

The Leaf Project

An E-Reading Platform Business Plan

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An E-Reading Platform

Business Plan

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Abstract

The publishing industry is rapidly changing, especially due to the commoditization of portable devices that enable ubiquitous access to information. E-publishing content is a business that is still in an early stage, which means that there are a lot of opportunities for start-ups to come up with innovative business models to challenge the traditional way of publishing content.

The Leaf Project intends to create an e-reading platform that will offer the possibility to stream e-books to computers, tablets, and smartphones. Most options available in the market offer customers the option of buying e-publishing content on an individual basis. However, as seen in the music and movies industry, users tend to access pirate content, unless they see extra benefits in a paid service. Initially, the Leaf Project will offer free content, such as the public domain books that are part of the Project Gutenberg. This will allow us to get real market feedback and gain users. Users will be able to use the platform to publish content, having the option to select between “not-for-profit” and “for-profit”, depending on whether they want to receive royalties for the content they publish. The service will be based on a freemium business model, in which premium users will pay a flat rate rather than per item, in a similar way Spotify and Netflix have done for music and movies. Additionally, in the future we plan to create a community in which writers will be able to establish contact with artists and developers that will help them to enrich their e-books, which will in turn increase the value offered by the content that will be available via the platform.

This master’s thesis is part of the Leaf Project, and it constitutes the business plan for the e-reading platform. The first part explains the different stages in the start-up process, as well as how to evaluate an innovative business idea. Then the business idea is described and the e-reading industry is analyzed to show how attractive this market is. An analysis of the risks that the company might face is performed, and different financial aspects required to operate the company are listed. The report finishes with the conclusions about the outcome of the thesis project as well as with suggestions for future work.

Sammanfattning

Förlagsbranschen förändras snabbt, särskilt på grund av produktifiering av bärbara enheter som möjliggör allmän tillgång till information. E-publicering innehåll är en affär som fortfarande är i ett tidigt skede, vilket innebär att det finns många möjligheter för nystartade företag att komma med innovativa affärsmodeller för att utmana det traditionella sättet att publicera innehåll.

The Leaf Project avser att skapa ett e-läsning plattform som kommer att erbjuda möjligheten att strömma e-böcker till datorer, tabletter och smartphones. De flesta alternativ som finns i kundernas marknaden erbjuder möjlighet att köpa innehåll e publicering på individuell basis. Men som framgår av musik och filmer industrin, användarna tenderar att få tillgång till pirat innehåll, om de inte ser extra fördelar i en betaltjänst. Initialt kommer the Leaf Project erbjuda gratis innehåll, till exempel offentliga böcker som är en del av Project Gutenberg. Detta ger oss möjlighet att få verklig marknad feedback och öka användare. Användarna kommer att kunna använda plattformen för att publicera innehåll, har möjlighet att välja mellan "icke-vinstdrivande" och "vinst", beroende på om de vill få pengar för det innehåll de publicerar. Tjänsten kommer att baseras på en freemium affärsmodell, där premium-användare kommer att betala ett schablonbelopp snarare än per post, på liknande sätt Spotify och Netflix har gjort för musik och filmer. Dessutom, i framtiden planerar vi att skapa en gemenskap där författare kommer att kunna etablera kontakt med konstnärer och utvecklare som hjälper dem att berika sina e-böcker, som i sin tur öka värdet erbjuds av innehåll som kommer att finnas tillgänglig på plattformen.

Detta examensarbete är en del av the Leaf project, och det utgör den affärsplan för e- behandlingen plattform. Den första delen förklarar de olika stegen i att starta processen, samt hur man ska värdera en innovativ affärsidé. Då affärsidé beskrivs och e-behandlingen industrin analyseras för att visa hur attraktiv denna marknad är. En analys av de risker som företaget kan ställas inför utförs, och olika finansiella aspekter krävs för att driva företaget är noterade. Rapporten avslutas med slutsatser om resultatet av avhandlingen samt med förslag för framtida arbete.

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List of Acronyms and Abbreviations

AAP	Association of American Publishers
DRM	Digital Rights Management
E-book	Electronic Book
EPUB	Electronic Publication
E-reader	Electronic Book Reader
EU	European Union
IDPF	International Digital Publishing Forum
IPO	Initial Public Offering
USD	United States Dollar
U.S.	United States of America
VAT	Value Added Tax

Glossary

Apache web server: An HTTP web server software part of the Apache Software foundation.

CSS3: Cascading Style Sheets (CSS) is a style sheet language used for the look and formatting of a document written in, for instance, HTML.

HTML5: The fifth revision of the HTML standard with support for multimedia.

OpenLDAP: An open source implementation of the Lightweight Directory Access Protocol based on the X.500 OSI directory standard.

PostgreSQL: An open source database server.

1. Introduction

Nowadays technology allows people to start new ventures by means of innovative ideas and entrepreneurial character, rather than large budgets. Once an entrepreneur (or a group of entrepreneurs) comes up with a business idea, there is a need for a written business plan, which will show whether the idea has a real opportunity of attracting investments and becoming a successful business. This master's thesis is the outcome of a business idea for an e-reading platform to distribute e-books.

1.1 Background

Coming up with a business idea is not as difficult as realizing a business plan. Every startup faces many challenges, especially at the very beginning of the entrepreneurial journey. Business planning is fundamental for every entrepreneur who wants to convert an idea into a business opportunity, and from this opportunity realize a successful business.

A business plan is intended to satisfy a wide range of readers ranging from investors to founders. However, many people find business plans of little use since most of the information they contain is based on assumptions [1]. Despite the opinions of those who say business plans are not useful, there are others who believe that it is imperative for every startup company to have a business plan. Investors are one of the main reasons to write a business plan, since this business plan is one of the elements they use to judge the viability of a business idea. Furthermore, writing a business plan is a means for the team to collectively consider and plan what is needed to realize the plan [2]. The action of writing the plan forces the team to consider issues that may not have been thought through *before* they become critical.

1.2 Overview of this Master's Thesis

The Leaf Project consists of an E-Reading Platform that offers users access to a distribution platform for e-books, with support for HTML5 and CSS3, giving users the possibility to make use of the gamification and transmedia concepts (which are explained in page 11). This will be done by leveraging today's tablets and their interactivity capabilities in order to go beyond the traditional way of presenting text. The project is still under development and has been divided into technical and business aspects that aim to lay the foundation upon which the business idea will be built in order to turn it into a real business. The following are the four different master's thesis projects into which the Leaf Project has been split:

- Sebastián Galiano: the Infrastructure [3].
- Federico Enni: the End User Application [4].
- George Khalil: the Commercialization Plan [5].
- Diego Botero: the Business Plan.

This thesis aims to fulfill the different requirements of a business plan. Different players in the e-book market are analyzed to provide an overview of the existing offerings and the different approaches taken by each company, in order to find their similarities and

differences and to understand how these similarities and differences can be exploited or avoided in setting up the proposed new company. In the financial area, a study of bootstrapping methods is carried out in order to reduce the amount of capital needed to start the business. The outcome of this thesis project is a business plan for a platform that will provide access to e-books based on a freemium business model in which we will charge a premium fee to provide access to content that has been published as a “for-profit” business.

1.3 Thesis Organization

Chapter 2 (Business Planning) explains the different stages in the start-up process, as well as how to evaluate an innovative business idea. In Chapter 3 (The E-Reading Platform) the business idea is described, stating the shortcoming identified in the current e-book offering and proposing a way to overcome these gaps. In Chapter 4 (Market Analysis) the e-reading industry is analyzed to show how attractive this market is. Chapter 5 (Financial Analysis) touches upon different financial aspects required to operate the company. Chapter 6 (Management Team) introduces the different members of the team that will be managing the company. In Chapter 7 (Risk Analysis) an analysis of the risks that the company might face is performed. The report finishes with Conclusions about the outcome of the thesis project as well as with suggestions for Future Work.

2. Business Planning

There are two basic things that are needed when creating a business plan: a clear picture of what is to be delivered and the target customers. There is no point in trying to develop a product or service that nobody is interested in paying for. Something that needs to be taken into account is that not only readers are willing to pay to be able to read content. There are at least three business models [6] that can be used to generate revenue without having to charge the end user:

- Eyeballs** A huge number of users have access to content which represents potential eyeballs that advertisers and sponsors are willing to pay for. This is the model traditional magazines and newspapers have used to generate revenue through their websites.
- Information** Provide information that can be used by people to make decisions or generate revenue.
- Access** Provide access to data, people, etc. so a firm (or firms) can make use of this access to make decisions or make money.

As an interactive e-reading platform, the Leaf Project aims to provide a service via which users will be able to find and utilize content. The platform intends to enable interactive content for e-publishing content, thus leveraging the capabilities of today’s tablets while offering added value that publishers and end users would not find in a single place when using other services currently offered in the market; such as, for instance, hypermedia systems [7].

2.1 Development Process

There are three stages in the start-up process [8], shown in **Figure 1**. The first stage is to come up with an idea and analyze its marketability. In the second stage, the business idea is developed into a detailed business plan. Then, in the third stage, once the business plan and the initial investment are ready, it is time to build up the company. The goal is to have a profitable business able to attract qualified people to work for it, thus enabling the company to deliver services to their customers.

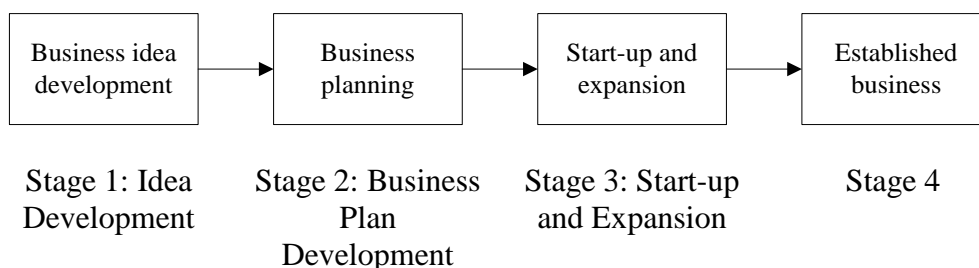


Figure 1. Development Process Leading to an Established Business

2.1.1. Stage 1: Idea Development

An idea with true potential is most of the time an idea that aims to solve a perceived problem. The idea may be based upon a new product or service, but it could also be based upon applying a new business model or improving an existing (business) process. The initial business idea needs to be developed such that it can be economically productive; this requires that a team must be in place and prepared to start working. At this stage, the money to develop the business idea usually comes from “seed capital”. This typically means that the founding team uses their own money or they get it from Friends, Family, and Fools (the so called “FFF”) [9].

2.1.2. Stage 2: Business Plan Development

In this stage, the details are not as important as having an overall picture of the business. In the business plan the risks involved in developing the business idea are calculated. The different functions of the business need to be taken into account in order to prepare the corresponding plans and an initial budget. These functions include development, finance, and distribution, among others. Furthermore, the target customer segment should be defined. Strategic decisions such as the pricing scheme and the choice of in house versus outsourced development should also be considered.

During the business plan development stage, the start-up will need to establish contact with lawyers and market researchers in order to gain knowledge in areas where the founding team lacks expertise. Potential customers, suppliers, and partners should also be contacted in order to estimate the size of the initial market.

The main objective of a business plan is to test the real potential of the business idea, before the product or service goes out to the market. Even though a business plan is mainly based on assumptions, it should take a realistic view in order to prove that the business is viable.

A major goal of a company in this stage is to get investors to finance the business idea or to determine that the business can grow by organic growth (i.e., bring in sufficient funds that it can fund its own development).

2.1.3. Stage 3: Start-up and Expansion

Stages 1 and 2 correspond to the design of the business. In stage 3, the business plan is put into practice and now the market will evaluate how good or bad the business idea really is. If the business proves to be successful, then the initial investors will want to have a profitable exit. There are different ways for them to realize a return on their investment. The options include [10]:

- Initial Public Offering (IPO). The company’s shares can be sold on the stock market. A successful IPO is an exit option that can generate the biggest payout. However, it is also expensive to carry out an IPO, and there is no guarantee that the final price will be profitable for those currently holding shares.

- Strategic Acquisition. The company could be sold to a strategic acquirer, willing to pay more than five times the revenues of the previous twelve months. Strategic acquisition is the second most profitable exit.
- Merger. The company can choose to combine all or part of itself with another company. This is done by exchanging stock and cash. This is considered the third most profitable exit.
- Buyout. Someone outside or inside the company buys it. The price can vary quite a lot.
- Reverse Merger. The company buys a public listed company that is no longer active. This way the company is converted into a public company with stock that can be sold.
- Financial Sponsor Sale. A private equity or holding company buys the company in order to improve its performance. Their final goal is generally to perform a strategic acquisition or an IPO later on. The price paid in this kind of sale ranges between one to three times the previous 12 months of revenue.

2.2 Business Ideas and Innovation

New business ideas can fall into one of the quadrants depicted in **Figure 2**. An idea is categorized according to its area of innovation, if any. Companies such as Apple and Google lie in the upper left quadrant. Apple [11] successfully developed a new product, the iPhone, whereas Google [12] innovated in the services arena by developing AdWords. Several years ago, Dell innovated by introducing a new business system based on a direct distribution system that decreased production costs and therefore allowed offering lower prices to end users (thus placing it in the lower right corner of the figure) [13]. The combination of innovation in a product or service and a new business system results in a completely new industry, where, initially, competition does not exist; thus creating a new market space (or blue ocean) [14].

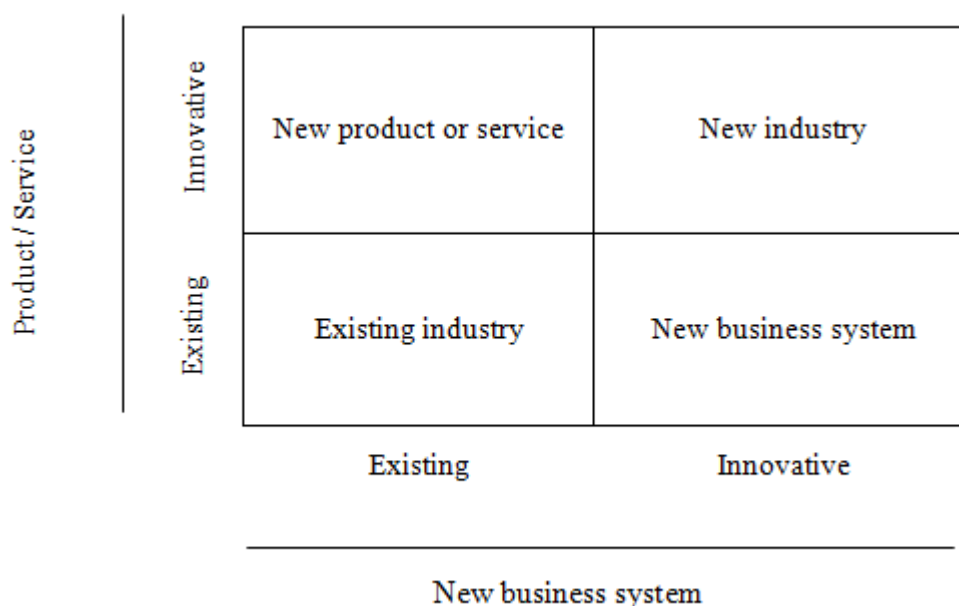


Figure 2. Business Innovation

Everyone has needs that they wish to have satisfied. We eat when we are hungry, drink when we are thirsty and sleep when we are tired. Then we look for shelter to feel safe. These are the most basic human needs, as depicted in **Figure 3**, and they are part of Maslow’s subsistence needs [15]. Once we have food, shelter, etc., we move on to social needs, esteem needs, and “self-actualization” - using our cognitive surplus (the energy and knowledge that is not used for our "job"). Hence the importance of community visibility; we do things because we like to do them and also because it is fun to do them. These are driving forces behind open source software/hardware, web pages, social networks and Wikipedia. Since the contribution is voluntary, we contribute to them because we enjoy doing it.

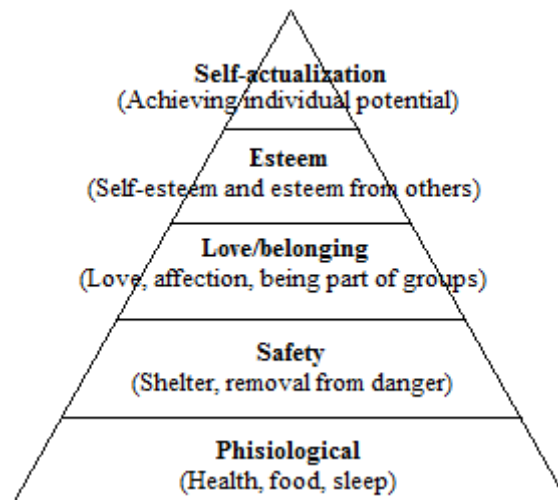


Figure 3. Maslow's Hierarchy of Needs (based upon [15])

Every business idea has to be thought of as a way to satisfy someone’s needs, meaning that the product or service will be a solution for a certain market segment. For instance, reducing the number of pieces that are needed to build a machine does not mean anything by itself, but this could be seen as a benefit if fewer pieces means lower manufacturing and maintenance costs. Solving new needs or doing it better than the competition can result in a successful business. Furthermore, there has to be a potential market for the business idea and there should be a clear idea about why this market segment is economically attractive. Finally, the business plan has to show how to make money.

2.3 Business Processes and Business Systems

A business process represents the procedure a company follows in order to reach a goal [16]. In the case of e-content distribution based upon subscription, that goal is to entertain, inform, or educate people. To achieve this goal, the end user needs to be able to find the desired content (via the platform), have a subscription to use the service, and utilize a device where the content can be consumed. A business process is basically a set of activities that describe the procedure that the company needs to create a product or service and how the product or service will be delivered to customers. This set of activities usually has a predetermined order that needs to be followed. In this case, the Leaf Project will first need to get content that will be distributed to the end users through the distribution platform.

There is typically interdependence between the activities in a business process, due to the coherence needed to achieve a common objective. However, in practice many of these activities can proceed in parallel as the e-content distribution platform will be distributing many different instances of content (i.e., different e-books, stories, etc.). Each of these different instances may be in different phases of the production process (acquisition, preparation for distribution, in distribution, etc.).

The different activities that are part of a business system are dynamic. Nevertheless, there are some static aspects that need to be taken into account and that together with the dynamic activities represent a business system. A business system is a systematic representation of how different activities are related to each other. **Figure 4** shows the typical value chain of a company.

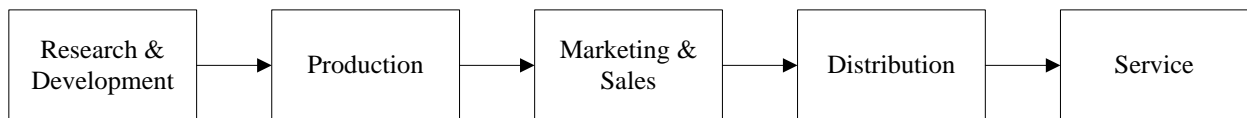


Figure 4. Typical Value Chain

The value chain depends a lot on the type of industry and also on the company itself. Different approaches can be taken, which will determine the structure of the company. When talking about Internet companies, the approach that is being taken today is the one of the value network, which has a much more fluid structure than the traditional value chain. A value network in networked companies takes into consideration the following currencies of value [17]:

- **Goods, services, and revenue:** Refers to the services or goods that customers get or have access to, and which generates revenue for the company.
- **Knowledge:** Concerns the exchange of knowledge around the product or service.
- **Intangible benefits:** Are related to the exchange of value and benefits that cannot be measured based on financial value (e.g., customer loyalty, co-branding, etc.).

Figure 5 represents such a value network and it shows that both customer and company exchange the values listed above.

The participants in the value network can be divided into three different types [18]:

- **Structural or tier-1 partners:** Provide basic and irreplaceable assets to the value network. They represent a direct and fundamental role for the business model.
- **Contributing or tier-2 partners:** Provide goods and/or services to meet requirements particular to the value network. However, their role is not direct and can sometimes be replaced without affecting the business model.
- **Support or tier-3 partners:** Provide common goods and/or services to the value network, making the value network viable.

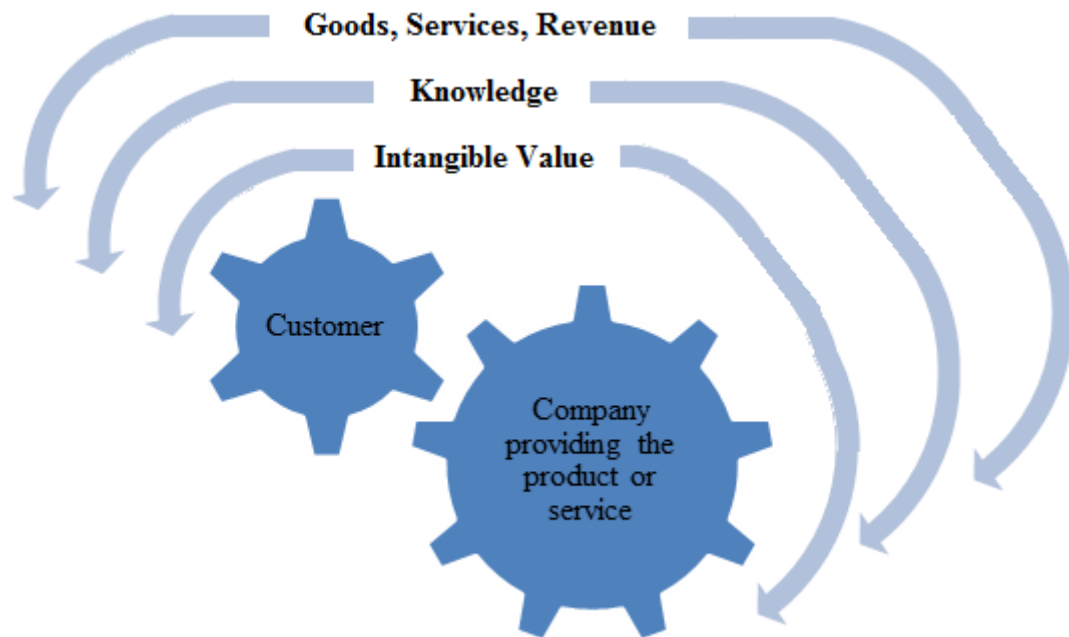


Figure 5. Representation of a Value Network [17]

An important decision is to choose which tasks to perform within the company and which ones to leave to others, for instance suppliers or business partners. This is especially important at the early stages of a company, since the number of employees is quite limited and therefore there are skills that most likely will not be available in house. The company needs to focus on the activities that it can do best while using other companies to perform all other tasks.

Technology companies focus mainly on Research and Development (R&D). Some of these companies focus their resources on software development, letting Original Design Manufacturer (ODM) companies design and build the hardware, based on specifications provided by the software company [19]. Other companies have adopted crowdsourcing [20], in which they purposely open their platform to create a rich ecosystem which enables others to develop software, hardware, content, etc. The Leaf Project aims to provide people with the means for publishing and distributing what they write; not only for professional writers, but also for amateurs that enjoy writing about the topics they are interested in, for whom writing is a hobby, not a job. This way, content can be offered at a reasonable price or even for free, giving the possibility for amateur writers to receive royalties, depending on the popularity of their work.

3. The E-Reading Platform

The e-book market is growing quite fast. This growth represents opportunities for newcomers to start offering innovative services to attract readers. The concept behind the Leaf Project is to stream e-books to portable end user devices such as tablets and smartphones, based on a freemium business model. The reasons for choosing e-books as the kind of publication to offer through the platform are listed in G. Khali’s master’s thesis [5].

3.1 Background

Portable electronic devices are changing the way we access information and therefore the way we consume content. The publishing industry is rapidly changing from offering only printed material to creating electronic versions of their publications (i.e., newspapers, magazines, and books). The e-reading industry is still young and the companies in this business have not yet realized all of its potential.

Apart from the traditional stakeholders that are part of the book industry, such as authors, publishers, and wholesalers, the digitalization of books has also brought in new players, such as hardware manufacturers, cloud service providers, and advertisers. In the traditional e-book industry, publishers often give advances to authors to get the author to write a book for them. With the new possibilities offered by e-books, authors can opt for distributing their books without having to go through a publisher, thus the author can retain most of the profit. The e-book industry is still immature, thus there are opportunities for new companies offering innovative services.

In the current scenario, with printed books, royalties for authors usually range from 10% to 15% [21]. Furthermore, if a book includes illustrations, there are also royalties for the illustrator. These royalties range from 3% to 6% [22]. However, with e-books, royalties are changing. Authors’ royalties in the digital world can range from 40% to 50% [23].

3.2 The Problem

The publishing industry needs to learn from the issues that the music industry faced during the digital revolution, so as to make the best out of the digital world, instead of suffering from a lack of innovation [24]. Failing to meet consumer demands will cause an increase in piracy via file-sharing services.

The Leaf Project has identified two shortcomings in the current e-book offering. One of them concerns the current pricing scheme, with the price for an e-book being similar to the price for the printed version. The music industry has shown that there are other alternatives, such as flat rate based services (e.g., Spotify) that give the user access to a vast library of music, which the user does not own but can use at any time during the subscription’s period. The other shortcoming is related to the content itself, since most e-books available in the market offer the same static content as their printed counterparts. With the tablets and smartphones available today, e-books can be enhanced in order to provide a much richer experience for the user.

3.3 The Product

Based in the opportunities that the members of the Leaf project have identified, the team has defined two main technical components: (1) a server and network infrastructure and (2) an end user application. These two elements allow the streaming of books to devices such as smartphones and tablets, as well as to personal computers (although the aim is to provide access to the platform mainly via portable devices). The content that the platform will provide will consist of user generated content that will be distributed via the e-reading platform.

Two different business opportunities were presented and evaluated in G. Khalil’s master’s thesis [5]. One of them is an end-to-end distribution business in which the responsibility for the acquisition and distribution of the content, cash flow management, and end user interface are part of our business model. In contrast, the other opportunity is a provider business, in which the production and the development infrastructure and end user application would be the core of the business, and the customer (another company) would be manage the content and the users. The Leaf Project has decided to start by implementing an end-to-end distribution business, and once the product is mature, consider the possibility of offering it to other companies (as a provider business). The main reason for embracing the end-to-end distribution business is the need to market test the service and to get user feedback in order to further develop and improve the infrastructure, the end user application, and the service in general.

3.3.1 The Infrastructure

The infrastructure on which the Leaf Project platform relies was developed by S. Galiano and is presented in his master’s thesis [3]. This infrastructure consists of several services, all of them running on open-source software. The content streaming service is based on an Apache web server, the authentication uses openLDAP, and a PostgreSQL database is used to store the data. The architecture of the infrastructure has been designed to support high availability, high scalability, manageability, and high performance.

3.3.2 The End User Application

The end user application interprets HTML5 and CSS3. Scripting code presents document “pages” for the user to read. The client application is a browser that allows the display of the content that is streamed from the server. In addition to text, the content includes embedded rich media and interactive elements.

The end user application offers the reader the possibility to access and read all the content available in the platform. A prototype of the application was developed by F. Enni and is presented in his master’s thesis [4]. However, the application must be empirically evaluated before it can be considered as a potential product [25]. In order to carry out a field test, the Leaf Project plans to first launch a very basic service. This basic service will be made available to friends and relatives who have a tablet computer in order to collect feedback regarding the end user application.

In general, e-books offer a set of advanced functions that are not available with printed books. According to J. Pesina, some of the most common features are [26]:

- The capability to interpret and highlight text,
- A search function, which is possible due to the indexing of the e-books and due to the format of the digital content,
- Bookmarks,
- Write and save notes, and
- Listen to audio files or view video clips.

Protecting the content against piracy is a key requirement for many content providers. These content providers want a service provider to sign an agreement for the distribution of their content. This agreement typically requires some sort of Digital Rights Management (DRM). DRM provides access control limiting the use (or re-use) of digital content. The infrastructure developed for the Leaf Project uses streaming to distribute the content, thus the content is only temporarily stored on the device. This temporary copy could be stored in an encrypted memory file system or protected in some other way when in the device. All of the communication to and from the device and the infrastructure should be protected to ensure privacy and integrity (i.e., that a third party cannot access the content and that the content has not been modified). This is possible because the end user application does not download the ZIP file containing the complete EPUB. Instead, the contents of the file are accessed and served chapter by chapter, creating a streaming-like service. Furthermore, the content that will be offered at the beginning will consist of public domain books that are part of Project Gutenberg, which makes it possible to avoid the need for DRM in our initial service. The implementation of DRM will be reconsidered if enough publishers or authors demand it to protect their content.

3.3.3 The E-book Streaming Service

Most people have gotten used to getting free content from the Internet. The newspaper industry is a very good example of how hard it is to change the consumer’s mentality, once people have become accustomed to accessing content for free. This has caused a reduction in advertising revenue of newspapers, which has to be compensated for by an appropriate online business model. The publishing industry needs to enter the modern digital world and start offering e-books to be consumed on devices such as e-readers, as well as on tablets and smartphones. This can open new markets, since tablets and smartphones can deliver enriched e-books, which could attract interest from less frequent readers [27]. Enriched content can be an added value to differentiate between e-books and printed books. This way users would have additional reasons for paying for the content. The following keywords help us understanding the changes the traditional book is experiencing as content becomes increasingly digital. These keywords also represent what the Leaf Project considers as enriched/interactive content [28]:

Gamification Gamification is related to the use of gaming related techniques and design to attract the reader. The synergies and strategies of the gaming world with movies, mobile computing, and textual content

(such as books, e-books, websites, etc.) is growing.

Metadata	Providing metadata such as the biography of the author, related websites, articles, etc., that can help search engines offer more accurate results. The more information that is provided, the easier it is to <i>find</i> and <i>display</i> the content on the Internet.
Social Media Marketing	Word of mouth advertising through social media such as Facebook and Twitter.
Transmedia	With digital editing, a book contains audio, images, video, and digital text.

There are currently some enhanced e-books such as those offered by Vook [29]. However, the enriched content offered in these books is still somewhat basic, because all they have added are video clips. The Leaf Project offers support for HTML5 content, which can be created using open source tools such as the Baker Framework [30], or commercial tools such as Adobe Edge [31]. The availability of editing tools, distribution means, and suitable clients should encourage content creators to utilize the gamification and transmedia concepts to provide enriched e-books. The development of tools such as Mozilla’s WebAPI [32] and jQuery [33] will help editing platforms catch hardware events enabling a higher level of interactivity.

3.3.4 Value Proposition

Service

The e-reading platform will offer users the possibility to publish both “not-for-profit” and “for-profit” content and by charging a flat rate we want to give readers additional reasons to switch from printed books to their digital counterparts. By supporting HTML5, CSS3, and Javascript as well as frameworks such as JQuery or Prototype, the e-reading platform enables visualization for interactive contents [34], thus allowing users to create e-book content, but *without* being tied to the current characteristics of an e-book. Furthermore, since the content available in the platform will initially consist of end user generated content as well books with expired copyrights, the licensing model will allow users to access content without restrictions based on their geographical location; the same way users can currently access websites such as Wikipedia and blogs, regardless of their location (unless governmental restrictions are in place, such as is the case in China).

The e-book streaming service will be based on a freemium business model combined with a flat rate service model for premium users. The selection of freemium as a business model has a lot to do with the fact that we need people to try out the service using a freemium account. Free users that like the service will recommend it to their friends. Then, once users realize how useful the service is, some of them will become premium users. As G. Khalil described in his master’s thesis [5], freemium and premium services are wide-spread among Internet companies, showing that this model works. This is especially true when we take into consideration that the initial customers are end users and not companies. Furthermore, we

find the current e-books to be too expensive as the price that has to be paid for a digital copy is very similar to the price of the printed version of the same book.

The e-book streaming service that the Leaf project plans to offer aims to utilize a value based freemium business model that will allow users to self-publish e-books and access e-books written by other users. If the user publishes an e-book without the intention of making money (i.e., “not-for-profit”), then the user will be able to publish it for free. However, if the user wants to get a percentage of the revenue (royalty) the platform generates upon this content, then he or she will have to pay a fee for each “for-profit” book that they wish to have distributed by the platform (this is similar to the open publishing model used by some scientific journals). Freemium users will have access to “not-for-profit” e-books. Premium users will have access to both “not-for-profit” and “for-profit” content.

Organizational

The following actors are needed to realize the e-reading platform service:

- **Content providers** provide the content. In our case, these content providers will be end users and small publishers.
- **Customers** access the service either for free (freemium users) or by paying for access (premium users).
- **Software developers** develop end user applications and/or services required in the infrastructure.
- **Internet Service Provider(s)** will provide Internet Access.
- **Infrastructure provider** provides the technical backbone, specifically the computing and storage services that are needed to run the infrastructure’s applications. The infrastructure provider should be able to scale the supply of resources to meet the current demand.
- **An application store** provides applications for mobile devices to be downloaded by users.
- **A payment system** handles electronic payments coming from end users to the platform provider (who in turn pays the content providers).

The content provider is the most important resource and is therefore tier-1 (as was described in section 2.3 on page 6), since it represents the base of the service. The infrastructure provider and the Internet service provider are both tier-3 and could be replaced by equivalents. However, changing the infrastructure provider will become more complicated with growth of content and the number end users. The payment system is tier-2 and can be easily replaced.

The actors that could fulfill the roles listed above are:

- **Content provider:** The content will be provided by end users and small publishers.
- **Software development:** The e-reading application for different platforms (i.e., Android, iOS, etc.) will be developed in house.

- **Internet Service Provider:** Any ISP which can offer the bandwidth and reliability needed for the service. Note that in this thesis we focus on the ISP providing connectivity to the infrastructure provider, but each user must also have an agreement with an ISP who provides them with network connectivity.
- **Infrastructure provider:** A cloud provider, such as Amazon or other major cloud provider.
- **Application store:** Initially the Android market and Apple’s App Store.
- **Payment system:** PayPal or Payson could be used for payments.

Based upon the value network shown in **Figure 6** and described on page 7, Table 1 shows the different value exchanges that are part of the e-book distribution platform that the Leaf Project plans to offer.

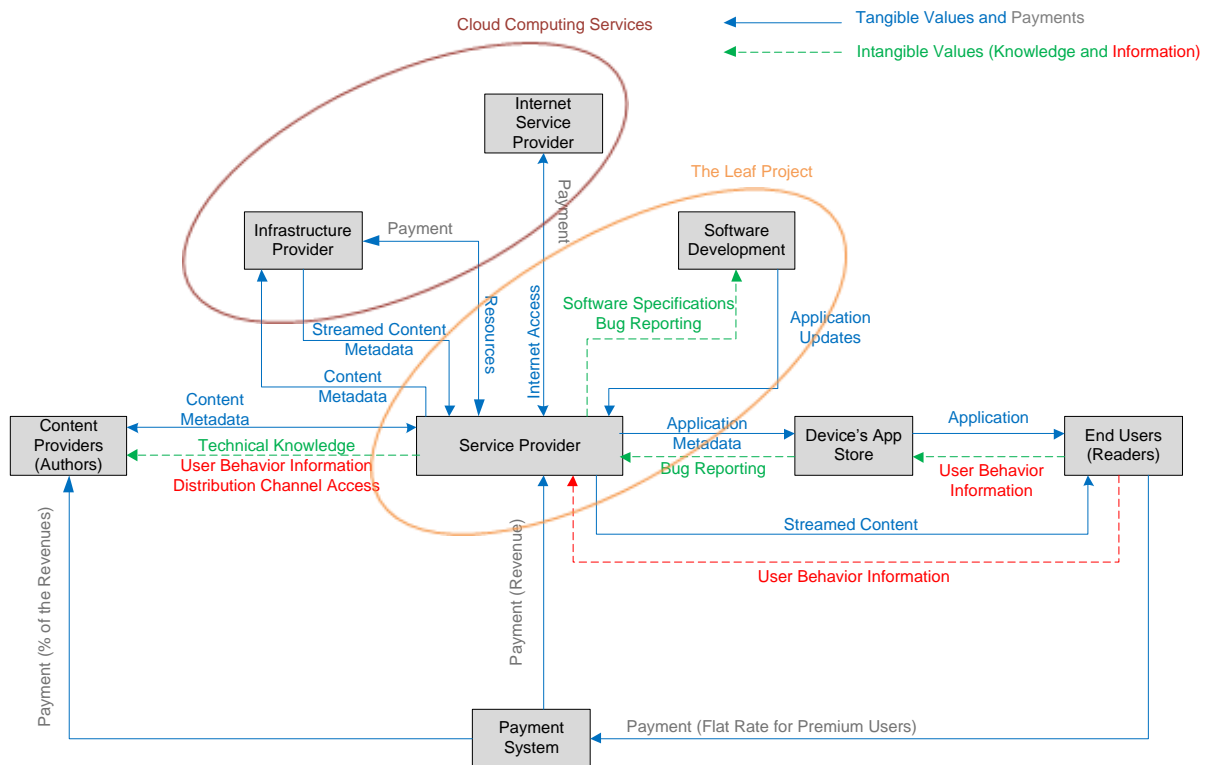


Figure 6. The Leaf Project's Value Network¹

¹ The content provider could also be an end-user.

Table 1. Value Exchanges of the Leaf Project

Mechanism	Provides Value	Returns Value
E-book Distribution Platform	Goods, Services <ul style="list-style-type: none"> • Self-publishing distribution platform • Access to self-published e-books • Continuously updated content • End user consumer behavior information for the authors 	Revenue <ul style="list-style-type: none"> • Premium users’ fee • For-profit publishing fee
	Knowledge <ul style="list-style-type: none"> • E-book offerings based on each customer’s preferences 	Knowledge <ul style="list-style-type: none"> • End user consumption behavior
	Intangible benefits <ul style="list-style-type: none"> • Open community feeling • Social features 	Intangible benefits <ul style="list-style-type: none"> • Customer loyalty and passion • Word of mouth advertising

4. Market Analysis

A market is basically a group of customers that want to and are able to buy products or services in order to satisfy certain wants or needs. Therefore, a market is represented by buyers. On the other hand, an industry consists of sellers that develop similar products that can replace each other [35].

4.1 The E-reading Industry

Even though the e-reading industry has become better known in the last years, the first steps were taken four decades ago and these steps helped shape the industry that is now experiencing a revolution, especially due to the technology that is currently widely available.

4.1.1 The Beginning

The origin of the e-book dates back to 1971, when Michael Hart founded Project Gutenberg [36], which is still alive and offers a library of more than 36,000 free e-books [37] (i.e., based upon books with expired copyrights). Alan Kay started another project at around the same time as Project Gutenberg. This project was called the Dynabook [38]. He envisioned a portable device similar to today’s dedicated e-book readers. However, this device could not be realized as a product since the necessary technology was not available at the time [36]. An early realization of a tablet computer can be seen in [39]. The tablet ran a Unix OS and a memory based file system and wireless LAN connectivity.

In the early 1990’s the e-book concept was slowly growing. User manuals were the most common kind of e-document. But with the widespread adoption of the Internet and the commoditization of the PC, the concept of e-books gained popularity. However, major publishers saw the e-book as a means for increased piracy and were therefore quite reluctant to promote content for e-books.

4.1.2 Breakthrough

In the last years, people have started to get used to reading texts on screen, and they have also gained experience in using e-commerce. In 2007, Amazon introduced the Kindle, and since then the e-book market has been growing exponentially. Amazon started offering e-books at a reasonable price, which together with its own e-book reader, the Kindle, began attracting more and more users. Once the major publishers saw the e-book as a profitable market, they started signing deals to offer a huge number of their existing titles in electronic format.

In 2010, Apple launched the iPad, which opened a completely new market: tablets. These devices have the same main characteristics as a personal computer, but in the form of a very portable device [40], that can also be used as an e-book reader. To exploit these capabilities, Apple introduced the iBookstore [41], which is a system to sell and deliver e-books to devices running Apple’s iOS. iBooks are limited to Apple’s own devices, whereas Amazon allows people to read Kindle books on any device. This combined with Amazon’s long-tail [42] business model for print books has made Amazon the absolute industry leader, with about 50 % of the U.S. book business across all formats [43]. Books that are part of the backlog are most likely out of print and can probably be used as part of a digital library by

paying only a fraction of the price they had when they were initially released by the publisher.

Libraries are also starting to get involved in the e-book market. Given the current development e-books are experiencing, it is natural for libraries to start offering their users access to digital content. Baker & Taylor, considered the world’s largest distributor of books [44], has started signing agreements with libraries, which will be using Baker & Taylor’s eContent Distribution, so readers can access e-books using the library’s website [45].

4.2 Macro-level Market Assessment

Currently, the market is becoming much more than simply textual content (as previously offered). The publishing industry is currently experiencing a drastic change, one that film/video, gaming, and music industries have faced due to the great advances in technology in the last decade. With the proliferation of smartphones, e-readers, and tablets (such as the Apple iPad), the revolution in the publishing industry is completely reshaping the publishing and distribution business.

The e-book market in the US has grown at a much faster pace than in Europe, due especially to the early introduction of e-reading devices such as the Kindle and to the huge number of e-books available in English (about 1 million) [46]. Later, when the Kindle was introduced in Europe, users in the UK also got access to this vast library. The British market saw an increase in e-book sales from 2% in 2009 to 11% in 2011, and, with 6% of market share of e-books the UK is currently second behind the US (6,2%) [47]. The UK is the European country with the highest rate of e-book adoption. The number of titles available in languages other than English continues to be much higher in printed versions compared to the number of titles that are available in electronic format. In summer 2009, the number of e-books available in Dutch was about 1000, whereas bol.com, one of the biggest retailers in the Netherlands was offering approximately 350 000 printed books in Dutch [48].

As can be seen in **Figure 7**, e-book sales have been increasing exponentially over the last several years. Data from the Association of American Publishers (AAP) shows that wholesale e-book sales for Q3 2010 were US\$119,7 million. Furthermore, sales of printed books decreased by 10,2% during the first two quarters of 2011, when compared to the sales from the same period in 2010 [47]. Adult fiction and mass-market paperbacks (romance, mystery, and science fiction) had a sales decrease of about 26%, whereas non-fiction books decreased by 2,7%. Even though this data only represents sales in the U.S., it shows how the e-book market continues to grow at an accelerated pace and that this growth is displacing the sale of printed books.

The Swedish e-book market is in an emerging stage, which is not in line with the high Internet penetration, even though Swedes are early adopters of digital offers [47]. The absence of big global retailers, such as Amazon, is considered to be one of the factors that has delayed the adoption of the e-book in Sweden. However, Swedish companies are taking action. Akademibokhandeln and Bokus have announced a new service called Dito, which was

launched during October 2011. They offer approximately 5400 e-books in Swedish as well as between 75 000 to 100 000 titles in English [49].

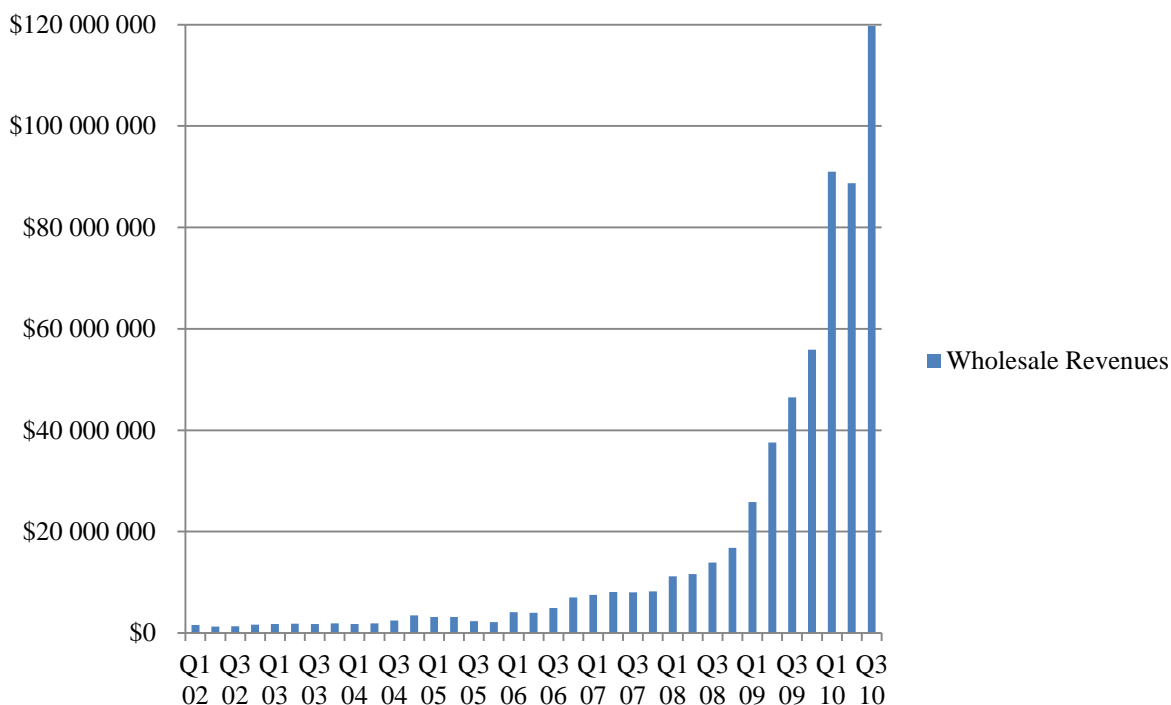


Figure 7. Quarterly E-book Wholesale Revenues in the U.S. (in million USD) [50]

At the moment there is a lack of standardization for e-books. This makes it difficult to distribute content across multiple platforms, formats, and types of screens. To overcome these problems, the industry has to start adopting flexible technologies and processes. Additionally, some of the players are adopting one of a small number of formats. Of these, EPUB (Electronic Publication) is one of the most popular formats, with millions of e-books already available in the EPUB format [51]. EPUB is a free and open e-book standard created by the International Digital Publishing Forum (IDPF).

Digital Rights Management (DRM) is commonly used to protect e-books from piracy. It is up to the copyright owner to decide whether an e-book should be copy protected using DRM. Software such as Adobe Digital Editions can be used for copy protection, but this implies having to install the matching client software and registering with an Adobe ID. On the other hand, companies such as Amazon and Apple use a model in which the content is registered to one user, which allows this user to access the content from different devices, as long as the device is registered to them. However, experts believe that DRM for e-books should be abolished, in the same way as occurred for music, which became DRM-free in 2009 [52]. The best approach seems to be the use of soft DRM, which means that the copyright license is not enforced by technology, only law (just as with printed books).

4.3 Micro-level Market Assessment

In the US, about 50% of e-book readers use their personal computers to read content, while the other 50% uses other platforms, such as e-readers, tablets, and smartphones (see **Figure 8**). Amazon’s Kindle is the e-reading device with the greatest adoption, but is now being threatened by multi-purpose devices such as the Apple iPad and other tablet devices. These devices are gaining a lot of adopters, since they can be used not only as an e-reader, but also to consume other content from the web (such as viewing videos) and for playing games. The e-book market has become a huge business due to the increasing number of available e-books *together* with affordable e-reading devices.

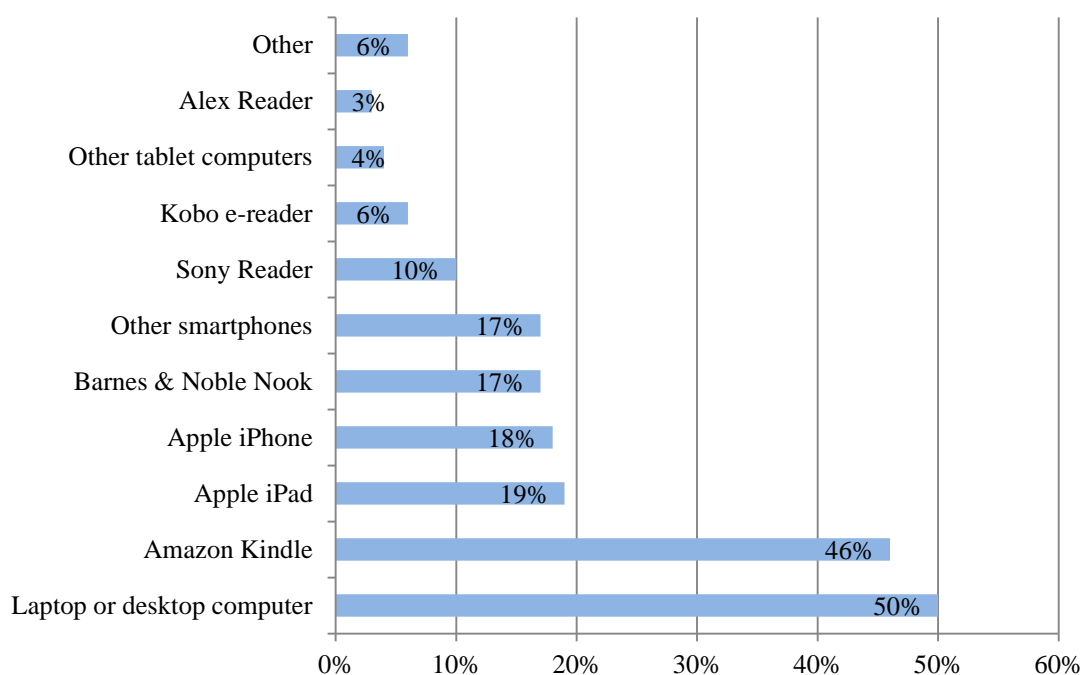


Figure 8. Devices Regularly Used to Read E-books [27]

(Based on 1 006 US adult e-book readers)

Amazon is currently dominating e-book sales and its e-reading device, the Kindle, is the main driver. Kindle e-book sales surpassed Amazon’s hardcover sales in July 2010 and they surpassed paperback sales in January 2011 [53].

According to a research performed by Elastic Path [27], males between 18 and 34 years old tend to be the earliest adopters of new e-book distribution services, whereas older generations prefer to use traditional booksellers. This trend clearly shows that younger people do not mind trying non-traditional booksellers, which is a very interesting behavior. Furthermore, these younger audiences find better graphics and rich media very appealing as well as interactive e-book content [27]. In addition, to make the younger adult market even more attractive, this set of readers find alternative buying options, such as getting free access by using an advertisement supported version, more appealing than the average reader does. Another important factor is that this group of people also likes to let others know what books they have read, generally using social media to communicate it. This spreading of

recommendations via social media helps create a "virtuous cycle" or "vicious cycle" that reinforces itself at Internet speeds due to the use of automatic recommendation systems that are driven from the real-time content of social media.

4.4 Competition

Some companies are trying to offer a collection of e-books that basically have the same content as the printed books. Other companies are offering software that converts text into a digital book. For instance, the e-book edition (an app) of “Here on Earth: A Natural History of the Planet” by Tim Flannery adds some interactivity [54], but the added content is basically videos and the possibility to post comments on Twitter.

Currently a lot of new players are trying to enter the e-book business. Table 2 provides an overview of the e-book market. Most of the companies listed in the table were founded in the last five years, which shows how the interest for the e-book market continues to grow. These companies aim to distribute e-books, magazines, and newspapers to readers wanting to access this kind of content from their smartphone, tablet, dedicated e-reader, and/or PC. Most of these companies have focused on the market of users wanting to buy specific e-books and the latest issue of a given newspaper or magazine. However, there are not many companies offering a subscription-based digital library, which is the kind of market the Leaf Project is targeting.

As can be seen in Table 2, there are four companies that are considered as the main competitors for the Leaf Project. At the moment we see 24symbols, Scribd, Wattpad, and WOWIO as our main competitors, since their platforms offer innovative services.

Table 2. Market Overview

Company name	Established	Focus	Target market	Level
24symbols [55]	2010	Read and share books for free	Any user interested in e-books supported by advertising	***
Amazon [56]	1994	E-books, newspapers and magazines	Kindle hardware and software users	**
Barnes & Noble [57]	1873	E-books, newspapers and magazines	Nook hardware and software users	**
Booklending [58]	2011	Borrow and lend Kindle e-books	Kindle hardware and software users	*
Byliner [59]	2010	Narrative non-fiction. Short stories	Users interested in content readable in a single sitting	*
Copia [60]	2009	E-books	Any user interested in e-books	*
CourseSmart [61]	2007	E-textbooks	Users looking for textbooks in electronic format	*
Kobo [62]	2009	E-books	Any user interested in e-books	*
Safari Books Online [63]	2001	Subscription-based, digital library	Any user interested in e-books related to IT	**
Scribd [64]	2006	E-books, magazines, and documents	Any user wanting to share content like e-books, magazines, and documents	***
SonyConnect [65]	2009	E-books, newspapers and magazines	Users owning a Sony Reader or using Sony’s software	**
Vook [29]	2008	A blend of e-books and videos	Users interested in enriched content	*
Wattpad [66]	2006	User generated stories	Writers and readers wanting to share stories.	***
WOWIO [67]	2006	E-books and e-Comics	Any user interested in e-books supported by advertising	***

Level of competition relative to the Leaf Project, based on innovative business models and user generated content:

*** = Direct competitor.

** = Competitor in non-target markets.

* = Not a current threat.

4.4.1 24symbols

24symbols is a Spanish startup. The company has created a platform for readers to read and share e-books [55]. The content is not downloaded to the reader’s device, but instead streamed from the cloud. This mechanism allows them to reduce piracy, since there are no local copies of the e-books. 24symbols claims that since no files need to be downloaded, there is no need for using DRM systems to protect the digital content.

Readers can recommend and receive recommendations about e-books, and they can also see what their friends are currently reading. Readers can use their Facebook and Twitter accounts to share information about a book.

Their system offers ubiquitous access to the content. Readers can seamlessly change devices and continue reading without affecting the end user experience.

Business Model

24symbols uses a freemium model, similar to the one used by Spotify [68]. They offer two ways to access the service:

- An ad-supported service, which entitles readers to read for free while being presented with advertisements (which support the service). Access to the Internet is required to be able to access the content.
- Their subscription-based access costs 9,99€ per month, 19,99€ per quarter, and 59,99€ per year. With this premium service the reader has ad-free content and offline reading.

The company’s goal is to get 8,5 percent of their readers to have premium subscription accounts [69]. The company pays 70 percent of the revenue to publishers in proportion to the number of pages read by readers.

Publishers also have access to data regarding end user’s content consumption behavior via a monthly report containing the following information for each book [70] (pages are counted as in their equivalent pages in the printed book):

- Total page views by freemium users,
- Total page views by premium users,
- Single readers for the reported month, and
- Total revenue generated by the book.

As of July 10, 2011 they have approximately 1000 e-books in their library, most of these are e-books in the public domain.

Advertising

The platform 24symbols has developed has two different types of advertising:

- Exclusive advertising for a specific book, this advertising is associated with a particular book.
- Advertising income not associated with a particular book (this generates “Common income”).

The revenue for a given book will be distributed as follows:

- The content provider for each book will receive 100% of the revenue produced by the exclusive advertising included in the book.
- The content provider for each book will be entitled to receive part of the income produced by common advertising and by the total subscription income based on the book’s total number of page views as a fraction of the total number of page views of the catalogue made available via the platform.

Income sharing

The company plans to pay the publisher 70% of the income generated by a particular book. This 70% includes the author’s royalties. The author’s royalties are paid according to the publisher’s agreement with the author. 24symbols recommends the author’s royalties to be 30% of the income that is paid to the publisher (this would correspond to 21% of the income generated by the e-book).

24symbols wants the publishers to invoice them quarterly. Their intention is to pay the publisher 90 days after being invoiced.

The company will sell advertising space and online promotional products, and offer online marketing consultancy to publishers. A publisher may agree to participate in marketing campaigns to attract new users for the platform by offering one or more specific books, whose availability will be specified by the corresponding publisher.

Agreements with Publishers and Authors

The agreement between 24symbols and the publisher² is valid for a period of three years, renewable for successive annual periods. The contract signed by the parties will be subject to Spanish law and to the jurisdiction of the Courts of Madrid, thereby renouncing an appeal to any other jurisdiction in case of any actions or claims.

The publisher may decide whether an e-book should be available for all users or only for premium users. If the agreement with the publisher includes the rights of regular books, then 24symbols will digitize some or all of these books to make them available through the platform. If the publisher wants to have access to the digitized version of a book, they will have to pay a fee for the digitization services.

4.4.2 Scribd

Scribd is a U.S. based document-sharing website where users can upload and share documents (including those in Word, PDF, and PowerPoint formats) [64]. The company has created a rich document format called iPaper, which was initially built with Adobe Flash but was later migrated to HTML5, as they saw HTML5 as a universal technology that can be displayed in a web browser on any computer or mobile device. Once the content is converted into web docs, these can be embedded on blogs and news websites. The service includes social sharing features that allow sharing documents on Facebook and Twitter.

² Note that in the case of self-publishing author, the author would also be their own publisher.

When users upload content to Scribd, they can decide whether the content will be private or open to the community. Scribd claims to have more than 75 million monthly readers who upload documents, follow authors, commenting on other’s content, and rating this content.

The company uses a Creative Commons license, which let users grant specific copyright permissions for the documents they upload. Users can easily change from the default “all rights reserved” to “some rights reserved”.

A user can access statistics regarding how many people per day have read a document uploaded by him/her, in which countries it is read the most, the keywords used in the search to find the document; as well as what they call the Heatmap, which is a bar showing how “hot” or “cold” a section is (reflecting the time spent by users in that specific section).

Business Model

Scribd’s business model is mainly based on advertising and sales from the Scribd Store, where e-books from several different publishers can be purchased. Users wanting to sell content through the store should charge at least US \$1 for it. Scribd keeps 20% of the sale as a consignment fee and deducts US \$0,25 as a transaction fee from the net revenue per document sold. Furthermore, if the publisher/author wants to have a DRM-protected Digital Editions file, the transaction fee is US \$0,40. The payment to the publisher/author is made after the end of each quarter, but is only issued if the balance is at least US \$100, in which case the publisher/author receives a check or credit to their PayPal account.

The company has a partner program, which according to the information available on their website offers the following to partners [64]:

- A branded profile.
- A branded document reader.
- Action badges on document pages, which allows readers to be direct specific places.
- Scribd store seller status.
- Advertising revenue sharing for selected partners.

4.4.3 Wattpad

Wattpad is a user-generated stories repository targeted mainly for access via mobile phones and tablets. The first e-books that were available on Wattpad were the Project Gutenberg e-books, the same e-books that 24symbols launched their service with. According to information shown on Wattpad’s website, they have 1 million registered users whom are adding approximately 3 million comments/votes a month. Furthermore, they have about 2 million user generated stories, and users spend an average of 30 minutes on Wattpad twice a day.

Business Model

Content available on Wattpad can currently be accessed for free. The service is 100% advertising supported.

4.4.4 WOWIO

WOWIO [67] is an online distributor for e-books and e-comics. Their library contains literature, comic books, and fiction and non-fiction titles.

Unlike 24symbols, which uses streaming, WOWIO allows the reader to legally download copyrighted e-books. The format in which the e-book is available depends on the publisher’s offerings. Table 3 shows the different formats, features, and compatibility for the e-books available on WOWIO.

Table 3. E-book formats available on WOWIO [71]

Formats	Download	Online	DRM-Free	Reflow ³	Print Layout	Notes
WOWIO PDF Plus	X	X	X		X	Read on any PDF compatible device.
DRM-Free EPUB	X		X	X		Read on any EPUB-compatible device.
Digital Editions	X				X	Read on any Adobe Digital Editions-compatible device. The format is fixed.
Digital Editions EPUB	X			X		Read on any Adobe Digital Editions-compatible device.
E-reader	X			X		Read on any e-reader compatible device.

It is possible to use a Facebook account when creating a WOWIO account. In this case, by default, WOWIO will have access to basic information such as name, profile picture, gender, networks, user ID, list of friends, and any other information the user has shared with everyone. WOWIO will also have access to information regarding the user’s birthday.

Business Model

WOWIO allows publishers to set their own prices, keeping 100% of the revenues of all retail sales [67]. Only a credit card transaction processing fee is deducted.

E-books and e-comics can be individually purchased. Once acquired, the user will have the document as a file in his or her device and will be able to download it again in case the e-book is lost due to a crash of the device where it was stored.

The company partners with sponsors to offer readers free content. Sponsors use this mechanism as a way to encourage the reader to remember them when it comes time to purchase their products or services.

³ Reflow refers to the ability to automatically wrap words in a document when the size of the window is changed by the reader.

WOWIO wants to offer their readers rich media content. To do so, they are incorporating multimedia elements into their e-books, such as an animated sequence in an e-comic, audio or video.

Advertising

According to information available on their website, the company focuses on male readers between 18 and 34 years old. WOWIO partners with sponsors to offer the reader free e-books. Sponsors get three pages, an introduction, a message page, and a closing page, to display information regarding their brand. WOWIO promotes sponsored advertising as way for the reader to remember the sponsors when it comes time to purchase the sponsor’s products or services.

Another alternative for advertisers is to use WOWIO’s BookShare™, which allows them to brand and embed messages within e-books. These messages can be distributed through the advertiser’s own website or a third party websites.

The company claims to have real-time reporting of revenues, sales, and downloads.

WOWIO acquired WEvolt in June 2010 [72]. WEvolt is an online platform for comic book artists to share their work and generate revenues by taking part in ad sales and merchandising [73].

At the moment, the company does not have an application for accessing and reading their content on portable devices. The content has to be accessed from the mobile version of their website.

4.5 Industry Analysis

According to the Five Competitive Forces Analysis model [74], there are five different competitive forces that shape strategy (as depicted in **Figure 9**):

- **Threat of entry:** The threat of entry depends on whether the entry barriers are low or high. Newcomers put a lot of pressure on price and this is reflected in the amount of investment that is needed. Low entry barriers and little retaliation from established competitors result in a high threat of entry and the potential profitability of the industry is considered to be moderate.
- **The power of suppliers:** Powerful suppliers can heavily influence the profitability of an industry, since it is not always possible to incorporate cost increases in ones own prices.
- **The power of buyers:** Powerful customers can force companies to reduce prices or they may demand better quality. This causes companies to fight against each other, which negatively affects the profitability of the industry.
- **The threat of substitutes:** A substitute offers the same or similar functionality using different means. A high threat of substitutes affects industry profitability.
- **Rivalry among existing competitors:** The intensity of competitive rivalry is a main driver when it comes to the competitiveness within an industry. This rivalry can take

different forms, such as discounts in price, advertising expense, product innovation, and service improvements.

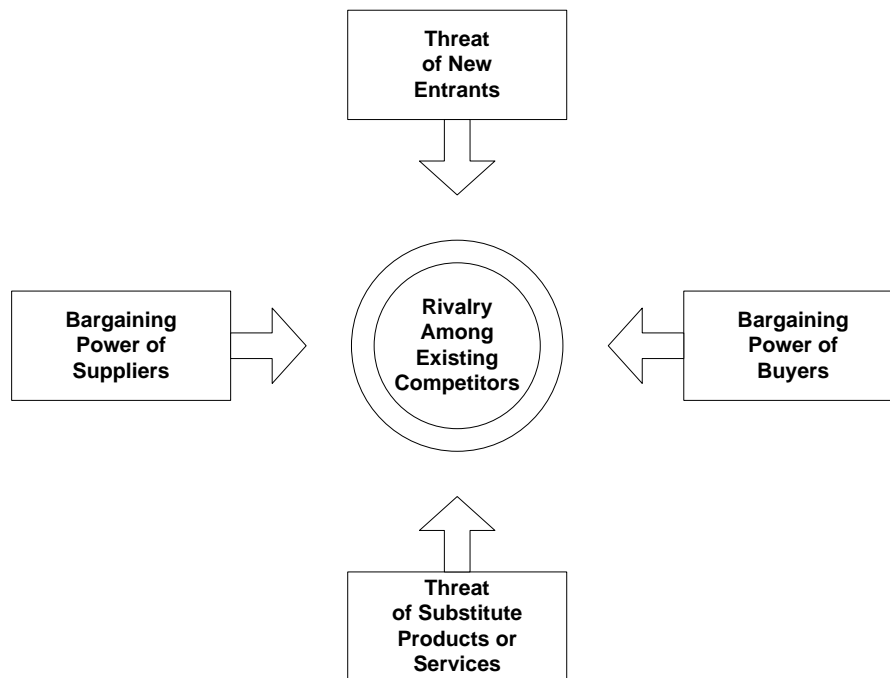


Figure 9. The Five Forces That Shape Industry Competition [74]

As can be seen in the Five Forces Analysis in Table 4, the threat of entry is medium, considering that the service can be started by offering public domain books, but the threat of entry will be reduced once we sign contracts with publishers (as these contracts will increase the barrier to entry of others). The supplier power is high in regards to e-book providers, since the rights to a specific book generally belong to a single publisher. Nevertheless, having end user generated content will decrease the supplier power, since a lot of people will be publishing via our platform. The buyer power is high because, as it is at the moment, end users can easily switch between different vendors. However, we expect the buyer power to decrease once customers become accustomed to using the platform offered by the Leaf Project and realize the advantages it offers compared with other services. The threat of substitutes is relatively high, taking into account that a lot of people still prefer buying printed books and unauthorized downloading of e-books is an attractive alternative for a lot of readers. Finally, regarding the rivalry among competitors, I have to say that the rivalry is high, since there are companies such as Amazon and Barnes & Noble which have already established book and e-book stores. Nevertheless, the e-book industry is still in an early stage of development and it is hard to say which company or what business model will succeed. Therefore, the fact that there are big companies already in the market should not scare us away from trying to introduce an innovative approach for offering e-books.

Table 4. Five Forces Analysis

Threat of entry	<ul style="list-style-type: none"> • Initial capital requirements. • Access to content, especially professional one (i.e., e-books written by professional authors). • There is a huge library of public domain books that is available for anyone to use. • Deals that already established e-book retailers have with publishers.
Power of suppliers	<ul style="list-style-type: none"> • Publishers often have all the copyrights to books and it is therefore not possible to switch to a different publisher in order to be able to commercialize a specific e-book. • By utilizing end user generated content, the power of suppliers can be reduced, since a lot of alternative content will be available. • Having our own Application Programming Interface (API) for the advertising platform can neutralize the power of the advertising companies, since it would make it easy for the Leaf Project to switch among different advertising companies, instead of having to stick to one.
Power of buyers	<ul style="list-style-type: none"> • Most e-books currently available in the market do not offer differences in the way the content is presented. It is mainly the same text with no additions, compared with what the user can get if he or she buys the e-book from a different website or if a printed book is bought instead of a digital one. This means buyers have few switching costs in changing vendors.
Threat of substitutes	<ul style="list-style-type: none"> • Unauthorized downloading represents an illegal substitute for both printed and electronic books. • Since the Leaf Project will be offering its books in digital format, printed books represent a very strong substitute, especially considering that there is no need for a rather expensive device (such as a tablet) to be able to read books. • The Leaf Project intends to limit the threat of substitutes by supporting enriched e-books.
Rivalry among existing competitor	<ul style="list-style-type: none"> • The growth that the e-book industry has been experiencing in the last years has attracted a lot of newcomers, in addition to the already established books stores that have also started offering electronic books.

4.6 Pricing Strategy

The bandwidth that is currently offered by both fixed and mobile broadband connections allows companies to sell downloadable content, such as music, videos, and e-books. The revenue in such e-content markets depends on the value the customers find in the offered content. Therefore, in order to determine the right price, it is important to get to learn how much customers are willing to pay for a product or service. Economic theory has determined that most customers have a small income and that there are only a small number of customers with a very large income [75].

The capacity to spend can be considered as the maximum valuation of a product or service. However, the fact that a customer can spend does not necessarily mean that he or she is willing to do so. In the case of e-content, the willingness of a customer to pay for this content depends, among other factors, on the kind of content. The optimal price can also be related to the amount of resources that are available in order to serve requests coming from customers. **Figure 10** shows how offering a service for an optimal price can end up causing an overload in the system, since the number of users is greater than the number that the system is able to handle. In such a case, increasing the price slightly can help limit the number of users, thus maximizing revenue. However, an increase in price could also cause almost all of the customers to decide not to buy.

Classifying the set of products or services into categories helps estimate that the mean customer willingness to pay is similar. The idea is that the customer will be paying the same price for products belonging to the same category. As a content provider, the Leaf Project will make these classifications based on customers’ willingness to pay, which will help estimate the rate of acceptance of a defined price.

Some EU countries such as France, Germany, the Netherlands, and Spain, have a fixed book price arrangement that is set according to policies defined by the publishers. However, there is currently no arrangement for fixing e-book prices [46]. There are, for instance, publishers in Germany that price e-books 20% lower than the printed versions.

The way printed books and e-books are taxed also affects the pricing. In some countries, such as in the UK, printed books are exempt from VAT. However, e-books sold in the UK currently have a VAT of 17.5% [76]. In 2009, the European Union decided that member countries will be able to charge a reduced VAT on “any similar physical medium that predominantly reproduce the same textual information content as printed books” [77]. Currently, opening an online bookstore in an EU country with low VAT for e-books is the best way to achieve lower prices. In contrast, e-books sold in Sweden currently have a VAT of 20%.

A lot of the products and services offered on the Internet are seen as an experience good. This means that there are products and services that people need to get the chance to try before they realize how useful they can be. Carl Shapiro discussed the optimal pricing for experience goods in an article he published in 1983 [78]. He concluded that people usually misjudge a product’s value, and therefore the optimal pricing for an experience good is to start by charging a low price, which will allow the good to build a reputation. Once the user understands the value that the product offers, a higher regular price is set. This is what happened with Spotify. Initially users that had an invitation to join the service with advertising supported access allowing them to have free unlimited access. Subsequently, Spotify started limiting the free music streaming service (starting on May 1st 2011). Now freemium users are limited to ten hours of free listening per month and are only allowed to play an individual track a maximum of five times. According to the media [79], between March and June this year, Spotify lost 1,6 million free users while at the same time gaining

about 520 000 premium users during the same time span. This means that the company has now about 1,5 million premium users.

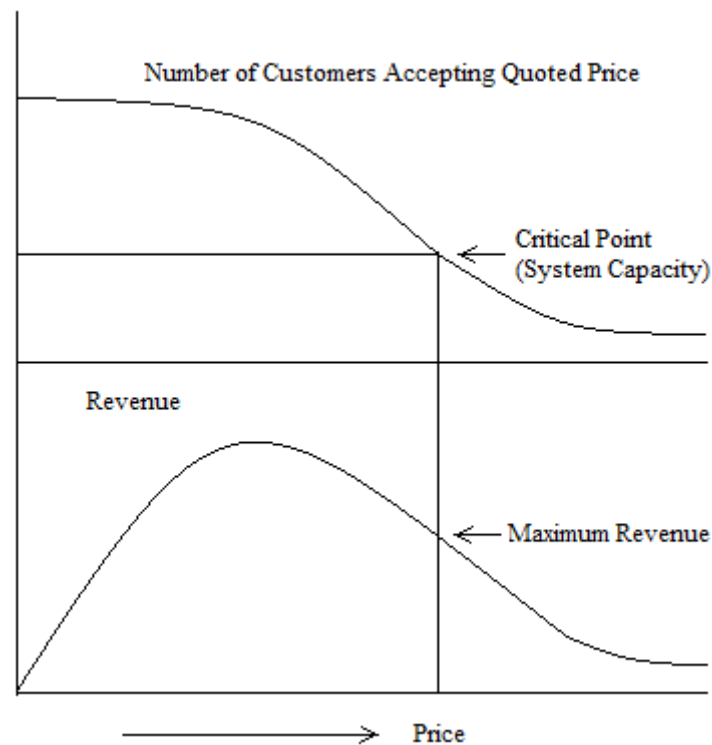


Figure 10. Maximizing Revenue Under Resource Constraints

In order to have value for the company, freemium users should represent savings in marketing costs (e.g., Dropbox) or generate revenues from advertising and/or user data (e.g., Spotify). Furthermore, the value provided by freemium users has to be higher than the cost of serving freemium users. Another important aspect is the size of the market, since there has to be enough premium users to be able to generate revenue for the business to be successful.

The Leaf Project plans to offer freemium and premium accounts. Freemium users will have access to all “not-for-profit” published content. On the other hand, premium users will have access to all the content published on the platform, which means access to both “not-for-profit” and to “for-profit” e-books.

4.7 Implementation Plan

The Leaf Project’s implementation plan is shown in **Figure 11**. The implementation plan is based on the business model implementation described in G. Khalil master’s thesis [5], taking into consideration that we have decided to implement an end-to-end distribution business.

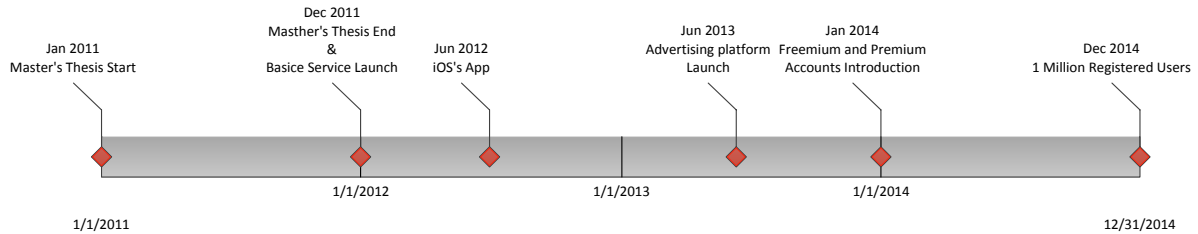


Figure 11. The Leaf Project's Implementation Plan

4.8 SWOT Analysis

The market analysis that was carried out shows how attractive the e-book industry currently is. Furthermore, the competitors that have been analyzed represent companies whose business model and/or service offering is innovative, unlike companies such as Amazon and Barnes & Noble. Table 5 shows the Leaf Project’s strengths, weaknesses, market opportunities, and threats, summarizing the analysis made throughout this chapter.

Table 5. SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • The freemium model lowers the barrier to entry for new customers. • Flat rate service model instead of charging per book. • The “streaming like” service (by serving content chapter by chapter) reduces the need for implementing DRM. • Support for the EPUB standard format. • Possibility for end users to publish “for-profit” in order to receive a percentage of the revenue the platform generates upon this content. • Support for HTML5, CSS3, and Javascript as well as for frameworks such as JQuery or Prototype, enabling visualization for interactive contents • End user data and behavior information can be used in product development and can also be offered to “for-profit” content publishers. • Revenues from premium accounts will be received before paying royalties to “for-profit” content creators. 	<ul style="list-style-type: none"> • Lack of expertise in the publishing industry. • Limited staff if there is no external investment. • An advertising API needs to be developed in order to avoid depending on a single advertising company, thus increasing the manpower needed for development. • Low number of users at the beginning. Advertising on the platform will become attractive with an increase in the number of users. • Consumer data trading depends on legal limitations that differ from country to country.
Opportunities	Threats
<ul style="list-style-type: none"> • Growth of the e-book market. • The e-book industry is still immature which translates into opportunities for new companies offering innovative services. • Companies with a similar service offering are still in a start-up phase. • Commoditization of tablet computers and smartphones. • Ubiquitous Internet access via fixed and mobile networks. • Self-published content is not as costly as content coming from publishers, which can be reflected in lower fees for accessing this content. • Enriched content can attract non-frequent readers. • Sign an agreement with an editing platform development company, to allow content creators to enrich their content. 	<ul style="list-style-type: none"> • Big players such as Amazon and Barnes & Noble could start a similar service offering. • A large number of newcomers looking for market share. • The e-book market is still in an early stage and it will take a few years before we know what business model and what kind of service can be successful. • Economic downturns cause people stop spending money on technological gadgets and non-essential services. • E-books continue to be taxed as online content, whereas physical books have low taxes. • Low percentage of premium users vs. total number of users. • Not enough “for-profit” content to attract premium users.

5. Financial Analysis

The amount of money that is required to start a company can be initially minimized by bootstrapping the business. This chapter starts by introducing some of the ways in which a start-up company can reduce costs, thus delaying the need for external investment. The financial plan shows the financial projections for the company during the first three years of operation.

5.1 Bootstrapping a Business

Bootstrapping refers to finding ways for running a start-up at as low a cost as possible and as efficiently as possible [80]. A start-up company looking to delay the need for an external investor needs to make use of their available capital in the most effective way. Therefore, all non-essential expenses for the business should be avoided. For instance, there is no need to have very spacious or fancy office space. Instead, a lot of work, especially at the beginning, can be done from home. Delaying the need for renting office space means that the money that would be used for renting can be used for something that is more essential to the success of the business at this stage.

5.1.1 Cash Flow

Some of the characteristics of a bootstrappable business model are [1]:

- Low up-front capital requirements,
- Short sales cycles,
- Short payment terms,
- Recurring revenue,
- Word of mouth advertising, and
- Social network based marketing - including blogs, product reviews, etc.

Managing cash flow is essential when bootstrapping a company. Sales opportunities that imply a long waiting time before being able to collect have to be avoided. On the other hand, payments to others should be delayed as long as possible, without surpassing the limits agreed to in a purchase agreement. The idea is to encourage other business to continue doing business with us, i.e., not to scare them away – lest we not to be able to get deliveries from our suppliers and hence be unable to deliver to our customers - who will pay us. This strategy will make the company seem to be less profitable, mostly because of the sales that were avoided, but managing for cash flow rather than profitability, is necessary when bootstrapping a company.

Besides saving money, bootstrapping requires bringing in cash as soon as possible; to do so, the product or service needs to hit the market and sales have to grow as quickly as possible. In this case, if the product has flaws -- but it is good enough, then it can be shipped to customers. This way, customers will be involved in testing the product and customer feedback will contribute to the product’s improvement while providing cash. However, this is a risky move, especially if the product is not sufficiently mature, because if severe quality problems arise with product this can leave a bad impression leading to a major loss in potential customers and increased support costs for the company. It may be very important

for the company to monitor what users are saying about the product and pro-actively respond to problems to avoid "Dell Hell" – see [81].

5.1.2 Employees

Every company needs suitable employees in order to be able to realize a business idea. A start-up is no exception. The problem that a startup faces is that, usually, good people are expensive, but the need for skilled people needs to be satisfied. Fortunately, not every talented professional is searching for a stable job with a high salary. Many people have different motivations, such as valuing a challenging job that allows them to grow professionally without bureaucracy, the possibility of flextime working, or even a convenient location. Therefore, the company needs to focus on offering what the big companies do *not* offer in order to attract talented people. In most cases, the people matching this profile are inexperienced young people, full of raw talent and energy. Students looking to write their thesis are quite often willing to do it for free. Recently graduated professionals are also a good target, as they want to gain valuable experience and learn as much as possible, and this is something that a start-up company can offer.

5.1.3 Market Research

Nowadays, a lot of information useful for a market research can be found on the Internet. It is easy to find information regarding competitors, industry trends, and customer opinions. There is a lot of information that is available on-line that is free, allowing a start-up to perform market research on a budget. For instance, the financial data from public companies is published on-line and can be accessed for free, meaning that financial data analysis can be carried out without paying a third party to provide the information. On the other hand, there are companies such as Hoovers [82] that offer company reports, competitive landscape reports, and industry reports for a fee starting from US\$49 per report. Of course paying for this information reduces the effort required, but a start-up should be careful to optimize its expenditures.

There are also some tools that allow social media monitoring. Alterian SM2 Freemiun offers a free version that, although limited compared to the paid one, gives the possibility to find out who is talking about a brand and the place where the discussion is occurring [81].

5.2 Financial Plan

Calculating a company’s finances is mostly based on assumptions about how the business will perform. Costs are easier to calculate, since the costs can be based on the implementation plan and the resources needed to realize that plan (personnel, premises, equipment, etc.). On the other hand, it is quite difficult to predict the revenues, since the revenues will mainly depend on the number of users using the platform. This financial plan is therefore a rough estimate of the company’s anticipated finances during the first years of operation.

End users

Based on the market analysis carried out in section 4, the main target is people between 18 and 34 years old. The study shows that men in that age range tend to be the

earliest adopters of new e-book distribution services. Nevertheless, we also expect to attract women to use the platform for self-publishing and reading e-books.

Being a digital product, the marginal cost (i.e., the cost of serving one more user) for the platform is low, allowing a freemium business model. Nevertheless, it is expected that a portion of the users will pay a premium fee to access “for-profit” content. As a rule of thumb, a conversion of 5% of the total users is needed to break-even, with 10% a good balance that allows maximizing the reach of a freemium business model.

We plan to have only freemium accounts during the first two years of operation. The main idea behind this is to generate content that will subsequently attract additional readers and writers.

Despite the huge potential that the e-book market has, as shown in the Market Analysis chapter, making future growth projections is complicated. The main reason for this is the varied speed at which the e-book market is developing in different countries. Wattpad was founded in 2006 and it now reports having 1 million registered users. Wattpad’s platform has from the beginning aimed for mobile devices as the device through which users access and read content. The availability of smartphones and tablets was quite limited when this service started. Based on Wattpad’s history, our target is to have 20 000 users by the end of the first year, 100 000 by the end of year 2, and reach 1 million users (with 5% premium users) by the end of year 3, instead of the five years it took for Wattpad to get this number of users. We consider these goals to be feasible, since the sale of smartphones and tablets continues to grow.

Premium fees will be introduced during year 3. The plan is to charge SEK 200 per user per year. The total revenue coming from premium users is expected to be SEK 6 000 000 (30 000 premium users paying SEK 200). Premium users wanting to publish “for-profit” will pay SEK 200 for each e-book they want to publish, in addition to the yearly premium fee. We expect to have 1 000 “for-profit” books which will bring in an additional SEK 200 000.

For year 4, we expect to have 60 000 premium users paying SEK 200 and 2 000 new “for profit” books, with authors paying SEK 200 per published book. Then, in year 5, we expect to have 80 000 premium users and 3 000 new “for profit” books.

Advertising revenue

We plan to implement an advertising platform during years 1 and 2 to start generating advertising revenues during year 3. According to statistics from StartWaves [83], the estimated value of 500 000 unique visitors per month for advertising is a maximum of US\$ 5 000 (SEK 33 500), which we would expect to receive by the end of year 3.

Personnel

The four member of the Leaf Project (D.Botero, F.Enni, S.Galiano, and G. Khalil) will start working on the e-reading platform full time from start of the first year. For the second year, our plan is to hire one developer to work on the reading application for tablets.

Then, for the third year, we foresee the need for hiring a web designer, to focus on social media and advertising.

Initially, the salary for each member of the Leaf Project will be SEK 27 500 per month (excluding the so called “arbetsgivaravgift”, which corresponds to 31,42% of the gross salary). This is the average salary that newly graduated professionals receive when they get their first job. Future employees will also be offered this initial salary level.

Premises

According to information available on Invest Sweden [84], the cost for office space in Stockholm ranges from SEK 1 500 /m²/year for a grade B property to SEK 3 700 /m²/year for a place with the best location in the market. Office space in a rent grade B property in the inner city costs SEK 2 100 /m²/year. We consider this last option to be a good one, since it offers a good location at an affordable price. Heating and water are usually included in the rent, whereas electricity, Internet connection, and telephone subscription are to be paid separately. The average price for telecommunication services is SEK 21 500 per year and the price for the electricity is around SEK 0,531/kWh. Considering the number of people working for the company (four, five, and six employees during the first, second, and third year respectively), we think that 50 m² will be enough for the first three years.

Royalties

Content creators will receive royalties for their “for-profit” content after the end of each quarter. However, the payment will only be made once the balance is at least SEK 1000, because issuing payments for small amounts would be too expensive. We plan that 50% of the revenue coming from the fees paid by the end users will be shared with the authors publishing “for-profit”.

Infrastructure

We initially plan to make use of Amazon’s Elastic Computing Cloud [85] (Amazon EC2) to host the server needed to provide the service. The choice of Amazon’s solution has to do with the way Amazon charges for using a virtual instance and also to the stability and scalability offered by their solution. Amazon charges per hour of use of the instance, which will be quite convenient for us, especially during the first year of operation because we don’t expect to have a lot of traffic. This will reduce the fee that we will pay for using Amazon’s service, but at the same time will allow us to provide access whenever it will be required, thus being able to escalate and adapt the solution to our needs. Furthermore, reviews on the Internet [86] [87] show that people who have been using Amazon’s Elastic Computing Cloud consider it to be affordable, highly scalable, and also to be more reliable when it comes to uptime when compared to other solutions.

Having a hosted solution implies a high operational expenditure (OPEX⁴), but it reduces the capital expenditure (CAPEX⁵) required to start up the business. Furthermore, the

⁴ OPEX refers to a recurrent cost for running a business.

⁵ CAPEX refers to acquiring fixed assets or adding value to existing assets, thus creating future benefits for the company.

cloud solution is based on a virtual machine, which makes it possible to migrate to a different service in the future. The hardware requirements are based on the tests performed by S.Galiano [3].

For the first two years, we will pay for a Large Instance, which has the following specifications:

- 7.5 GB memory
- EC2 Compute Units (2 virtual cores with 2 EC2 Compute Units each)
- 850 GB instance storage
- 64-bit platform
- I/O Performance: High

A Reserved Large Instance running SUSE Linux Enterprise Server 11 costs US\$ 1 102 (SEK 7 400) per year. The cost per hour is US\$ 0,173 (SEK 1,16). Assuming that the usage during the first year will be at most 50%, the cost will be US\$ 1 860 (SEK 12 500).

For the second year, we plan to keep the Large Instance, but we expect a usage of 100%. The cost for the second year will be US\$ 2 617 (SEK 17 500).

For the third year, we plan to move to an Extra Large Instance, which has the following characteristics:

- 15 GB memory
- EC2 Compute Units (4 virtual cores with 2 EC2 Compute Units each)
- 1,690 GB instance storage
- 64-bit platform
- I/O Performance: High

A Reserved Extra Large Instance has a one-time fee of US\$ 2 012 (SEK 13 500) for a one year term and it costs US\$ 0,333 (SEK 2,23) per hour. Assuming a 100% usage, the cost for the third year will be US\$ 4 930 (SEK 33 000).

Other expenses

We will register a limited liability company (AB) with the Swedish Companies Registration Office (Bolagsverket) and the Swedish Tax Office (Skatteverket). Registering a limited company means that the company will be able to enter into agreements and that the company is liable for its debts. As a small company, we may select not to have an auditor. Registering the company will require SEK 50 000 in share capital.

During the first year of operation we plan to use our own computers, shifting the expenses for purchasing computers to the second year. Additional expenses include web hosting, office supplies, etc.

Income Statement

Table 6 shows the projected income statement for the first three years of operation. Our main goal during the first two years is to gain users and to increase the content available

on the platform. That is why all content published during this time will only be “not-for-profit”. Then from year 3, we plan to introduce the fees for premium users and for authors wanting to publish “for-profit”. As can be seen in Table 6, we expect the revenues to start increasing from year 3. We expect to break even during year 4 and to have a net income of SEK 1 099 000 at the end of year 5.

Table 6. Income Statement

kSEK	2012	2013	2014	2015	2016
Revenues	0	0	6 200 000	12 400 000	16 600 000
Advertising revenue	0	0	200 000	200 000	200 000
Total Revenues	0	0	6 400 000	12 600 000	16 800 000
Royalties	0	0	3 000 000	6 000 000	8 000 000
Cost of personnel	1 734 000	2 168 000	2 602 000	3 036 000	3 036 000
Office space	105 000	110 000	115 000	120 000	125 000
Internet, Electricity	40 000	40 000	40 000	40 000	40 000
Infrastructure	12 500	17 600	33 000	40 000	50 000
Other expenses	100 000	150 000	200 000	250 000	300 000
Total Costs	1 991 500	2 485 600	5 990 000	9 486 000	11 551 000
EBITDA	-1 991 500	-2 485 600	210 000	3 114 000	5 249 000
Depreciations	0	0	0	0	0
EBT	-1 991 500	-2 485 600	210 000	3 114 000	5 249 000
Tax	0	0	1 550 000	3 100 000	4 150 000
Net income	-1 991 500	-2 485 600	-1 340 000	14 000	1 099 000

5.3 Exit Strategy

An investor tries to pay the correct price according to their perceived risk that a company succeeds and produces a significant return on the investment [88]. The earlier an investor invests, the lower the price he or she will have to pay since the risks are considerably higher earlier than they are at a later stage. **Figure 12** shows how the valuation of the company is anticipated to grow over time, together with the risks that need to be considered.

Venture capitalists that invest in technology start-ups look for growth oriented companies than can return their investment many times over in the future. Their exit strategy can either be selling the business to a competitor, having the company taken over by a larger company, or to list the company on the stock exchange via an IPO. The entrepreneur also wants to get a return on the money and time that they have invested in the company. Generally the entrepreneur wants to wait as long as possible before taking on investors, as this means that the company will get a larger external investment than it would get if the investment comes at an early stage.

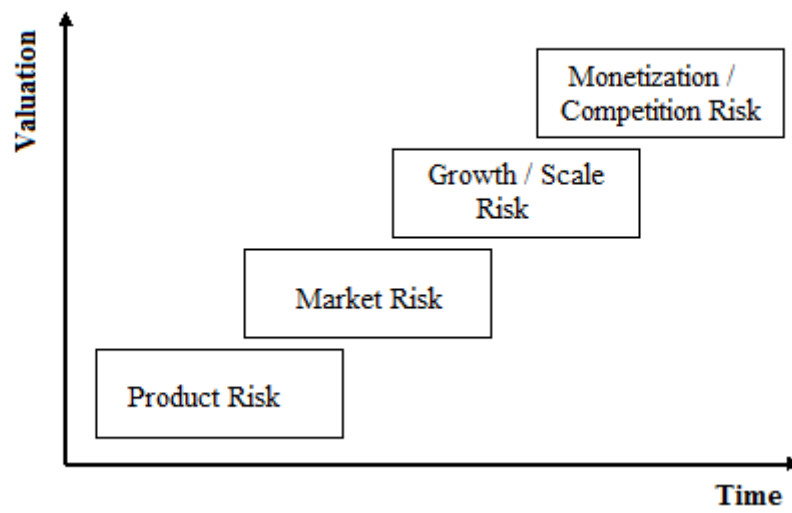


Figure 12. A Company's Valuation over time

6. Management Team

Starting a company not only implies coming up with a business idea, but it also includes having a management team able to drive the development of the company. Ideally, the skills and interests of the people in the management team should be diverse, so they can complement each other. Furthermore, investors will invest upon the team working on developing the business idea.

The four member of the Leaf Project (D.Botero, F.Enni, S.Galiano, and G. Khalil) all have engineering backgrounds. However, each member has skills and interests in different areas, which are complementary. The master’s thesis projects were divided so they would all contribute to the Leaf Project. These projects have shown that the team can work together and how each person has taken responsibility for a specific area. Given the knowledge that each one of us acquired during the development of our master’s theses, the plan is for each team member to continue working in the same areas, as described below.

Diego Botero

I have a B.Sc. in Electronics Engineering the National University of Colombia and I am currently finishing a M.Sc. in Communication Systems with emphasis on Entrepreneurship at KTH. I have experience mainly in the broadband business, where I have worked as an auditing engineer for the installation of broadband equipment, as a system test engineer for residential gateways, and also as a professional services engineer (this later position which has provided me with the opportunity to work close to customers and partners). Writing the business plan for the Leaf Project has allowed me to apply the knowledge in ICT entrepreneurship that I have gained during my master’s studies. I will be responsible for the operations of the company, driving the company’s strategy as well as coordinating and managing the organization.

Federico Enni

Federico has a B.Sc. in Informatics Engineering from Roma Tre University and a M.Sc. in Communication Systems with emphasis in Entrepreneurship from KTH. Federico has experience in web analysis, web design, and web development. As part of his master’s thesis project, he developed the first end-user application for the Leaf Project. The application was developed in Android. This allowed Federico to gain experience in developing for the Android platform and to produce a client for a rapidly growing part of the tablet and smart phone market. He will be the chief developer, thus he will be responsible for further developing the Android end-user application as well as starting the development of the iOS version of this application. In the future, when we will hire additional developers, he will lead the development team.

Sebastian Galiano

Sebastian has a B.Sc. in Telecommunications engineering, specialized in Telematics and a M.Sc. in Communication Systems with emphasis in e-business and ICT systems design from KTH and TU Delft. Sebastian worked at UPCnet in Barcelona, where he was a member of the team carrying out stress and performance tests on Atenea, Spain’s biggest e-learning platform based in moodle, with more than 50 000 users. He was also involved in the

deployment of the infrastructure for the Athenea project. In his master’s thesis project, Sebastian developed the infrastructure for the Leaf Project. His expertise in Linux administration and the experience he has in managing and deploying services will help us further develop and improve the infrastructure for the e-reading platform.

George Khalil

George has a B.Sc. in Electronics & Communications from Cairo University and a M.Sc. in Communication Systems with emphasis in Entrepreneurship from KTH. George has several years of experience working for Ericsson Egypt, where he worked as an implementation supervisor and as a project manager. Additionally, he also has experience in business development and knowledge in finance for start-ups. His master’s thesis project describes the commercialization plan for the Leaf Project. George will be responsible for business development as well as for finance. He will look for potential partners that are complementary to the Leaf Project, specifically targeting areas in which we lack expertise, such as the editing platform for enriching e-books.

7. Risk Analysis

Companies are exposed to risks. These risks can be internal to the company, or they can be related to the environment in which the company carries out its activities.

7.1 Top Three Risk Threats

The top three risks threats list is based on the likelihood of the threat to occur and the impact it would have on the company in case the threat would occur.

7.1.1 Similar and Substitute Products

Printed books are the natural substitute for e-books (or the other way around). As the research that was carried out in the market analysis shows, even though the e-book market is growing at an accelerated pace, printed books are still dominating the market. The need of for either an e-book reader or a tablet to be able to read e-books means that people wanting to access this kind of electronic content have to spend a considerable amount of money to get one of these devices. Smartphones are also suitable for reading e-books, although the screen size makes the reading activity more cumbersome. Printed books will still be around for a long time, thus innovation not only in our e-reading platform but also in the e-book industry in general is required to get people to change from reading printed books to utilizing e-books.

The research done for the competitor analysis identified companies whose services are similar to the one the Leaf Project intends to offers. As a differentiator, our e-reading platform will offer both “not-for-profit” and “for-profit” e-books, the latter available to users paying a flat rate that will entitle them to access all content, instead of paying per individual e-book. Furthermore, companies such as Wattpad do not share any of their revenue with users that write and publish through their platform, whereas the Leaf Project will allow authors to receive royalties when publishing “for-profit” e-books.

Another differentiating factor has to do with the enrichment of the content available on the Leaf platform. The risk we see in here is the lack of knowledge of authors about how to enrich e-books. Failing to have enriched e-books would prevents us from marketing the Leaf e-reading platform as a place where users can find e-books that go beyond the static text that it is offered by other distribution platforms. In order to encourage enhanced e-books, we plan to promote tools (such as Adobe Edge) to enrich content and we will publish stories about successful cases of enriched content published on the platform. Additionally, in the future we plan to create a community in which writers will be able to establish contact with artists and developers that will help them to enrich their e-books.

7.1.2 Content Acquisition

Initially the content available on the Leaf e-reading platform will be user generated (in addition to the public domain books that are part of the Project Gutenberg). This means that we need to attract enough people to create content and publish it through our platform. For the Leaf Project, we believe that content is king. Not having enough content will not attract users to the platform, which would inhibit the growth and limit the future of the company. We see “not-for-profit” e-books as a way to encourage authors to publish on the platform, since this will allow them to gain a better reputation without having to spend

money. Then, once these authors consider that their reputation will allow them to get enough readers to attract royalties, they will have the option to pay a fee and start publishing “for-profit” content.

7.1.3 Copyright Lawsuits

Giving end users the possibility to upload content will also open the doors for people to upload illegal content. Lawsuits are extremely expensive and could bankrupt the company. Verifying every single e-book uploaded on the platform is not feasible, since we expect to have a vast library of user generated content, thus making it impossible to guarantee that the content is not copyrighted by someone else. To avoid problems with copyrighted material, a clause about this material will be included in the Terms of Use that users must agree to before using the Leaf Platform. These Terms of Use will state that the user will not upload copyrighted material for which he or she does not own the rights or have permission from the copyright owner. If a copyright holder finds that content uploaded by a user infringes the copyright owner’s copyright, the copyright holder may notify the Leaf Project, in which case we will investigate and take the appropriate actions. The access for users whom have infringed copyrights repeatedly will be revoked.

7.2 Other Risk Threats

Table 7 shows several other potential risks that have been identified and classified according to the level of risk that the threat takes into the business.

Table 7. Other Risk Threats

Risks	Likelihood	Consequences	Impact	Mitigation Tactics
Customers do not like the design of the application	Low	Users will stop using the application and remove it from their device	High	Release a closed beta version, so friendly users will get the chance to test the application and provide feedback in order to improve the application
One of the founders decides to leave the project	Very low	Loses of know-how in the area in which this person was working and work overload on the remaining founders	High	Create a development process free of dependencies on any one person
Current liabilities exceed total liquid assets	Medium	Unable to pay salaries, office space, bills, etc.	High	Cash-flow sufficient for 3 months of operations must be available in a bank account to avoid such a situation
Conflicts among the founders	Very low	Loss of team spirit and risk of project cancellation	Very high	Build up a team spirit
Users complain about the quality and stability of the platform	Low	The user might decide to stop using the e-reading platform	Medium	Perform quality assurance tests before releasing the application
Lack of investment	Medium	Delay in software and infrastructure development, lagging behind other competitors	Very high	Efficient distribution of the workload and avoid unnecessary expenses
A popular author decides to remove the “for-profit” content he or she has published on the platform because he or she is unhappy with the royalties	Low	Users who only read content from this author might decide to stop paying for a premium account	Medium	Including a clause in the terms and conditions that prevents the author from removing content before a given period of time. Offer a fair and competitive royalty system.
Failure to understand the publishing industry	Low	The lack of expertise in the publishing industry can cause bad decisions when defining the company’s strategy, affecting its growth	Very high	Get acquainted about how the publishing industry works, to be able to understand its strengths and weaknesses. Keep up to date on the current development of the e-book industry.

8. Conclusions and Future Work

When writing a business plan, it is important to analyze the business idea and find out whether there is a market for it. This master's thesis shows how the e-reading industry is rapidly changing and that there are a lot of opportunities for entrepreneurs to start businesses around it. In this thesis, the business idea and the business model have been described. Furthermore, a detailed market and competition analysis has been carried out, as well as financial projections and risk analysis for the company.

8.1. Conclusions

The value network is a valuable tool to show how values are exchanged in a company. The traditional value chain does not illustrate this exchange of values when it comes to Internet companies, both the company and the customer have values to offer, not only tangible, but also intangible ones. Intangible values (knowledge and information) can be used to improve the user experience, thus positioning a company better than another company that does not realize the importance of intangible values.

Pricing a product or a service is not a trivial task. There are a lot of aspects that need to be considered, such as the perceived value for the customer. This is where a freemium business model becomes convenient. It gives the opportunity for customers to try out a product or service, before making a decision to pay for the premium service.

The research and analysis carried out throughout this thesis shows that the e-reading industry is currently experiencing a revolution in the way people consume content. Printed books, magazines, and newspapers are no longer the only way in which reading material is distributed. The commoditization of devices such as dedicated e-readers, tablets, and smartphones allow people to access content everywhere at any time. In the last decade the film/video, music, and gaming industries failed to evolve their businesses which caused them to lose a lot of money. On the other hand, the revolution in the publishing industry has been even slower coming, but is taking place right now. This means that there is a chance to try to do things right and use the technology to help the business, instead of fighting against the changes that this technology enables (whether the existing publishing industry wants these changes or not).

Even though the financial plan is mainly based on assumptions, it gives us an idea about the costs for running the company and how much money we would need in order to continue working on the project for the next three years. Revenues are more complex to calculate, since it involves assumptions about the potential user base per year, and how many of those users will be willing to pay for the service. Furthermore, we see the need for implementing an advertising platform, so we will not depend only on the users paying for a premium access. Moreover, given the growth that is expected in the e-book market, we believe that combining the “not-for-profit” and the “for-profit” models, we will be able to attract enough authors, thus we will be able to offer a vast library of e-books that users will find appealing.

All in all, this business plan shows that our e-reading platform can fight for a place in the e-book industry. We believe that everyone striving towards enriched content is taking a risk, since this is a new market with no proven model. Amazon has been quite successful with its Kindle and the “traditional” e-books they have been offering so far. But even they have realized that the future of the e-books is beyond simple text and static images. With the launch of the Kindle Fire, they are paving their way into interactive content, and this kind of content is the type of content that we have envisioned from the beginning of the Leaf Project, which shows that we are aiming in the correct direction.

8.2. Future Work

This business plan has evaluated what I considered to be the most important aspects related to the e-reading platform business. However, there is always room for improvement. The following are aspects that should be investigated in the future in order to further develop what has been presented in this master’s thesis:

- Study different licensing schemes.
- Evaluate possibilities for an advertising platform.
- Include balance sheet and cashflow statement in the financial analysis.
- Further analyze the exit strategies.

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