



CHALMERS
UNIVERSITY OF TECHNOLOGY



Making the freemium business model successful

Action research at a Swedish freemium startup company

Master's thesis in the Management and Economics of Innovation

JONATAN ARONSSON
FREDRIK EDEN

DEPARTMENT OF TECHNOLOGY MANAGEMENT AND ECONOMICS
DIVISION OF ENTREPRENEURSHIP AND STRATEGY

CHALMERS UNIVERSITY OF TECHNOLOGY
Gothenburg, Sweden 2020
www.chalmers.se
Report No. E2020:102

REPORT NO. E 2020:102

Making the Freemium Business Model Successful

Action Research at a Swedish Freemium Startup
Company

J. ARONSSON
F. EDÉN

Department of Technology Management and Economics
Division of Entrepreneurship and Strategy
CHALMERS UNIVERSITY OF TECHNOLOGY
Gothenburg, Sweden 2020

Making the Freemium Business Model Successful
Action Research at a Swedish Freemium Startup Company
J. ARONSSON
F. EDÉN

© J. ARONSSON, 2020.
© F. EDÉN, 2020.

Report no. E2020:102
Department of Technology Management and Economics
Chalmers University of Technology
SE-412 96 Göteborg
Sweden
Telephone + 46 (0)31-772 1000

Making the Freemium Business Model Successful Action Research at a Swedish Freemium Startup Company

J. ARONSSON
F. EDÉN

Department of Technology Management and Economics
Chalmers University of Technology

SUMMARY

In the last decade, the freemium business model has increased dramatically in popularity. The underlying concept is to provide a free version of a product or service to acquire a large user base and then offer premium value-adding services for either a subscription fee or a one-time cost. Previous research has examined the underlying economics behind the model and what general considerations that are important to keep in mind when designing the model. However, there is a lack of research that addresses the challenges related to the practical implementation of the freemium business model, and how businesses that are applying the freemium business model can approach them.

The purpose of this study is to examine what challenges companies that utilize a freemium business model face when trying to convert non-paying users into paying customers and to provide guidelines for how they can practically approach these challenges when designing their value offering. To fulfill the purpose of the study, a single case study with an exploratory action research approach of a fin-tech startup was conducted. The startup company, henceforth referred to as Company X, is providing accounting software and applies a freemium business model.

In practice, the study was carried out by developing a prototype that included financial add-on services that potentially could be integrated into Company X's cloud-based accounting software. Lean UX methods were applied when developing prototypes to enable short iterative cycles for receiving feedback. By talking to real users and understanding how they interacted and perceived a prototype of a potential real product that included the add-on services, valuable insights of opportunities, challenges, and risks involved when trying to convert non-paying users into becoming paying customers by offering financial add-on services could be made. Further, a conceptualization with general guidelines on how to practically approach the opportunities and challenges of converting non-paying users to become paying customers could be developed. The research process in this study was divided into three different stages: a pre-study, an iteration stage, and a final stage.

Based on empirical findings from the users' interaction with the prototypes, a critical challenge for companies trying to convert non-paying users into paying customers by offering add-ons was found to be the visualization of a user's perceived value. An opportunity to address this challenge was found to be the level of customization of add-ons. Further, the ability to mitigate the risk of decreased trust, as well as the ability to increase users' trust for the vendor, brand, and product was experienced to be critical factors for the freemium business model's success.

Keywords: freemium, add-on, conversion rate, user experience, Lean UX, value proposition.

Table of Content

1	Introduction.....	1
1.1	<i>Purpose and Research Questions.....</i>	2
1.2	<i>Case Company.....</i>	2
1.3	<i>Outline of the Report.....</i>	3
2	Theoretical Framework.....	4
2.1	<i>Business Models.....</i>	4
2.2	<i>The Freemium Business Model.....</i>	5
2.3	<i>Enhancing the Attractiveness of a Premium Product.....</i>	5
2.4	<i>Understanding What Creates Value for Your Customers.....</i>	7
2.5	<i>How Trust Affects Customers' Purchasing Intentions.....</i>	8
2.6	<i>Customer Loyalty and Converting Customers That Already Own Similar Services.....</i>	11
2.7	<i>Process for Creating Value for Your Customers.....</i>	12
2.7.1	<i>Validating Hypotheses.....</i>	13
2.7.2	<i>User-Centered Development.....</i>	14
2.7.3	<i>Agile Development Processes.....</i>	14
2.7.4	<i>Data-Driven Decision Making.....</i>	15
2.7.5	<i>Build-Measure-Learn.....</i>	15
3	Method.....	17
3.1	<i>Research Process.....</i>	17
3.2	<i>Changes Made to the Research Problem.....</i>	19
3.3	<i>Elaboration of Tools and Methods in the Pre-Study.....</i>	20
3.3.1	<i>Assumptions Exercise.....</i>	20
3.3.2	<i>Design Studio.....</i>	20
3.3.3	<i>Literature Review.....</i>	20
3.4	<i>Elaboration of Tools and Methods in the Development Stage.....</i>	21
3.4.1	<i>Minimum Viable Product.....</i>	21
3.4.2	<i>Customer Interviews and Live Interactions.....</i>	22
3.4.3	<i>Feedback Loops.....</i>	24
3.4.4	<i>Additional Data.....</i>	25
3.4.5	<i>Strategies for Customer Interviews and Live Interactions.....</i>	26
3.4.6	<i>Analysis of the Feedback.....</i>	28
3.5	<i>Methodology Discussion.....</i>	28
3.5.1	<i>Trustworthiness of the Study.....</i>	28
3.5.2	<i>Ethics and Biases.....</i>	30
3.5.3	<i>Challenges When Applying Lean UX Methods.....</i>	30
4	Empirical Findings.....	32
4.1	<i>Pre-Study.....</i>	32
4.1.1	<i>Initial Assumptions.....</i>	32
4.1.2	<i>Feedback Pre-MVP.....</i>	33
4.1.3	<i>Hypotheses.....</i>	34
4.2	<i>First Iteration.....</i>	34

4.2.1	Build.....	34
4.2.2	Measure.....	36
4.2.3	Learn.....	37
4.3	<i>Second Iteration</i>	38
4.3.1	Build.....	39
4.3.2	Measure.....	44
4.3.3	Learn.....	44
4.4	<i>Third Iteration</i>	44
4.4.1	Build.....	45
4.4.2	Measure.....	45
4.4.3	Learn.....	47
4.5	<i>Fourth Iteration</i>	47
4.5.1	Build.....	47
4.5.2	Measure.....	49
4.5.3	Learn.....	50
4.6	<i>Fifth iteration</i>	51
4.6.1	Build.....	51
4.6.2	Measure.....	52
4.6.3	Learn.....	54
5	Elaboration of the Empirical Findings	56
5.1	<i>Content</i>	56
5.1.1	Tailored Add-ons.....	56
5.1.2	Business analysis.....	58
5.1.3	Company X Score.....	59
5.1.4	Additional features.....	60
5.2	<i>Communication</i>	61
5.2.1	Communication of the service.....	61
5.2.2	Communication of advice.....	63
5.3	<i>Design</i>	64
5.3.1	Design of the service.....	64
5.3.2	Continuous user feedback.....	66
6	Discussion of the Empirical Findings	67
6.1	<i>Create a Great Value Proposition</i>	67
6.2	<i>Bridging the Cognitive Bias Gap</i>	68
6.2.1	Visualize the Impact and the Perceived Value.....	69
6.2.2	Customize When a Free Trial Is Not an Option.....	69
6.3	<i>Increase the Willingness to Purchase by Mastering the Vendor-Brand-Product Trust Relationship</i> 70	
6.3.1	Benevolence Trust's Effects on Conversion.....	70
6.3.2	Increase Trust by Being Transparent.....	72
6.3.3	Mitigate the Risk of Integrity Violation.....	73
6.3.4	Competence Trust's Effect on Conversion.....	74
6.3.5	Increase Trust with Predictability.....	75
6.4	<i>Design a Smooth Sign up Process</i>	76
6.5	<i>Pains and Gains When Applying a Lean UX Process</i>	77
7	Conclusion	79

8	References	81
----------	-------------------------	-----------

1 Introduction

In recent years, the use of the freemium - a combination of free and premium - business model, has increased dramatically. Companies like Spotify, Dropbox, and Evernote all rely on the freemium business model and are doing so successfully. Phil Libin, the co-founder and former CEO of Evernote, gives a statement that clearly depicts the freemium business model's elementary concept:

"The easiest way to get 1 million people paying is to get 1 billion people using."

In its core, the freemium model works by providing a basic version of a service or product to users at no charge, with additional complements to the basic version that users must pay for (Pujol, 2010). The model is especially common in companies that provide a digital service as the marginal cost for every new user is negligible. Pujol (2010) further describes how the traditional sales cycle demand generation is generally attained by adverts, but that the demand generation in the freemium sales cycle instead is attained by providing a product or service for free. As supported by Gu, Kannan & Ma (2018), the freemium sales cycle provides the opportunity to create a considerable demand, and by the support of viral marketing and word-of-mouth referrals, there is potential to achieve exponential growth. Since the demand generation in the freemium model is not based on traditional adverts, it makes it particularly suitable for startup companies that initially do not usually have an extensive marketing budget.

Bullard (2018) explains that the free version of the product or service only should include basic functionalities and features, and that value-adding add-ons or premium features in the product or service should be provided for a subscription fee or a one-time cost. Thus, to make the freemium model work, it is necessary to be able to convert non-paying users into becoming paying customers, which according to Gu, Kannan & Ma (2018), is the main challenge for companies that applies the freemium business model.

Previous scholars, like Seufert (2014) and Anderson (2009), have focused on describing the underlying economics and concepts behind the freemium business model, what key performance indicators that should be used to define its success, and what analytical methods that can be utilized to track the metrics. Kumar (2014), has another focus and describes what general considerations are important to keep in mind when designing the model. However, there is a lack of research that covers how freemium companies can practically address the challenges they are faced with when trying to convert non-paying users into becoming paying customers, and how add-on services shall be presented to users to increase the likelihood of conversion.

1.1 Purpose and Research Questions

The purpose of the study is to examine how companies that apply a freemium business model can practically approach identified opportunities and challenges related to converting non-paying users to become paying customers by targeting them with add-on services. The study aims to provide a guideline for how add-on services should be designed and presented to increase conversion. For the purpose of the study to be reached, the following research questions will be addressed:

1. *What challenges and opportunities are apparent when targeting users with add-on services with the purpose to convert them from non-paying users into paying customers within a freemium service?*
2. *How can freemium companies practically address identified challenges and opportunities to increase non-paying users' willingness to purchase add-on services?*

1.2 Case Company

To fulfill the purpose of the study and to answer the research questions, a single case study of a freemium fintech startup company that is facing these issues will be conducted with an action research approach. The reason why an action research approach was chosen will be further explained in chapter 3, *Method*.

The company examined in this case study, which further on will be referred to as Company X, is a digital fintech company whose target customer segment is small- and medium-sized businesses. Company X applies a version of a freemium business model where they offer accounting software for free and then generates revenue by selling add-on services that are presented to its users within the software.

The revenue is generated from two types of add-on services; financial add-on services and accounting add-on services:

- The financial add-ons are made up of business insurances, pensions, contract templates, invoice financing, and mobile phone subscription plans. The financial add-ons are provided through third-party providers that Company X is in partnership with. The financial add-ons are presented to the users within the software and Company X gets a revenue share from the third-party provider when an add-on is sold.
- The accounting add-on services consist of day-to-day bookkeeping services, preparation and filing of VAT returns, and preparation and submission of annual accounts. The accounting add-on services are provided by Company X.

1.3 Outline of the Report

First, a theoretical framework is presented in chapter 2, where previous findings related to factors influencing the conversion rate in a freemium business model are presented. Since the study is characterized by an exploratory action research approach, the theoretical framework has partly been developed throughout the study. When an interesting phenomenon was observed during the empirical research which could be assumed to have an impact on the conversion rate, relevant literature related to the phenomenon was reviewed to explore whether previous scholars had made findings that could be useful when analyzing the empirical findings.

The theoretical framework forms the foundation for the discussion outlined in chapter 6. The framework further supports the concluding guidelines outlined in chapter 7 for how companies that apply the freemium business model should act to increase the conversion of add-on services.

In chapter 3, the methods used when carrying out the study are described. The study was performed with an action research approach with an iterative process, where findings continuously were analyzed to suggest new solution-hypotheses that later would be tested.

In chapter 4, the empirical findings and formulated solution-hypotheses are presented and ordered according to the iteration cycle where they emerged.

In chapter 5, an elaboration of the empirical findings is presented. This chapter focuses on findings that are directly applicable to Company X. The elaboration in chapter 5 does not conceptualize the empirical findings to a general level but instead analyses the actions taken to improve the MVP based on Company X's specific situation. Further, recommendations for Company X's future work are presented.

In chapter 6, the empirical findings and the elaboration outlined in chapter 5 are conceptualized and a discussion is carried out on how the findings can be used to draw general conclusions on how freemium companies shall approach the identified challenges and opportunities when trying to convert non-paying users to paying customers. In this chapter, trade-offs, important considerations, and recommendations for how to design and test add-on services are provided.

Finally, a concluding guideline for how freemium companies should practically address the challenges and opportunities apparent when targeting their users with add-on services is presented in chapter 7. The concluding guideline is based on the discussion in chapter 6 with support from findings made by previous scholars.

2 Theoretical Framework

The theoretical framework explains concepts relevant to the study and phenomena observed in the empirical research. The theoretical framework's purpose is to create a foundation for the analysis and discussion of the empirical findings and to support the concluding guideline for how freemium companies should practically address the challenges and opportunities apparent when targeting their users with add-on services.

Firstly, the freemium business model is described, including the opportunities and challenges it brings identified by previous scholars. This is followed by how a value proposition best shall be designed to meet the users' pains and needs in order to bring value to the user. Next, switching costs will be explored to understand what thresholds that are prevalent in the purchasing decision for users who already possess a similar service from a competing provider. Lastly, Lean UX concepts will be examined to create an understanding of the process for developing a product cost-efficiently and with a short time-to-market. The Lean UX concepts will be important when designing the methodology of the study as it will be necessary to gain valuable feedback and insights in a short time of how customers perceive different ways of being presented with add-on services in a realistic setting.

2.1 Business Models

Every company that wants to generate a profit and stay competitive should have a clear picture of who their customers are, of its value offering, how they should deliver the value and the financial viability of the business. These are all elements represented in a company's business model. According to Haaker, Faber & Bouwman (2006), the business model can be seen as "a blueprint of four interrelated components: service offering, technical architecture, and organizational and financial arrangements.", and is further defined by Osterwalder & Pigneur (2013) as "A business model describes the rationale of how an organization creates, delivers, and captures value. "

A company's business model shall act as the foundation for a strategy that shall be incorporated in the entire organization and permeate everything the company does, from designing the organizational structure, forming the corporate culture, building the people, and crafting the business processes (Osterwalder & Pigneur, 2013). There are several possibilities for how to design a business model, Teece (2010) states that what characterizes a well-designed business model is highly situational. And further, that the design of the business model should not be fixed, but rather developed through an iterative process, and that the creation of a new business model can itself be seen as an innovation.

2.2 The Freemium Business Model

The concept of offering a service for free and then capitalize on additional premium features has been around in the software industry since the 80s (Wagner, Benlian & Hess, 2013). However, the term “freemium” - a “hybrid” of the words free and premium - was first conceptualized by Fred Wilson in 2006. Wilson (2006) describes the concept of the freemium business model as:

“Give your service away for free, possibly ad supported but maybe not, acquire a lot of customers very efficiently through word of mouth, referral networks, organic search marketing, etc., then offer premium priced value-added services or an enhanced version of your service to your customer base.”

When a company is applying the freemium business model, a basic product or service is provided for free to generate a large user base. As Bullard (2018) describes, this version of the product or service only includes basic functionality and features that only meet the basic needs of a user. Within the product or service, additional value-adding services or premium features are provided, either for a subscription fee or a one-time cost. Usually, as pointed out by Seufert (2014), only a small share of the user base is purchasing these value-adding or premium features, and no more than 5% of the total user base can be expected to ever monetize. These customers accommodate all the revenue generated from the product or service and cover all maintenance and development costs of the service, including the free version. Thus, as stated by Gu, Kannan & Ma (2018), the success of the freemium business model depends on the share of users who purchase premium services and become paying customers.

2.3 Enhancing the Attractiveness of a Premium Product

To make an add-on based freemium service work, it is important to have a viable strategy for how to present the add-ons in order to optimize the conversion rate. Kumar (2014) states that there are several important factors to consider when designing a freemium business model.

Firstly, Kumar (2014) argues for the importance to determine what features of the service that shall be offered for free, and what value the free service should provide. If the free service is not compelling enough, it will have a negative impact on user growth, which is the primary purpose of providing the service for free. On the contrary, if the free service brings too much value to the user, there is not enough incentive to pay for premium. Wagner, Benlian & Hess (2013) argue for the importance to gain an understanding of the cognitive-affective relationship between the free service and the premium version. The authors are using the concepts of perceived premium fit and perceived price value to describe users’ likelihood of converting from free to premium.

They argue that only a limitation of features in the free service is not the optimal way of maximizing the conversion to the premium service, as users cannot fully understand the additional value of the premium version until they have experienced it. Instead, they conclude that the best way to approach this catch-22 situation is to provide a time-limited free trial of the premium version which automatically converts into the basic free version if the user does not choose to pay for the premium.

Secondly, Kumar (2014) stress the importance of communicating the provided value of the value-adding or premium features of the service. If the users cannot see the additional value clearly without first signing up, the conversion rate will be severely impacted negatively. In the paper *Selling the Premium in Freemium*, Gu, Kannan & Ma (2018) were studying how the conversion rate of add-ons improved when extending the product line. In their research, they analyzed the impact on the conversion rate when presenting a premium product in different settings for a company that was providing free PDFs and selling paperback copies as a premium add-on. When the paperback product was presented to the users next to a higher-quality and higher-priced product of a hardback copy, the revenue generated from the paperback increased by 8,9% compared to when the paperback was presented in isolation from other offerings. Gu, Kannan & Ma (2018) are comparing this phenomenon to when a salesperson is first presenting a low-end low-priced product to a user, then showing a high-end premium-priced product, intending to finally sell a middle-range product. When the paperback product was presented next to a product with significantly reduced quality and with a slightly lower price, the revenue generated from the paperback increased with 21,5%. The authors explain this phenomenon with the "attraction effect". When a lower-quality product is presented next to the original product, the attractiveness and perceived value of the original product increases. Gu, Kannan & Ma (2018) also concluded that it is important that the lower-end product is not priced too low, as this will result in the cannibalization of the sales of the promoted product.

Thirdly, Kumar (2014) describes the importance of understanding the underlying implications of the metrics used to track the performance of a freemium business model and to set the right objectives. A commonly used metric used to track freemium performance is the conversion rate of the value-adding services. Intuitively, it is easy to think that the highest revenue is obtained by maximizing the conversion rate. If the conversion rate is abnormally high, Kumar (2014) suggests it might be worth analyzing if the offered free service is attractive enough, and if efforts should be made to enhance it to expand the customer base. In his research Kumar (2014) states that most freemium companies have a conversion rate between 2 and 5% and argue that the optimal conversion rate depends on the size of the targeted market.

Finally, Kumar (2014) argues for the importance of freemium companies to understand the full value of its freemium users' which takes two forms. Some convert to premium customers, and some refer the service to others who potentially become premium customers. In his research, Kumar (2014) has found that a free user can be worth as much as 15 to 25% of a premium customer, and to increase the value of free users, it is important to be able to carefully manage referral incentives and communications.

2.4 Understanding What Creates Value for Your Customers

Since the purpose of this study is to investigate how an add-on service with certain specifications should be presented to a user to maximize the willingness to purchase the add-on, it is essential to understand how the value offering should be designed in the best way, and what considerations that are important to keep in mind.

The value proposition canvas developed by Osterwalder, Pigneur, Bernarda, Smith & Papadakos (2015), is a constituent of the business model canvas developed by the same authors. The value proposition is described "The benefits customers can expect from the company's products and services". While Osterwalder et al. (2015) describe the business model canvas as a tool that helps managers create value for their business, they describe the value proposition canvas as a tool for facilitating value creation for customers. The Value Proposition Canvas can be seen in Figure 1.

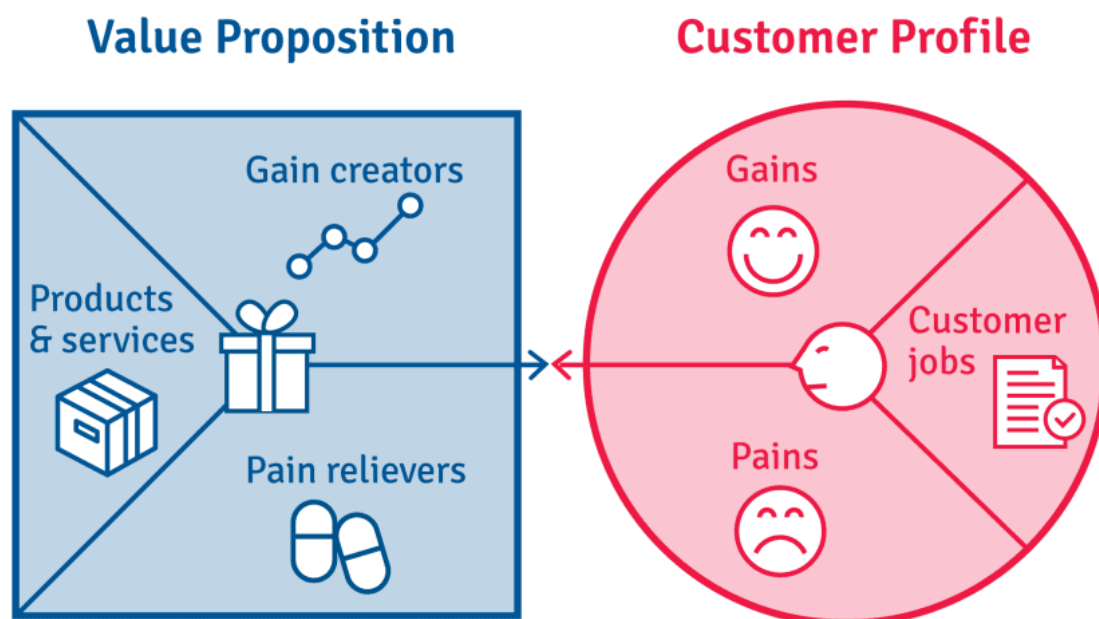


Figure 1. Value proposition Canvas (Osterwalder et al., 2015)

The left side of the canvas is referred to as the Value Map, where a description of the company's value proposition shall be stated. The right side of the canvas is referred to as the Customer Profile. Here, companies state the "set of characteristics that are assumed, observed, and verified in the market".

The left-hand part of the Value Proposition Canvas, the Value Map, consists of:

1. **Products and Services:** A list of all products and services a company's value proposition is built around.
2. **Gain Creators:** Describe how products and services create customer gains.
3. **Pain Relievers:** Describe how a company's products and services relieve the customers' pains.

The right-hand part of the Value Proposition Canvas, the Customer Profile, consists of:

1. **Gains:** A description of the outcome customers want to achieve, or the benefits they are seeking.
2. **Customer Jobs:** An informal description of what customers are trying to get done in their jobs or everyday life.
3. **Pains:** A description of bad outcomes, risks, and difficulties related to the jobs the customers want to have done.

Osterwalder et al. (2015), further argue that the aim for the company designing the value proposition should be to achieve a fit between the value map and the customer profile, meaning that the customers' gains, pains, and jobs should be met by the value proposition offered by the company. By applying adequate tools and processes, entrepreneurs can reduce risk in development, and better manage the messy and nonlinear process of designing a strong value proposition. Like other scholars, such as Goodman, Kuniavsky & Moed (2012) who are addressing the product development process in an environment characterized by uncertainty, Osterwalder et al. (2015) are stressing the importance of applying an iterative learning process where constant development and agility lies at the center.

2.5 How Trust Affects Customers' Purchasing Intentions

Even if a great value proposition has been designed, there are still multiple other aspects that affect a customer's intention to convert from a free user into a paying customer. One

influence that affects a user's intention to purchase add-on services is trust, which is an integral element in all customer-company relationships. Trust plays a particularly important role when selling services because unlike when products are sold, the transaction typically occurs before the user can experience the service (Berry, 2004).

The concept of trust is defined by Mayer, Davis & Schoorman (1995) as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party". Morgan & Hunt (1994) are conceptualizing trust as "when one party has confidence in an exchange partner's reliability and integrity", and stress that a high-level of trust in business relationships have the potential to contribute to increased efficiency, productivity, effectiveness, and reduced decision-making uncertainty. One factor that contributes to an increased level of trust in business relationships is frequent and high-quality communication and information sharing, as this assists in aligning perceptions and expectations between parties (Morgan & Hunt, 1994).

McKnight, Choudhury & Kacmar (2002) provides a model of the components that influence trust in a web vendor. They state that trust in a web vendor is made up of trusting beliefs and trusting intentions, which is dependent on the consumers' disposition to trust and institution-based trust. The disposition to trust also has an effect on personal innovativeness, and the institution-based trust is in turn dependent on the general web experience. Shapiro, Sheppard & Cheraskin (1992) further states that the predictability of a vendor's behaviors and actions increases the level of trust in the vendor. High-level trust beliefs positively affect online intentions since, as stated by McKnight et al. (2002), "a consumer with high trusting beliefs perceives the internet vendor to have attributes that enable the consumer to hold a secure willingness to depend on the vendor". For instance, a perception that a vendor is honest, which relates to integrity trust, reduces the consumer's concern to provide personal information to the vendor. The trust intentions presented by McKnight et al. (2002) consist of:

1. Willingness to depend on the vendor
2. Follow advice provided by a vendor
3. Provide personal information to the vendor; and
4. Make purchases

Becerra & Korgaonkar (2011) have made a valuable contribution to the understanding of the impact of trust on consumers' online intentions. They argue that a consumer's online intentions are based on its cognitive and emotional expectations about the vendor providing the product or service available for purchase, which they, similarly to McKnight et al. (2002), refer to as trust beliefs. They have theorized and extended the work of

previous scholars and summarized it into a conceptual model that describes the relationship between trust beliefs and consumers' online intentions. In Becerra & Korgaonkar (2011) conceptual model, a consumer's online intentions, similarly to the trust intentions provided by McKnight et al. (2002), consist of:

1. Intention to purchase; and
2. Intention to provide personal information online

In Becerra & Korgaonkar (2011)'s conceptual model, the online intentions are influenced by trust beliefs which consist of:

1. Competence trust; the vendors' ability to comply with the needs of the consumer
2. Benevolence trust; the vendors' will to act according to the consumers' interests; and
3. Integrity belief; the vendors' honesty and the degree to which a vendor adheres to an accepted set of principles

Becerra & Korgaonkar (2011) have also studied the interrelationship between vendor, brand and product trust beliefs, and how they affect consumers' online intentions. The vendor and brand trust depend on the trust beliefs stated above, whereas product trust as suggested by Becerra & Korgaonkar (2011), arises from:

1. The type of product
2. Performance variability
3. The newness of the product
4. Low levels of or bad experience with the product type,
5. Lack of information about the product type, and;
6. The inability to inspect/touch the product.

Becerra & Korgaonkar (2011) state that lack of trust is one of the primary reasons why consumers on the web chose not to purchase products and services online. If there is a concern among users to provide personal information online, this can affect the ability to convert online shoppers into becoming buyers as most online transactions require the consumer to enter personal or financial information (Bart, Shankar, Sultan & Urban, 2005). Becerra & Korgaonkar (2011) further argues that the customers' online trust beliefs must be sufficiently high in order to overcome the perceived risk and uncertainty related to purchasing products and services online.

The conceptual model of the relationship between trust beliefs and online intentions suggested by Becerra & Korgaonkar (2011) is presented in Figure 2.

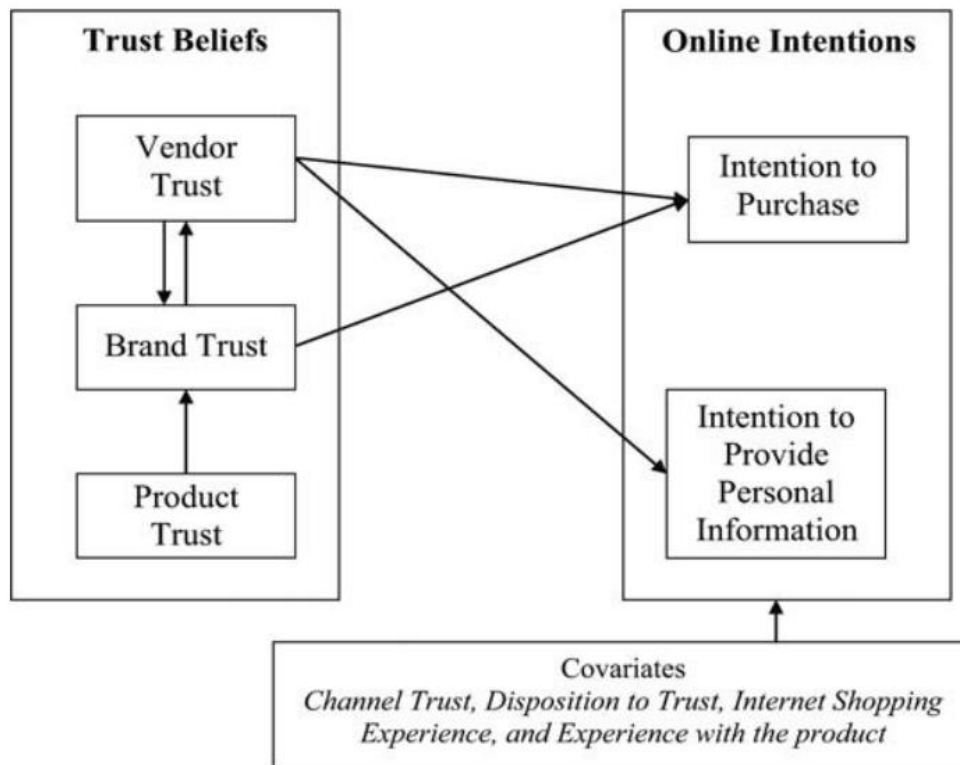


Figure 2. Conceptual model of the effects of trust beliefs on consumers' online intentions (Becerra & Korgaonkar, 2011)

Becerra & Korgaonkar (2011) conclude that a high brand trust belief has a positive effect on consumers' intention to purchase and provide personal information online. The effect of vendor trust belief depends on the trust for the brand and product/service trust can be increased by trust in the brand. If there is high uncertainty about a product or service, brand trust becomes increasingly important (Dowling & Staelin, 1994). Further, if a vendor provides products related to high trust beliefs, the vendor's trust will increase (Lee & Lee, 2005).

2.6 Customer Loyalty and Converting Customers That Already Own Similar Services

A firm's customer loyalty and credibility have in the information age, especially with the emergence of strong network effects, become increasingly important for achieving a competitive advantage (Shapiro & Varian, 1999). In distinction from customer retention, which can be achieved by implementing a retention strategy, Caruana (2003) proclaims that customer loyalty is a psychological state that arises in the customer's mind based on how they perceive the company and its offerings. Caruana (2003) further states that customer loyalty can generate word-of-mouth promotion for the company, which has an impact superior to most other marketing tools. For startup-businesses with limited

marketing budgets, customer loyalty is, therefore, a key element to understand and execute on.

According to Caruana (2003), one of the key factors that influence customer loyalty is switching costs. Switching costs are typically defined as the cost related to when a customer switches from one supplier's service or product to a similar product from a competitor. Burnham, Frels & Mahajan (2003) defines switching costs as “the one-time costs that customers associate with the process of switching from one provider to another”.

Caruana (2003) states that switching costs can have either monetary or non-monetary characteristics, and further argues that the switching costs can be divided into both real and perceived costs. Klemperer (1987) divides switching costs into three different categories; transaction costs, learning costs, and artificial or contractual costs. He exemplifies the transaction cost as the cost to close an account at one bank and opening up a new one at a competing bank. The learning cost refers to the cost of not being able to transfer the gained knowledge from using a product from one supplier when switching to a competitor that offers a similar product with the same quality. Klemperer (1987) argues that transaction costs and learning costs reflect the real social costs of switching between brands. The third type of switching cost is artificial or contractual costs, which, according to Klemperer (1987), arises when consumers who switch between companies are penalized relative to those who stick with a single firm.

Apart from the explicit switching costs, Caruana (2003) states that there are additional implicit switching costs associated with decision biases and risk aversion that needs to be taken into account. These switching costs involve psychological and emotional costs, which can arise when a social bond or a trust has been built up with one firm over a period of time and can create a psychological exit barrier even if a competitor offers a supplementary product or service of superior quality. Bloom, Asher & White (1978) explain that this phenomenon occurs because customers want to avoid the potential psychological and emotional stress, as well as the risk and uncertainty that switching between firms entails.

2.7 Process for Creating Value for Your Customers

As previously stated, applying an iterative learning process where constant development and agility lies at the center is essential to create a strong value proposition (Osterwalder et al., 2015). A well-designed value proposition can, however, be difficult to deliver to the users, as users are often misinterpreted or misunderstood, and it can be even harder when developing a new and innovative product.

There are several methodologies available that can be applied to facilitate the new product development process. When cost-efficiency and a short time-to-market are the primary determinants of the development process, Lean UX can help to understand users and to develop better products faster and with less waste compared to other strategies (Klein, 2013). Gothelf & Seiden (2016) describes the concept of Lean UX as “the practice of bringing the true nature of a product to light faster, in a collaborative, cross-functional way that reduces the emphasis on thorough documentation while increasing the focus on building a shared understanding of the actual product experience being designed”.

To create a better understanding of what Lean UX is, and how it can help businesses operating in an unknown environment, its main principles will be explained in the following subchapters.

2.7.1 Validating Hypotheses

Firstly, one significant difference between Lean UX and other design- and development methodologies is Lean UX’s way of thinking of a product as a set of hypotheses to be tested, instead of features to be built (Klein, 2013). Klein (2013) argues that this different mindset reduces the risk of developing a product that does not bring value to the user. By continuous research and user interviews, hypotheses about what needs and pains the user have can be formulated, tested and validated to ensure that there will be a demand for the product.

Compared to more traditional product development strategies, Lean UX is not about adding new features to a product. A common problem in the development of new products is that a designer’s or product owner's idea of the product scope and what features to be built rarely corresponds to what will actually solve the users’ problems (Klein, 2013). With a hypothesis-driven approach, the uncertainty in the development process can be reduced by maximizing the amount of information gained from the users per resource spent (Eisenmann, Ries & Dillard, 2011). This approach confirms by talking to users if a feature is worth building before resources are spent on building it (Klein, 2013). As a bonus, valuable feedback is attained of how the users want the new product to work.

A challenge in the hypotheses-driven approach is to interpret if a hypothesis has been validated or not and to understand what results that constitute a success (Klein, 2013). To manage this challenge, a helpful strategy as suggested by Gothelf & Seiden (2016), is to break down the hypotheses into smaller, more specific hypotheses. By doing so, the outcome tends to be easier to interpret.

2.7.2 User-Centered Development

User-centered development has a central role in Lean UX, as well as in many other development strategies. However, what differentiates Lean UX according to Gothelf & Seiden (2016), is that it emphasizes the importance of getting out of the building to talk to real users and the need to realize that it is the users who have the answers to the questions needed to be examined. Instead of spending time discussing if a new feature brings value to the users or not, Lean UX suggests trying ideas fast, and much sooner on real users, than what many other development strategies propose. The quickly obtained user feedback helps product managers to, in a shorter time than usual, determine if it is worth spending the required time and cost on building the new product or feature (Gothelf & Seiden, 2016).

Continuous user feedback is also distinguishing for how the Lean UX approach interprets user-centered development. By having an ongoing process with regular user conversations instead of just at the beginning of the development process, which is the case in many other product development methodologies, there will be room for frequent opportunities to validate product ideas (Gothelf & Seiden, 2016). However, as much as Lean UX favors getting feedback from real users, it is important not to start imagining that the users have a well-defined idea of the desired final version of the product (Klein, 2013). Klein (2013) stresses that including users in the design process does not mean that they should take control of product design decisions. However, it is vital to include users in the development process to let designers and developers understand what the users' problems and pains are so that better decisions for future solutions can be made.

2.7.3 Agile Development Processes

Lean UX has a lot in common with Agile development. Both methodologies focus on teams working in short iteration cycles to ensure that the time until they get feedback on the product is as short as possible (Klein, 2013). The short feedback loop is according to Klein (2013) both strategies' most important constituent as it gets rid of the waterfall methodology. The waterfall methodology divides the project development process into different stages that are executed in sequence, which gives the project an initial direction but limits the feedback during the different stages (Eisenmann, Ries & Dillard, 2011). The waterfall methodology often leads to a lengthy research and design process before delivering a product specification to developers, which moreover often tends to be wrong (Klein, 2013).

Agile development aims to unite developers and designers to work together in product development projects (Gothelf & Seiden, 2016). This cooperation also plays a central role in the Lean UX methodology as it helps to speed up the design process and increases the ability to make modifications if something goes wrong in the process (Klein, 2013).

Both methodologies also promote frequent communication between the team members to unite the team around a shared vision and to bring insights from different disciplines into the process faster than other development methodologies do (Gothelf & Seiden, 2016). Excellent communication in the team can also, both in Agile development and Lean UX, get rid of waste in the form of extensive documentation, as there is no need for documentation to inform and update on product specifications since a simple mockup or a flowchart is enough (Klein, 2013).

2.7.4 Data-Driven Decision Making

A fundamental part of Lean UX is that everything should be tested to ensure that data supports the decisions taken in the design process (Klein, 2013). Data can help designers understand how users behave and interact with the product, and how to solve problems. However, Klein (2013) states that there are challenges in creating a data-driven decision-making culture and stresses the need for tracking actionable metrics and the difficulty in combining design and test practices with useful key metrics with the purpose to develop a more valuable product.

In Lean Analytics, Croll and Yoskovitz (2013) elaborate on what they argue to be useful metrics. Firstly, metrics should be comparable to something, so that it is intuitive which direction a tracked metric has. Secondly, a change in data should correspond to a change in the product. Thirdly, useful metrics should take the form of a rate or a ratio to make it easier to act on and compare to other metrics. Lastly, metrics should change behavior. For a metric to change behavior, Croll and Yoskovitz (2013) argue that it needs to be aligned with the objectives of the process.

Croll and Yoskovitz (2013) also stress the need for qualitative data analysis and tracking of metrics in the initial state of a process. Even though quantitative data may be easier to interpret and provide more statistical value, qualitative data can help explain why things are happening and why users behave as they do. This claim is also supported by Gothelf & Seiden (2016), who stress the need for including qualitative data into success metrics to understand if, for example, users are willing to recommend the product to their friends or if they find it intuitive how a particular feature should be used.

2.7.5 Build-Measure-Learn

The Minimum Viable Product (MVP) and the Build-Measure-Learn feedback loop, influenced by the concept of Lean Startup, are fundamental in Lean UX (Klein, 2013). An MVP is a version of a product that only includes the most essential features, and thus allows for the shortest time until the product team can test their formulated hypotheses for how the product will be perceived and used by users, and consequently fulfill the

Build-Measure-Learn feedback loop (Ries, 2011). The purpose of an MVP is to reduce the time spent in the development process by creating a basic version of a product to be able to start learning from it faster, compared to start by developing a full-scale product with a full range of features (Klein, 2013). This enables an iterate development process where it is possible to learn what features that solve the users' pains and what features that should be avoided. The iterative development process is vital in Lean UX, whose main purpose is not to waste resources on building products that users will not find valuable (Gothelf & Seiden, 2016). A visualization of the Build-Measure-Learn loop is seen in Figure 3 below.

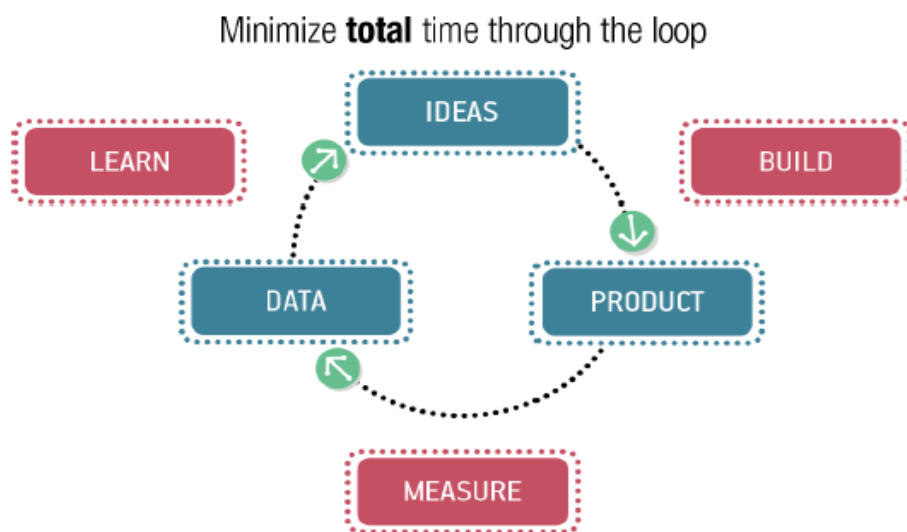


Figure I-1. The Lean loop

Figure 3. The Build-Measure-Learn loop (Klein, 2013)

The Build-Measure-Learn loop combines all principles of Lean UX to constitute an interactive process that enables building small things fast, learn from them, and continue to develop the MVP by either testing new features, improving existing features or removing features that made the users' pains worse (Klein, 2013). The Build-Measure-Learn loop and Lean UX make it easier to understand if there is a need to pivot from the initial idea, and it also reduces waste in terms of both time and money (Ries, 2011). The biggest challenges in the Build-Measure-Learn loop, are according to Ries (2011), to determine if the improvements of the MVP lead to actual progress, and mitigate the risk that further development is based on poorly set metrics.

3 Method

The research strategy used for conducting the case study was action research performed on Company X. As described by Coughlan & Coughlan (2002), action research is different from many other methodologies as the researchers are working to make an action happen, rather than just observing it. This gives researchers the possibility to more easily capture deeper aspects of a studied phenomenon compared to other methodologies (Eden & Huxham, 1996). Therefore, we argue that action research on a freemium company was suitable to apply in this study as it was required to get a thorough understanding of users' perception of being targeted with add-on services in a realistic environment. By applying action research on Company X, it was possible to get a deep understanding of the users' concerns and perceived value when add-on services were presented to them in different ways. Further, it was possible to assess the freemium startup Company X's, ability to sell add-on services to its users within their freemium product. By talking to real users and observing their interaction with prototypes, we could gain a lot of valuable insights on how they probably would perceive a real product.

The research could also have been performed by, for example, a qualitative case study where the authors could have focused on interviewing multiple users or management of companies with similar business models. This could have gained valuable insights and more generalizable outcomes, however, with the more flexible and practical design of the action research approach, the research problem could emerge and evolve as the project progressed. As the process also enabled for a body of knowledge to be created, it helped to continuously zero in on the researched problem as more knowledge was acquired (Coughlan & Coughlan, 2002).

3.1 Research Process

Argyris, Putnam & Smith's (1990) state that action research is an iterative process designed to assist towards a solution, including the four following activities:

1. Problem identification
2. Planning
3. Action
4. Evaluation

The research process in this study was conducted according to Argyris, Putnam & Smith's activities, but with the adjustment that it was performed in three, instead of four, different stages: pre-study (problem identification), iteration stage (planning & action), and a final stage (evaluation). A figure to help visualize the research process is shown below in Figure 4.

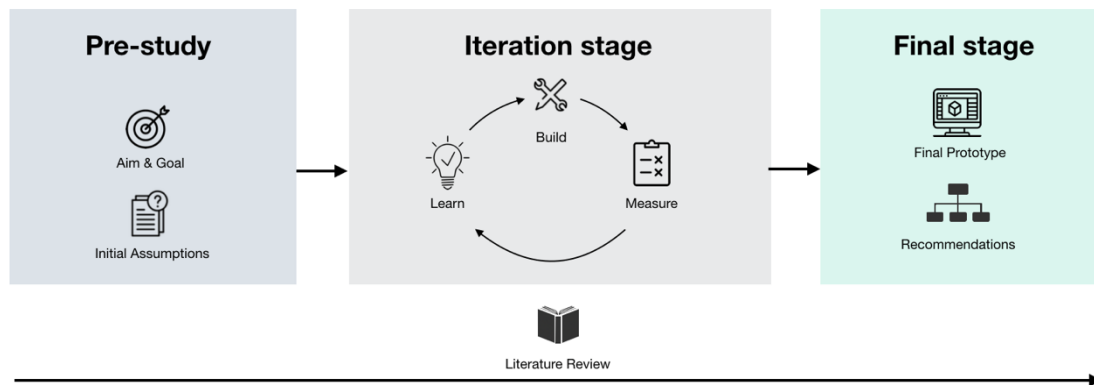


Figure 4. Overview of the research process.

The research started with the pre-stage, consisting of problem identification to formulate the aims and goals of the study, as well as to unify our initial assumptions about the users and the prototype. This stage helped to formulate the research problem together with the management team in Company X, which was the case company on which the action research was performed. Formulating the research problem together with the organization of the case company is a vital part of action research, since it helps to create an understanding of the rationale for the research, as well as for what contributions and knowledge the research are expected to provide (Coughlan & Coughlan, 2002). The management team was involved continuously throughout the process, as recommended by Bushe & Shani (1991), and functioned as a learning group to help reflect on the emerged findings.

The pre-stage was followed by an iteration stage with three activities: build, measure, and learn. Build relates to Argyris, Putnam & Smith's planning stage, where actions were planned by designing and constructing MVPs in different iteration cycles, which later was tested on Company X's users. The feedback from the user tests was received in the phase referred to as the measuring stage before analyzed in the learn stage. Based on the learnings gained from testing an MVP on users in one iteration cycle, actions for the next iteration could be planned.

The final stage occurred when most of the essential hypotheses about the MVP had been validated or rejected, and only less critical feedback was attained from the users. The final stage included providing Company X with recommendations for further actions, based on the learnings gained from the research, as well as conceptualizing the learnings into a more general context.

3.2 Changes Made to the Research Problem

The wanted outcomes of an action research approach are solutions to explored problems, but also to get insights and a better understanding of an observed problem that can be conceptualized into scientific knowledge and theory (Coughlan & Coughlan, 2002). As the case study initially did not have a clearly defined problem description, an action research approach was particularly suitable as learnings gained during the study could help formulate the desired outcome. While the understanding of the users' needs and pains grew larger, and consequently how the solution would be designed to be perceived as valuable, the research problem could be adopted accordingly and formulated more clearly. As the action research approach enabled an agile research process, the research could be adapted better to examine the actual problem that was prevalent, compared to if the research problem would have been fixed from the start.

To provide an example of how the action research method came to its use, the research initially attacked the problem with a more quantitative approach. The management team at Company X had an idea of creating a performance score based on Company X's users' data. The purpose of the score was to rate the performance of a user's business based on a certain number of set financial ratios similar to a credit rating score but extend with data Company X possessed about the users' future transactions, such as outstanding supplier invoices. It was assumed that the score would help increase the conversion of non-paying users into paying customers by visualizing the impact purchasing an add-on would have on the performance of the user's business. The score was a predetermined feature that the management team had decided should be included in the service, and therefore something that we needed to relate to when developing the MVPs. As the purpose of the score was to rate a user's business's performance based on financial ratios, the initial focus was to test solutions based on previous literature relating to data science and credit rating concepts. However, it was found that it would be hard to proceed with this approach due to the lack of data about the users' businesses, as well as the complex nature of the data.

The research, therefore, pivoted into taking a more qualitative approach where the main focus was instead to examine how users perceived being targeted with add-on services in various ways, and what would make them more willing to purchase the add-ons presented to them. Because of this change in course, literature regarding increasing the attractiveness of an offer, value propositions, the influence of trust on customers' purchase intentions, switching costs and user experience was instead explored to develop testable prototypes and gain feedback from the users. The score was still set to be included in the MVPs, but now instead based on the users' activity on the platform rather than on an assessment of their businesses' performance and financial situation. In retrospect, it can be said that if the score would not have been included from the start,

more time could have been spent on gaining additional and even more in-depth learnings from the users.

3.3 Elaboration of Tools and Methods in the Pre-Study

The pre-study was divided into three stages, where the first stage was to get all of our assumptions unified and divided into categories. The second stage treated different ideas for how the first MVP could be designed. The last stage consisted of a literature review where different potential research process methods were explored.

3.3.1 Assumptions Exercise

To align all of our thoughts, ideas, and assumptions about the target users and their characteristics, we conducted an assumption exercise. Gothelf & Seiden (2016) describe how an assumption exercise lets team members reach common ground and bring all concerns and ideas to the table, which helps the team vision what a successful solution could look like. In the exercise, we individually tried to come up with all possible assumptions we had about the users and the potential value Company X could provide to them. The outcome of the assumption exercise then helped us formulate our initial hypotheses which formed the basis for the design studio and in extension to the development of the first MVP.

3.3.2 Design Studio

A design studio is a group exercise that helps to combine different ideas to boost the design of a product (Gothelf & Seiden, 2016). Following the procedure described by Gothelf & Seiden (2016), we started the design studio by individually designing a few possible MVPs using pen and paper with a time limit of 10 minutes. Then, we presented our ideas to each other before discussing, iterating, and refining the design of the MVP until we were satisfied. According to Gothelf & Seiden (2016), the idea behind using this simple exercise is to let all team members express their ideas and to ensure that everyone's ideas are being heard, which may bring useful input into the MVP.

The Design Studio exercise was conducted when designing the first MVP, as well as when pivoting into new directions when developing the third and fifth MVP.

3.3.3 Literature Review

The purpose of the literature review was to form a body of knowledge that could be used to better interpret and understand the users' interaction and perception when they presented with add-on services and advice in Company X's freemium software. As the research method chosen to fulfill the purpose of the study involved developing MVPs to test on Company X's users, part of the focus in the literature review was also to examine

tools and methods that could be used for how to best structure the product development process in order to minimize cost and achieve a short time-to-market.

The procedure for reviewing the literature had an iterative approach, where concepts and methods were evaluated as learnings from the iteration cycles emerged, and new challenges had to be faced. The purpose of the strategy was to ensure that suitable techniques and methods were used during the different stages in the thesis. As an example, literature about the impact of trust on customers' purchase intentions was not reviewed until after feedback had been received from the users that they felt that their trust in Company X was adversely affected when they were being presented with add-on services. After reviewing the literature, the reason behind the users' concern could be better understood, and solutions for how to mitigate the risk of generating badwill could be designed with support from existing theories.

Google Scholar and electronic databases at Chalmers University of Technology were used to find literature. In order to find relevant literature, keywords such as freemium, action research, Lean UX, user experience, Lean Startup, hypothesis-driven, new product development, value proposition, converting from freemium to premium, the influence of trust on purchase intentions, and switching costs were used. However, little literature written by academic researchers about Lean UX was found. Therefore, most of the applied tools and methods used in this case study are based on literature written by authors that only have practical experience from Lean UX.

3.4 Elaboration of Tools and Methods in the Development Stage

This section elaborates on the used methods in the development stage. The development stage consisted of six iteration loops, each of which comprises the design and creation of an MVP, testing it on users to get feedback and learn from the feedback to gain insights for how to proceed to the next iteration.

3.4.1 Minimum Viable Product

In the book *Lean UX*, Klein (2013) explains the importance of conducting real tests instead of making own assumptions about how users will interact with a prototype. Therefore, we chose to design and build a Minimum Viable Product (MVP) to be able to test the hypotheses that had been formulated.

To be able to gain as valuable feedback as possible when testing the MVPs on the users, we chose to create semi-interactive prototypes using the design software Sketch and InVision. Another option would have been to develop a fully functioning prototype, but evaluation was made that it would have required more time and resources than the additional value that would have been received in the form of slightly more accurate

feedback. According to Klein (2013), developing a fully functioning prototype is also a waste of resources in the early phase of the product development process as the prototype needs to be adopted and improved in high-frequently performed iterations. A non-interactive MVP would have been even less time consuming to develop, but that would probably have resulted in a poorer understanding of how the users really interacted with the prototype. Further, it would have been harder to get in-depth insights for how the users perceived the prototype the more unrealistic it would have been. With a semi-interactive prototype, we were able to create a realistic experience for the users and get additional feedback on workflows and usability that we would have missed out on with a simpler version of the prototype.

The MVP was tested in terms of design, user experience, and maybe most importantly, the users' perceived value and expressed concerns when being targeted with add-on services. The tests of the MVP helped create an understanding of the users' pains and needs, which barriers that could adversely affect the conversion rate, and how the solution would best be designed to increase the users' willingness to purchase add-ons.

3.4.2 Customer Interviews and Live Interactions

The main method used to get feedback was to conduct qualitative interviews and, in live interactions, observe users when they interacted with a prototype. Both methods were combined during the sessions with the users to gain insight into how they understood and perceived the MVP, as well as to get an understanding of their behavior and characteristics. The feedback sessions were conducted either over the phone or in person. We started off by conducting interviews over the phone in order to, in a short time, create a rough understanding of the users' problems, needs and their attitude to being presented with add-ons. This knowledge was then used when designing the first MVP, whose purpose was to gain a more detailed understanding of the users' attitude when being presented with add-ons in a more realistic environment. In all later feedback rounds, the users were both interviewed and presented with an MVP, which they also interacted with. In the first feedback round, all interviews were conducted over the phone, apart from one. In the last feedback round, all test sessions were performed in person to be able to better observe how they interacted with the MVP.

It was not decided in advance how many users would be contacted in total since this was due to how many iteration cycles that would be carried out. The aim of the process was not to carry out a specific number of iteration cycles, but rather proceed with the development of the MVP until the feedback from the users only regarded minor concerns, and the prototype could be considered to have reached a stage where it was ready for development. As seen in Table 1, a total of 27 sessions were conducted with an average time of 57 minutes per user session.

Table 1. Overview of feedback sessions with customers.

Stage	User ID	Date	Method	Duration	Industry
Pre-MVP	P1	2019-02-22	Phone	50min	Data consultancy
Pre-MVP	P2	2019-02-26	Phone	1 h 15min	Data consultancy
Pre-MVP	P3	2019-02-22	Phone	21min	Data consultancy
MVP-1	P4	2019-03-05	Phone	19min	Data consultancy
MVP-1	P5	2019-03-06	Phone	28min	Data consultancy
MVP-1	P6	2019-03-12	Phone	37min	Data consultancy
MVP-1	L1	2019-03-12	Live	1 h 30min	Data consultancy
MVP-3	P7	2019-03-18	Phone	20min	Printing of Books & Other
MVP-4	P8	2019-03-22	Phone	1 h	Interest organizations, others
MVP-4	P9	2019-03-22	Phone	20min	Data consultancy
MVP-4	P10	2019-03-25	Phone	24min	Data consultancy
MVP-4	P11	2019-03-22	Phone	1 h	Construction
MVP-4	P12	2019-03-27	Phone	58min	Teknisk konsult inom Industriteknik
MVP-4	P13	2019-03-28	Phone	47min	Investment & Risk Capital
MVP-5	P14	2019-04-08	Phone	55min	Data consultancy
MVP-5	P15	2019-04-09	Phone	1 h 5min	Motor vehicles, repair & maintenance
MVP-5	P16	2019-04-10	Phone	27min	Social efforts
MVP-5	P17	2019-04-11	Phone	38min	Consultancy on corporate org.
MVP-5	P18	2019-04-11	Phone	14min	Law, Economics, Science & Technology
MVP-5	P19	2019-04-11	Phone	50min	Construction
MVP-6	P20	2019-04-15	Phone	34min	Cars & Light Motor Vehicles, Trade
MVP-6	L2	2019-04-15	Live	2 h 30min	Data consultancy
MVP-6	L3	2019-04-17	Live	2h	Data consultancy
MVP-6	L4	2019-04-23	Live	1 h 30min	Hairdressers
MVP-6	L5	2019-04-25	Live	1 h 40min	Consultancy on corporate org.
MVP-6	L6	2019-04-29	Live	1 h 58min	Data consultancy
MVP-6	L7	2019-05-07	Live	1 h 20min	Consultancy on corporate org.

3.4.2.1 Qualitative Semi-Structured Interviews

To gain knowledge about the users' characteristics and pains, qualitative semi-structured interviews were performed. Bryman & Bell (2011) describe how qualitative interviews put a greater focus on the level of interest from the person being interviewed compared to structured interviews. Bryman & Bell (2011) further describe how the interviewee also is encouraged to elaborate on his or her views and thoughts, and not just answer a set of predefined questions, which allows for getting a deeper understanding of the subject. Qualitative interviews are also more flexible than structured interviews in the sense that the interview takes the direction the interviewee's provided answers set out, and the emphases in the research can be adjusted accordingly.

As described by Bryman & Bell (2011), what characterize semi-structured interviews is that a predetermined interview guide with a list of questions is being used with the aim of covering some fairly specific topics. In this case study, the following general questions were asked to understand the users' pains and characteristics:

- What is your company's line of business?
- What does your daily business operations include?
- What problems are you usually experiencing related to business administration?
- What decides how you think your company is performing?
- To what extent are you using business analysis and different key metrics to make decisions in the business?
- What financial services are you currently using and what was important when you signed them?

3.4.2.2 Live Interactions

When feedback had been received on the users' pain and characteristics, a live interaction session was conducted to gain insights on how the users interacted with and perceived the MVP. The live interaction session started off by letting the users interact with an MVP while observing them. This technique was, as supported by Bryman & Bell (2015), efficient to identify and understand the users' behavior. The emphasis was on listening to the users' thoughts and feelings that spontaneously came up when interacting with the MVP. If a user did not freely share her thoughts, she was encouraged to express her impression by asking questions like:

- How do you feel when you read this?
- What would you describe is the purpose behind this service?

When the user was done navigating the MVP, and no more feedback was provided, we proceeded to ask more specific questions that would give us insights for how to best present an add-on to increase the user's willingness to purchase it. These questions included:

- What is important for you when signing financial services?
- Does it matter if you are presented with offers from a single or several providers of the add-on service?
- To what extent does it matter if it is a well-known brand that provides the add-on service?
- Does it matter where the sign-up flow is located, in Company X's platform or if you are redirected to the third-party provider's platform?

3.4.3 Feedback Loops

When testing our hypotheses and interviewing users, we ended up with data of various kinds. We also had several hypotheses that had been both validated and rejected. Gothelf & Seiden (2016) argue for the importance of creating continuous feedback loops to help guide the design process and incorporate the feedback into future iterations.

To make it easier to take action on the feedback data in the next iteration step, the feedback was divided into three different categories. The different categories were; design, communication, and content.

The design feedback was defined as feedback that could be directly connected to the design of the MVP, such as how the users interacted with the MVP and what parts needed to be redesigned to make it easier for the users to understand how to use the MVP.

The communication feedback consisted of feedback that described how the users' perceived the MVP, including the perceived value of the MVP and expressed concerns relating to integrity violation and reduced trust in Company X.

The last feedback category, content, was defined as all data that has an impact on the scope of the product. This was data that described the users, such as the jobs that the users' wanted to have done, their pains and needs, and their characteristic.

In some cases, the feedback directly or partly related to more than one feedback category. In practice, this could result in that an expressed problem was categorized into one feedback category, but the proposed solution into another. That complicated our categorization of the feedback, but we believe that the separated categories helped make the process more efficient in that it was easier to prioritize and structure the received user feedback.

3.4.4 Additional Data

To determine which of Company X's users that would be contacted, we first conducted a quantitative analysis of the users' data. In the quantitative analysis, a rough assessment of the users' financial situation was made, along with an analysis of their activity in Company X's software.

One hypothesis that was stated after the first feedback round was that the users' perceived value of the MVP would increase if the add-ons and advice presented to them were tailored to their businesses' specific needs. Thus, an evaluation was made to determine what add-on services a user would benefit from purchasing based on the financial situation of the user's business. The relevant add-ons were subsequently presented to the user in a tailored MVP, together with other advice for how the user could improve its business's performance. Each user was thus presented with an MVP whose content, in the form of add-ons and advice, was customized and unique to that company.

To automate the process of determining which users' that would be presented with what add-ons and advice, certain trigger points were set up that determined if an add-on or advice would be activated for a specific user or not. After testing the MVPs on the users'

in the different iteration cycles, the trigger points were refined to increase the accuracy of when an add-on and advice should be presented to a user. However, the most emphasis when adjusting the trigger points was not on the quantitative analysis of the users' financial situation, but on the qualitative feedback that we received from the users. The qualitative feedback from the users' helped us better understand how the users' perception of different add-ons and advice was affected by different situations that the users experience.

The data about users' businesses was retrieved directly from Company X's database. To enhance the quality of the data, different filters were applied to ensure that the data was up to date and correct. When conducting the quantitative analysis and deciding on the trigger points, we received help from two employees at Company X who were more knowledgeable in data cleaning and analysis, and more experienced in how Company X's database was structured.

3.4.5 Strategies for Customer Interviews and Live Interactions

Gothelf & Seiden (2016) describe how starting with a small homogenous group of users and designing an MVP for that segment, help to start the learning process as quickly as possible. Klein (2013) also supports this strategy as it enables getting a product out on the market sooner, and that it is easier to understand the pains and needs of a small group, and consequently being able to design an MVP accordingly. As proposed by Gothelf & Seiden (2016) and Klein (2013), our aim was to contact five users within the same segment for each iteration cycle.

The users in the first iteration cycle were selected from a list of existing users of Company X's premium accounting service. To reach a homogenous group, additional segmentation was done by dividing the users into different segments based on the number of employees and the industry their businesses belonged to, based on their SNI-code ("SNI-information, pdf - SCB:s Företagsdatabas", 2019). In total, 40 users from the premium accounting service, which belonged to the data/IT consulting industry and did not have employees, were contacted. This segment was chosen because they were active users of Company X's software and because data/IT consulting represented the largest industry among Company X's existing users. The decision of what users to contact was made in consultation with two accountants working at Company X who had worked with all users who were using the premium accounting service. The accountants stated which users that could be contacted with minimal risk of creating badwill, and further which users that were assumed to be willing to set off time to assist in the development of the new service.

The process for conducting the first user interviews and live interactions were as follows:

1. First, an email was sent to the selected users with the background and purpose of the interview and the future service to be developed, followed by an invitation to participate.
2. The users who replied that they were willing to attend, were then sent an additional email with the purpose of scheduling a timeslot for the interview.
3. When an interview had been scheduled, the users were called and interviewed to learn about their pains, needs, and characteristics. At the end of an interview, the user was asked if it was okay if an analysis was conducted of their business, which would then be sent to them in the form of an MVP, which also included add-on services and advice tailored to the user's business's needs.
4. After the users had reviewed the MVP, a new interview was scheduled with the purpose to investigate how they had experienced and perceived the MVP.

However, the response rate from these 40 initially contacted users was very low; only 3 users replied and agreed to be interviewed. It was also a very time-consuming process that did not meet the aim of the process to have short iteration cycles. Therefore, the process for user interviews needed to be improved. The next iteration cycle was conducted as follows:

1. A message was posted at Company X's Facebook group. The post was stating the background and purpose similar to the first email in the previous process.
2. The users that replied to the post were sent an invitation to schedule an interview.
3. When an interview had been scheduled, an MVP was customized based on the specific situation and needs of a user's business, before the user was called and interviewed as described in the initial process. The MVP was sent to the users during the call.

In total there were 3 500 members in the group, but only seven agreed to be interviewed. These seven respondents came from different segments, but the decision was made to proceed with these users since the feedback that would be obtained was still considered to be valuable. However, as the response rate was still low and thus did not allow for a sufficient number of users to be contacted, the strategy needed to be further adopted. In the coming iteration cycles, the following process was applied:

1. Users were selected directly from Company X's database, where business and contact information are stored. A filter was applied in the SQL-query to only include businesses within the industry *data consultants* and who had made an action in the system within the previous five months. This to ensure that their business was active and that they were active users of Company X's software, and therefore could be assumed to be able to provide valuable feedback.
2. An MVP was customized for the selected users as previously described.

3. The selected customers were called without notice and interviewed. If they allowed us to analyze their business, the prepared MVP was sent by email.

When the most general hypotheses had been validated or rejected, we wanted to get more detailed information about the MVP. This was however hard to get during a telephone interview, for example, because we couldn't read our interviewees' body language, or observe how they interacted with the MVP. Therefore, we realized that we needed to change our approach once again as we needed to get more in-depth insight into how the users' perceived the MVP in order to fulfill the aim of the study in a sufficient way. Instead of doing telephone interviews, we started to do the interviews face-to-face, which resulted in that we received more thorough feedback and could create a better understanding of how the users interacted with the MVP. To allow for the live interviews, an additional filter in the SQL query to only include companies from Gothenburg was applied to facilitate the face-to-face meetings.

3.4.6 Analysis of the Feedback

An extensive amount of feedback and information about users' problems, needs, and perception of the MVPs including the add-ons and advice was obtained. All problems were documented and assigned with a proposed solution. The solution was prioritized based on an estimate of the severity of the problem and the ease of implementing the solution in MVP. The estimate of the severity of the problem was based on how many users expressed the problem, how serious each user stated that the problem was, and internal discussions with company X's management. Based on the assigned severity of the problem, ease to implement the solution, and internal discussions, a decision was made on what solutions would be tested in the following MVP.

3.5 Methodology Discussion

This section discusses challenges that may have had an impact on the study's outcome. First, the trustworthiness of the study is discussed, followed by a discussion about ethics and biases concerning the study. Finally, the challenges that were identified when applying the principles of Lean UX to the research process are discussed.

3.5.1 Trustworthiness of the Study

Eden & Huxham (1996) argue that action research cannot be judged by traditional criteria for trustworthiness. Instead, they argue that the ability to conceptualize the results and make them applicable outside of the researched area should be used as a measure for the trustworthiness of the study. This has been done in chapter 6, *Discussion*, where the empirical findings from the study are conceptualized to help guide future similar research projects or companies that are facing similar challenges when targeting their users with add-on services within their freemium product.

The guidelines and recommendations have not been proven with statistical significance to have a positive effect on users' willingness to convert. However, by a deep understanding of the findings, we propose solutions that have been proven important in this case study and that also should be of value for other freemium companies. To provide the research with reliability, we have been honest and tried to explain rigorously how the project has been carried out.

During the research process, the aim was to test all stated hypotheses on the users. However, at several occurrences, it was difficult to decide how to interpret the received feedback. As Croll & Yoskovitz (2013) argue, qualitative data helped us understand how the users perceived the MVPs, but the qualitative data was also harder to interpret than quantitative data. Sometimes this made it hard to decide if a hypothesis should be considered validated or rejected. To overcome this challenge, the hypotheses were broken down into more granular hypotheses as recommended by Gothelf & Seiden (2016), but sometimes the decisions were still based on gut feeling. The validity for some hypotheses can, therefore, have been affected by the authors' subjective feelings and interpretation of the users' feedback. However, to reduce this risk most hypotheses were not considered validated until a pattern in the users' feedback had been identified between several iteration cycles.

The qualitative nature of our hypotheses has, as mentioned, helped us understand how users perceive and interpret the MVPs and the add-on services presented within them. However, we have not received any data that support if the users would convert to the add-on services presented to them as it was not possible to test with live add-on services that could be purchased. Due to the qualitative nature of the study, it would also have been hard to determine how to optimize the design to maximize the conversion rate of the add-ons even if it would have been possible to test live add-on services. That would require a quantitative research approach and access to a lot more data. Thus, we propose that further research should be made, for instance by applying A/B-testing, to be able to compare different designs against each other and thereby be able to determine how the solution should be designed to optimize the conversion rate of the add-on services.

However, we argue that the research method used in this study has been effective as a first step in the development process when designing a service where add-ons are to be presented. The insights and learnings gained have created a good understanding of the users' pains, perceptions, and their willingness to purchase particular services. Thus, a solution that is fairly close to an optimal state could be developed in a period, which can further work as a foundation for additional qualitative testing to optimize the design.

3.5.2 Ethics and Biases

In an attempt to keep good ethics in the research, a message with the purpose of the interview was sent out when recruiting potential interviewees. This could have resulted in a biased population. The users who responded, both to the email sent in the first iteration and the Facebook post in the second iteration, could have a more positive attitude towards Company X and its services than the average population. In the later iterations, this risk was arguably decreased since we called users before informing them about the purpose of the research.

We have, at all times, tried to keep good ethics in the research process. In the early iteration cycles, we chose to ask for approval to analyze the users' data for the customization of the MVPs. However, because of the inefficient process of recruiting people, we started to construct the analyzes before asking for approval during the later iteration cycles. This decision was taken after discussions with the CEO of Company X. The analysis of data is permitted from a legal aspect and is expressed in the user terms of Company X's service but asking for permission before analyzing may have been more ethically correct. To not gain badwill from the users, we still asked for their permission to analyze the data before sending an MVP of the proposed solution based on the users' business data, even though we already had done the customization of the MVPs to get a more efficient process.

The MVPs have always been password-protected, and the passwords were provided to the users over the phone. In that way, the risk of unauthorized access to the MVPs and the data presented in them was reduced. Even if the email sent to the user with a link to the MVP would have been hacked, it would not have been possible to access the sensitive user data. Further, all user data and all feedback received from the users have been anonymized during the research. The ethics could have been improved even further by briefing the users after the interviews with our interpretations of their feedback. This was not done because there was no interest in that from the users' side.

3.5.3 Challenges When Applying Lean UX Methods

Gothelf & Seiden (2016), Klein (2013), and Ries (2011) stress the importance of minimizing the time in the Build-Measure-Learn loop. This was, however, the main challenge when applying methods of Lean UX to the research process. Firstly, long iterations emerged due to problems in designing and developing the MVPs. This was especially a problem in the early iterations since none of the researchers had any prior skills in the programs used for creating the MVPs. The iteration time affected by this was, however, decreasing as more MVPs were constructed and we got more skilled using the programs. Secondly, we had problems recruiting users to be interviewed, which also made the iterations longer than favorable. This was improved by adaptations to the

recruitment process. Thirdly, several times, we spent more time than what probably was needed on the design of the MVPs. Klein (2013) stresses not to spend more time on the design of the MVP than necessary to be able to test the formulated hypotheses. However, we tended to spend a lot of time on the design just because we wanted it to have a nice look and to improve the users' interest in the MVP. To some extent, we argue that a more visually compelling design can improve the understanding of the MVP. However, it also risks providing vanity data and a belief that the MVP is creating more value for the user than what is true.

Another challenge we experienced was to start testing something simple and then continuously add, remove, and improve features. Both Gothelf & Seiden (2016) and Klein (2013) argue for the importance of reducing the risk of going in the wrong direction before putting too much effort into building the product. This was something we had problems with already with the first MVP, as it was apparent that it was too advanced and hard to understand for the users. We put a lot of resources and time into the design, just to understand that it was too complex. This was improved after the first iteration when we decided to pivot into a less complex MVP, which let us test and learn more vital things about the MVP.

Finally, the Lean UX theory stresses to get out of the building to interact with users and observe them while they interact with your MVP. In all iterations except for the last, the feedback was gained from telephone sessions. This was a result of difficulties in recruiting users, as well as the fact that users were located in different parts of Sweden. However, the feedback received during the telephone sessions helped to create an understanding of more fundamental issues in a time-efficient way, such as the violation of integrity when offering an analysis based on the users' data. When those issues were considered to be validated, the change to instead conduct live interviews and tests in person helped us receive more feedback on the design and how the users perceived and interacted with the MVP than before.

4 Empirical Findings

Feedback received from user interviews and tests will be presented in the following chapter, chapter 4. The empirical findings obtained from the different iteration cycles are presented in relation to the corresponding iteration cycle as they were obtained from. When presenting each cycle, the developed MVP is first presented, followed by feedback obtained from the users concerning the presented MVP. The user feedback is divided into feedback about the content, communication, and design of the MVP. The most critically received feedback was taken action to and regarded in the study. This feedback is presented in its respective feedback loop and iteration cycle. A full list of all problems, concerns, and needs that users stated in the feedback sessions and its solution-hypotheses can be found in Appendix B-F. At the end of each iteration cycle, concluding findings and decisions made for how to proceed to the following iteration cycle are presented.

4.1 Pre-Study

Before developing the first MVP in the study, a pre-study phase was conducted to give the researchers a better context and understanding of the studied issue. In the pre-study phase, an assumption exercise was first performed to unify the researchers' thoughts and ideas. Then, before entering the first iteration and starting to design and build the first MVP, feedback from three users was received to get a better understanding of the pains, needs, and characteristics of the users. Finally, hypotheses based on the initial assumptions and the first feedback round were formulated.

4.1.1 Initial Assumptions

The most critical initial assumptions resulting from the assumptions exercise, described in 3.3.1 Assumptions Exercise, are outlined below. The most critical assumptions are those that the researchers believed should have the greatest impact on the outcome of the development. A full list of the assumptions is presented in Appendix A.

The most critical initial assumptions about the users' characteristics were:

- Users have low knowledge in finance and economics, and that it would be easier to convert users with above average financial knowledge.
- Users do not know how to analyze their businesses and how they can improve their businesses' performance by applying financial measures.
- Many users lack knowledge about the terms and specifications of the financial services they have today.
- Users' interest in spending time researching for the best financial deals is low.

Assumptions regarding what factors that were most important to make users' purchase the add-on services were:

- Saving money is the number one attracting force when choosing to purchase an add-on service from Company X. Users that already possess a similar financial product should save money compared to the current deal they have, and that new users will be attracted by a low competitive price compared to competitors in the market.
- It is important that it is easy and not a time-consuming activity to purchase an add-on service.
- The add-ons should be customized to the user's specific needs and current business and financial situation.

The highest risk of targeting users with add-on services was assumed to be lack of trust for Company X due to bad communication of the value proposition, and that there is a relation between how an add-on is presented and communicated to the users and the users' trust in both the add-on and Company X.

4.1.2 Feedback Pre-MVP

A common user pain based on the initial interviews was the effort and time required to manage administrative tasks in their businesses. Administration work, including managing bookkeeping, invoicing, and payments, was considered to be an unenjoyable task related to a high workload that was considered a "necessary evil", something that had to be done for their businesses to proceed. The time spent on these tasks could preferably have been focused on more operational processes that provide direct value to the users' businesses.

The users spoken to in the first feedback round did not seem to do any type of analysis of their businesses' performance other than some limited analysis and forecasts of their cash flow. Some of the users had created a simple tool in Excel to help them with this. All interviewed users that stated that they performed a cash flow analysis said that the reason behind this was to ensure that they could pay themselves a salary. None of the users implied that they used any other type of analysis to inform their business decisions. The reason for this was said to be that they either lacked knowledge about how to perform such an analysis, or that there was no time for performing a more thorough analysis.

The knowledge about the financial services that the users had signed was high among all interviewed users. Thorough research in different alternatives on the market for financial products had been made to find a suitable solution before making a purchase. However, the process of comparing different deals for financial services was a lengthy process

where much information had to be shared with the providers before getting an offer. The cost of a financial service was not said not to be the most important factor, more important was to find a service that was customized for their specific business's characteristics and needs. Further, it was considered to be important if they could save time or get better control of their business. However, in some cases, the users had terminated or rejected some financial services only because the price was considered to be too high.

4.1.3 Hypotheses

After analyzing the feedback, the following hypotheses were stated:

- Company X's users have limited knowledge about how financial products and services can impact the performance of their businesses.
- Thus, visualizing an analysis of how a financial service can impact a user's business that is easy to comprehend will increase a user's willingness to purchase an add-on service.
- Company X's users want to be presented with financial add-ons in a concise and easily comprehensible format to reduce the time spent on time searching for different deals.
- Company X's users want to activate advice if they can save money.
- Users will not activate an add-on if they believe the process of signing the deal will be time-consuming.
- The value proposition of an add-on needs to be specific and customized to the user for it to be attractive.
- The user will not sign up for an add-on if the service is not communicated compellingly.

4.2 First Iteration

In the first iteration, telephone interviews with three users, and one live interaction were conducted to test the above-stated hypotheses. As stated in the method in chapter 3, we started interviewing data consultancy businesses without employees to focus on a small homogenous group. The first iteration started with a Design Studio, followed by building an MVP. Then, users were presented with the MVP to receive feedback before new hypotheses were formulated based on the feedback obtained from the users.

4.2.1 Build

Before building the initial MVP, a design studio workshop was conducted, as described in chapter 3.2.2. The result from the design studio is presented in Figure 5 below.

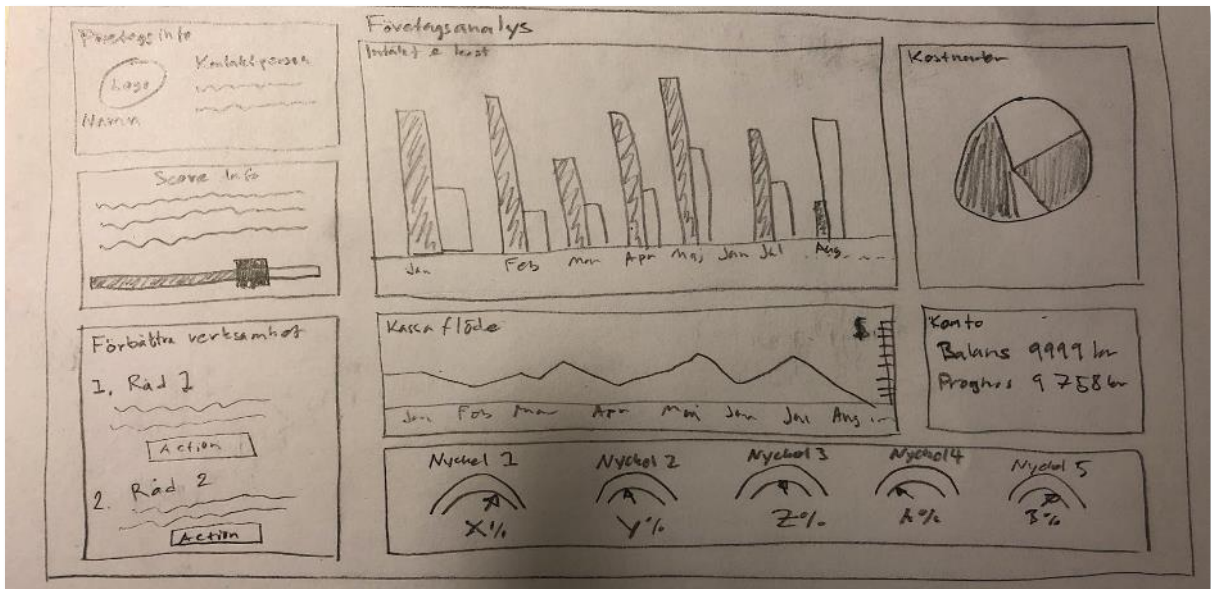


Figure 5. The result of the Design Studio executed in the first iteration.

The purpose of the design was to give the users an overview of the performance of their business and advice on how to improve the performance, including how financial add-on services could improve their businesses' financial position. Based on the design from the design studio, the first MVP was built, presented in Figure 6 below.

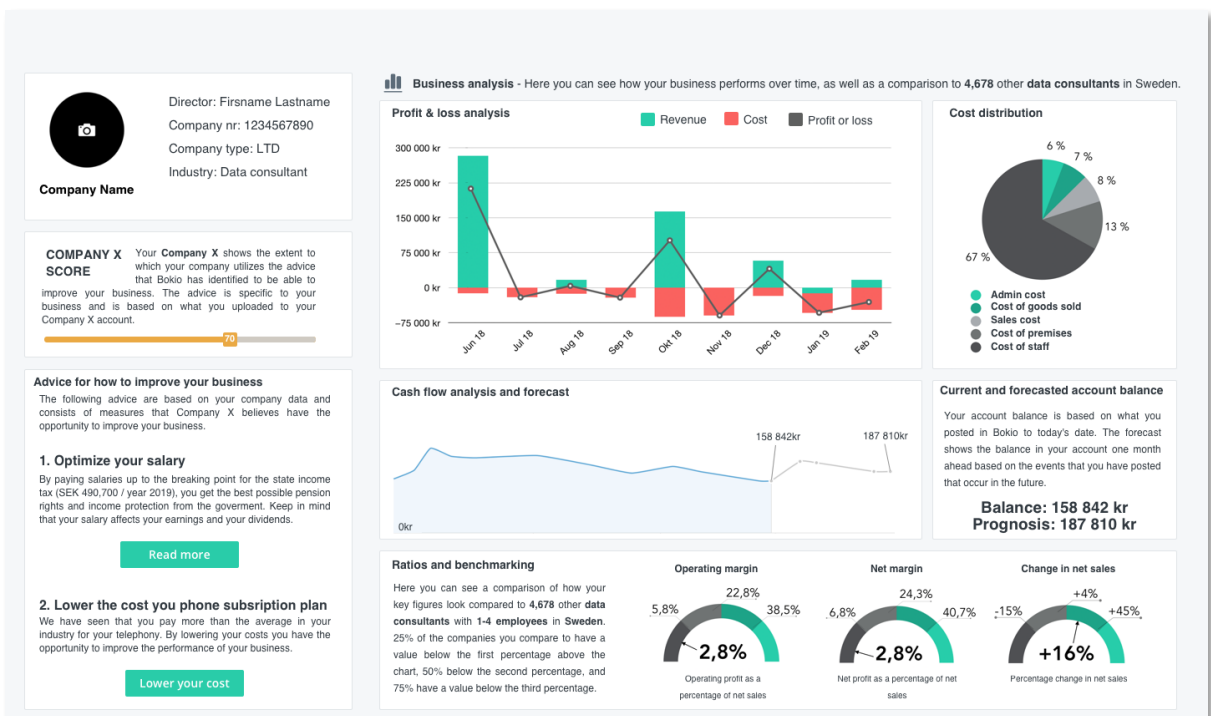


Figure 6. MVP-1, based on the result of the Design Studio.

The MVP offered the users advice about how to improve their businesses (the bottom left box), which were built up and motivated by an analysis of their company (the right side of the MVP). The box to the middle left included a score with the performance of the user's business with the purpose to give extra incentives to take action on advice and purchase financial add-on services that could improve the performance of the users' businesses. The performance score of the company presented in the MVP was an estimation, but if included in a real service, it could be developed by Company X and calculated by an algorithm based on the user's business data.

4.2.2 Measure

The most important feedback from the first iteration cycle is presented below. A full list of the feedback and the proposed solution-hypotheses is presented in Appendix B.

4.2.2.1 Content

The most critical feedback regarding the content of the MVP was that the liquidity prognosis was not accurate for all users. The reason for this was that the bookkeeping was not up to date and that other known upcoming costs had not been recorded yet. This takes away the value of the prognosis and consequently is considered to be confusing and something that just takes up unnecessary space.

The interviewed users' most critical pains were:

- It takes a lot of time to get an overview of the business's financial situation. The process of first checking the bank account, then the upcoming costs in a budget tool, and finally checking the balance in relation to budget is considered to be effortful.
- It is hard to get an overview of the business's upcoming costs. A budget tool was, therefore, said to be important. Some users use Excel to manage their budgets, and this is difficult as they then do not have all information about their business in one place.
- It is difficult to know how much salary can be withdrawn from the business, and how the salary best can be combined with dividends to optimize the tax impact on the business's profit.
- It is effortful and takes a lot of time to compare loans from different financial institutions and get the best interest rate.
- It is effortful to compare deals from different insurance companies. The users have to call all insurance providers to receive different offers and prices. But then it is often hard to determine what is included and what is not included in the offer.
- It was difficult to know how to start their businesses. Especially how to structure their business, the organization of the board, employment contracts, and shareholder agreements.

- It is hard to know if the balance in the tax account is accurate and agrees with the bookkeeping. Similarly, it is hard to know the status of the VAT (value-added tax), if they should pay the tax authority or get paid.

4.2.2.2 Communication

The most critical feedback relating to the communication of the MVP was that the MVP was perceived by the interviewed users as a severe violation of integrity as employees at Company X had looked into their personal and arguably sensitive data to construct customized advice. Users urged the importance of not pushing advice and add-on services based on their data before Company X had informed and been given approval from the users. The general concern among the interviewed users was that Company X was trying to start making money on the users' data.

With all the different information presented in the MVP, users found it hard to see the purpose of the MVP itself. A general concern was whether the MVP was a business analysis tool or a way for Company X to earn money on their users by advertising financial services. In turn, it was also unclear what value purchasing a financial add-on provided by a third-party through Company X had compared to purchasing it directly from the supplier of the add-on.

Finally, the users found it difficult to understand what the metrics in the MVP meant. It was unclear what the purpose of the score was and how it was constructed to rate their businesses. Further, the users found it difficult to understand the value of the benchmarks with their current level of knowledge in economics.

4.2.2.3 Design

The general feeling among users, when presented with the MVP, was that it was a lot of information to take in at the same time. It was hard for the users to focus on specific features in the MVP because there was so much to process at the same time, and the overall impression was that it was "messy". At first, the add-ons and advice were not recognized since they were almost hidden at the bottom left of the MVP. Users also stressed that it was unclear where the MVP would live in Company X's software. If it would be included in Company X's software as an additional feature or if it would be sent out by email.

4.2.3 Learn

The most critical feedback regarding the MVP was that the users felt that their integrity had been violated. It was also hard for the users to understand the different elements of the MVP, as well as that the add-on services felt like advertising. Therefore, to test if the identified risks could be mitigated and if the users' perceived value and perception of the

MVP could be improved, MVP 1 was developed based on the solution-hypotheses outlined below.

Solution-hypotheses to solve integrity violations:

- By giving users an opportunity to opt-in to the service and by being transparent about in what way their data is used and how it will benefit the users, the feeling integrity violation will be reduced.
- By pointing out that it is an AI-engine that generates the advice and what add-on services that can benefit the users' businesses, the feeling of integrity violation will be reduced.
- By being transparent about how Company X earns revenue, the customers' trust in Company X will be increased.

Solution-hypotheses to improve understanding of the MVP:

- Adding informative and pedagogical texts about what the metrics mean, and how they can be used, will increase the understanding and perceived value of them.
- By adding an initial informative text about the service, the purpose of the service will be clearer.

Solution-hypotheses to make the advice feel less like an advertisement:

- By adding an initial informative text about what the proposals of advice and add-on services are based on, it will be clearer to the user that the proposals are tailor-made to improve the users' businesses.
- By adding an initial informative text that states that Company X can provide a lower price compared to what is available on the market by grouping together many deals, it will increase the users' perceived value of purchasing add-ons through Company X.

4.3 Second Iteration

The received feedback in the first iteration cycle was highly critical and with high risks for generating badwill for Company X. Therefore, the decision was taken to pivot the initial MVP into a much simpler version. A new Design Studio was executed to create ideas for how the MVP could be designed, before building it in Sketch and testing it on users. Due to a long time to recruit users to this iteration cycle, the feedback in this iteration cycle is only based on one telephone interview. However, the feedback from that one user gave a valuable idea to test, wherefore the decision to move on to the next iteration was taken after only one interview.

4.3.1 Build

The user feedback from the pre-stage and the first iteration was used as direction for designing MVP-2. The conducted Design Studio resulted in a proposed MVP with three new features, an opt-in screen (see Figure 7), a loading screen (see Figure 8), and a new layout for the main page of the MVP (see Figure 9).

The first new design feature, resulting from the design studio, was an opt-in screen that was shown before the users could enter the MVP. The purpose was to test if the users felt less violated by Company X analyzing their data when they were informed about the purpose of the MVP and the presented advice and add-ons. The opt-in screen is illustrated in Figure 7 below.

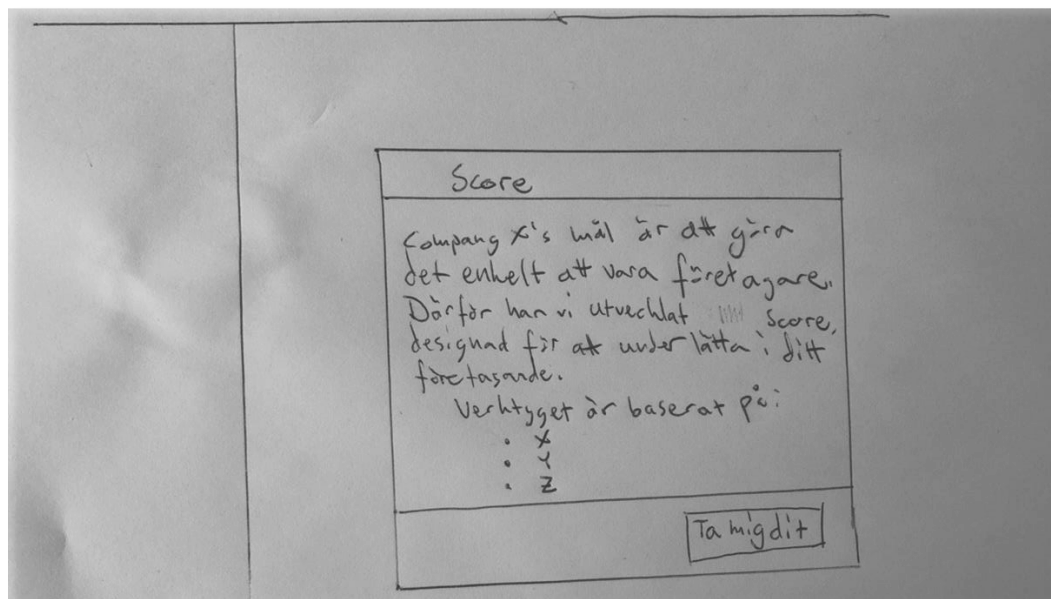


Figure 7. Opt-in screen before the user is presented with the main MVP.

The second new feature, seen in Figure 8 below, illustrates a loading screen that was shown after the newly created opt-in screen and before the main page.

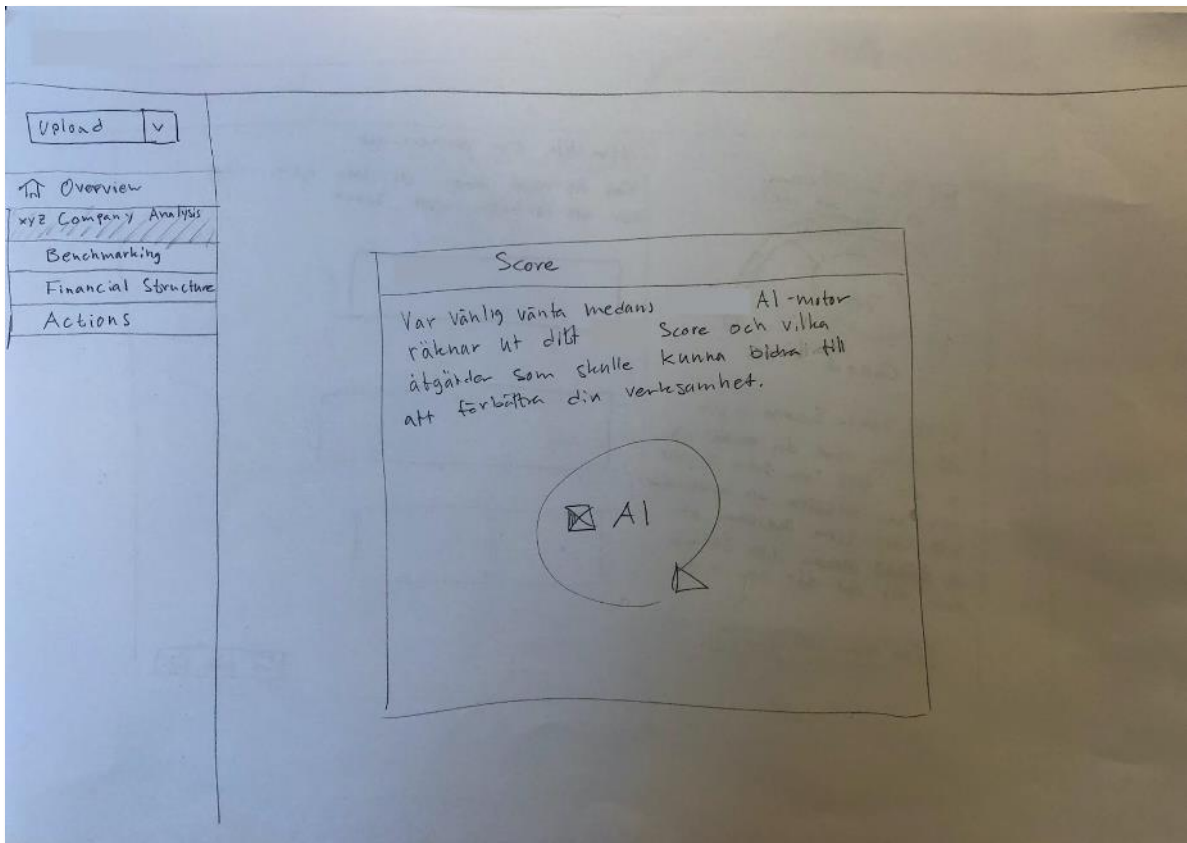


Figure 8. Loading screen designed for MVP-2.

The purpose of the loading screen was to test if users experienced the MVP to be more professional than before by visualizing that it was an AI-engine that computed the tailored advice and add-ons presented to the users in the MVP. An additional purpose of the loading screen was to test if the users' feeling of integrity violation was reduced when it was pointed out that it was an AI-engine that analyzed their personal data, and not an employee at Company X.

The third new feature in the second MVP, a new main page of the MVP is presented in Figure 9 below.

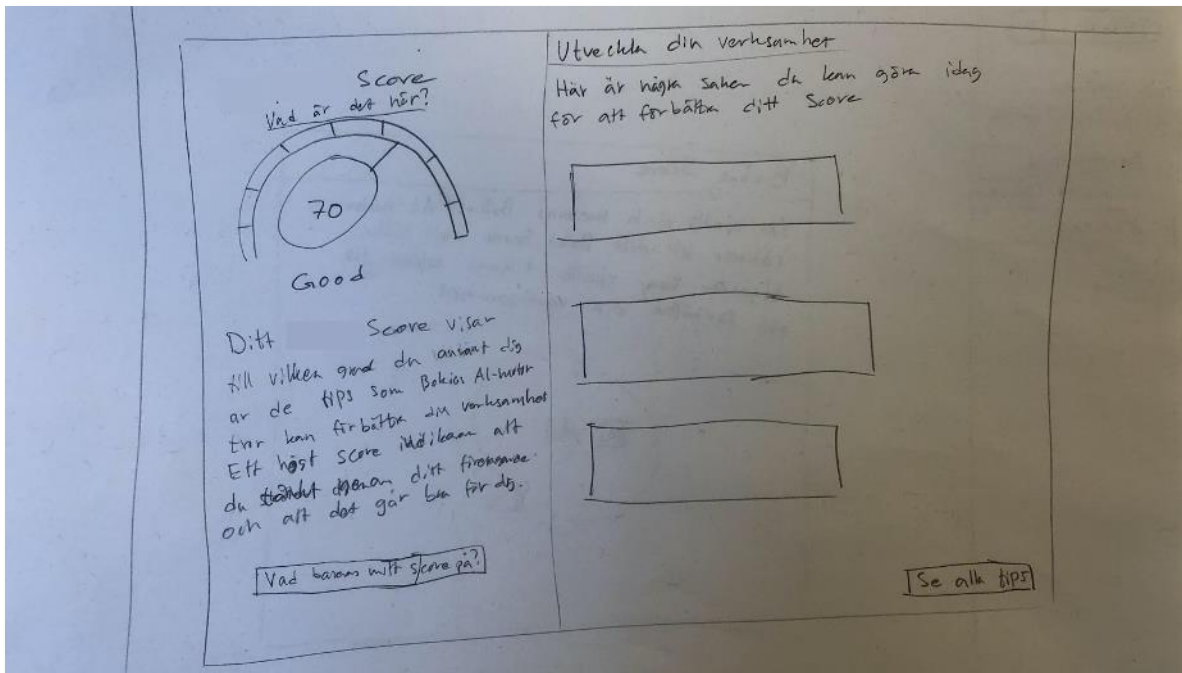


Figure 9. Design proposal for the main page of MVP-2.

The design of the main page had a much simpler design than before, with just two different elements. The left side included a score of the user's business, and the right side included advice and add-ons that could improve the users' businesses. The main purpose of this design was to go simple, to test if the users could understand the connection between the score and the suggested advice and add-ons, and most importantly to test if the users were receptive to take advice and purchase add-ons presented by Company X.

The design proposals from the Design Studio and the collected feedback was used to create MVP-2 which is presented in Figure 10, Figure 11, and Figure 12 below.

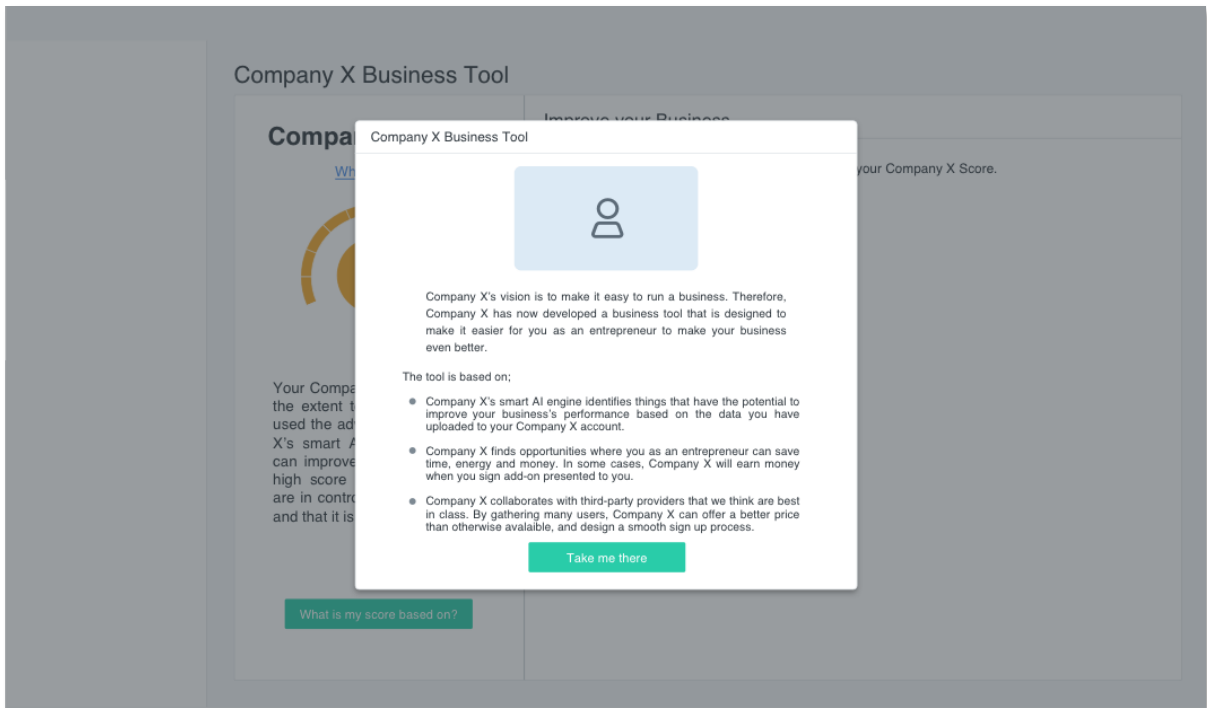


Figure 10. The opt-in screen in MVP-2.

The opt-in screen in MVP-2 presented Company X's vision followed by information about the service presented as bullet points. At the bottom of the opt-in screen, the users had to take action to activate the service by pressing a button that took them to a loading screen, presented in Figure 11 below. The hypothesis was that the risk of violating users' integrity would be mitigated when they chose opt-in to the service.

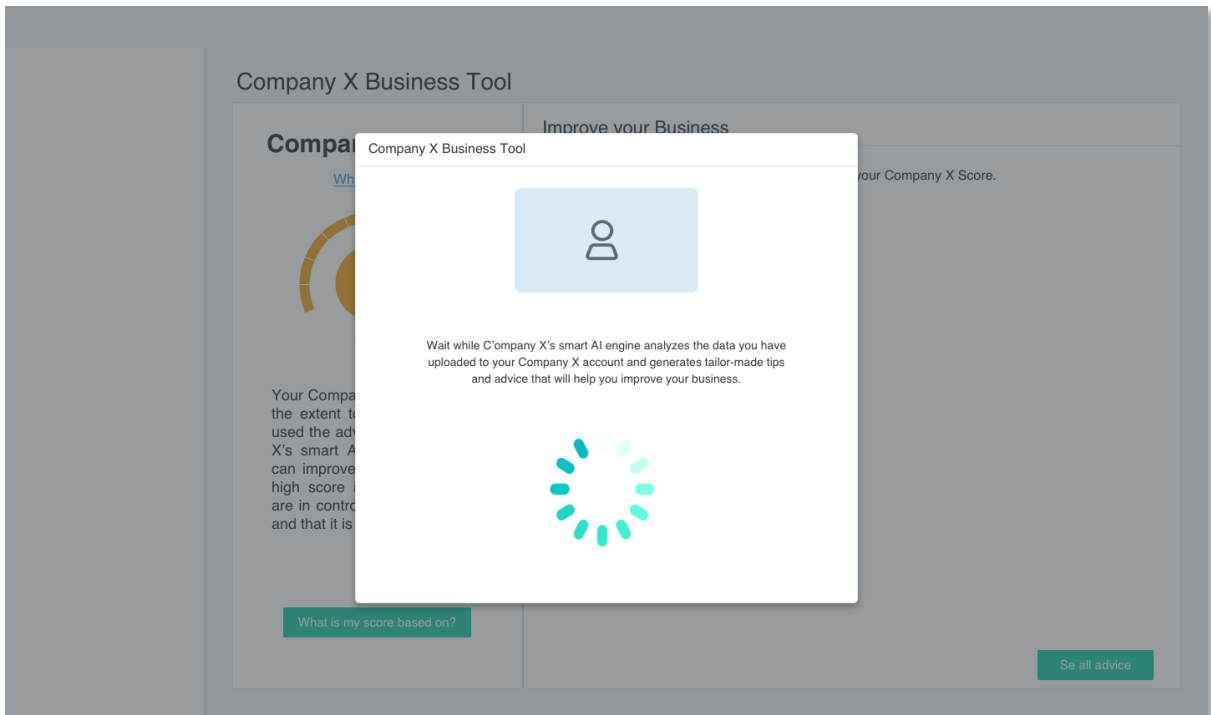


Figure 11. The loading screen in MVP-2.

The loading screen was a result of the design studio, with the purpose to increase the users' perception that it was a high-quality service since it was an AI-engine that generated the proposed actions add add-ons that could improve their businesses' performance, and reduce the users' feeling that their integrity was violated.

After the loading screen had been shown for a few seconds, the users were taken to the main page of the MVP, presented below in Figure 12.

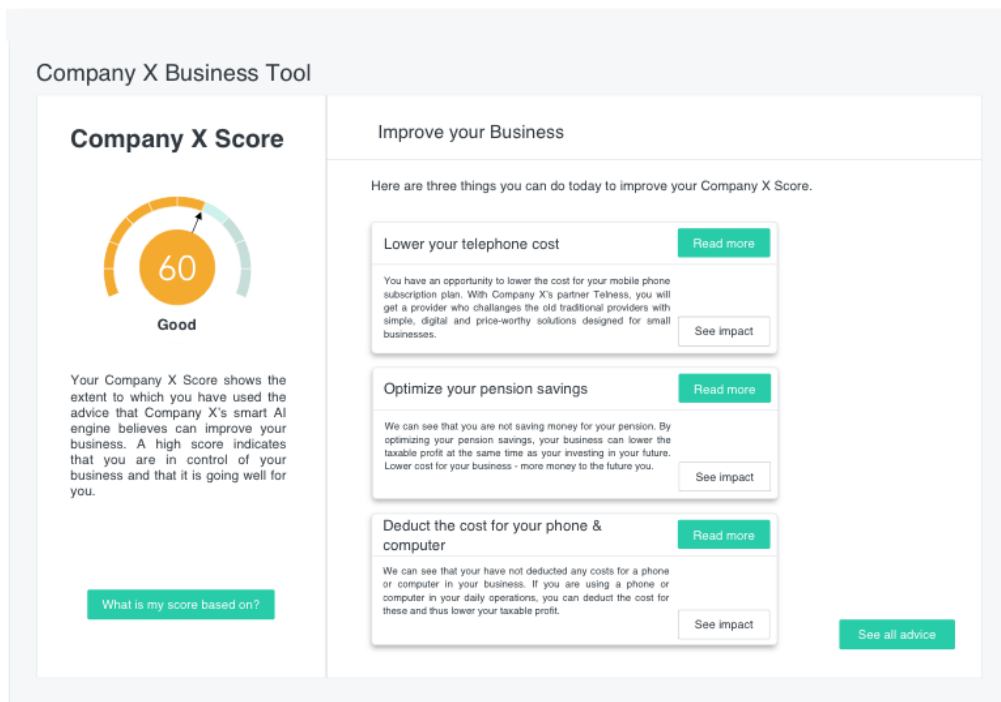


Figure 12: Main screen in MVP-2.

The purpose of the simplified design of the main page was, as mentioned earlier, to test if the users could understand the connection between the score and the proposed advice and add-on services, as well as to test if users were receptive for advice and add-ons presented by Company X.

4.3.2 Measure

The user that tested MVP-2 had trouble understanding the score, even though informative texts were describing it. To make it even more understandable, the user suggested visualizing the factors that decided the numerical value of the score with checkboxes.

4.3.3 Learn

Based on the feedback from the single user, we formed a new hypothesis:

- By visualizing the factors building up the score, the users will better understand what the score is based on and how they can take action to improve it.

4.4 Third Iteration

In the third iteration, telephone interviews with six users were performed. The iteration cycle started by improving MVP-2 with a pop-up window describing the score, followed

by feedback sessions with users, and lastly formulating the learnings from this cycle and how to proceed.

4.4.1 Build

MVP-3 had the same design and features as MVP-2, except for a new pop-up shown in Figure 13 below.

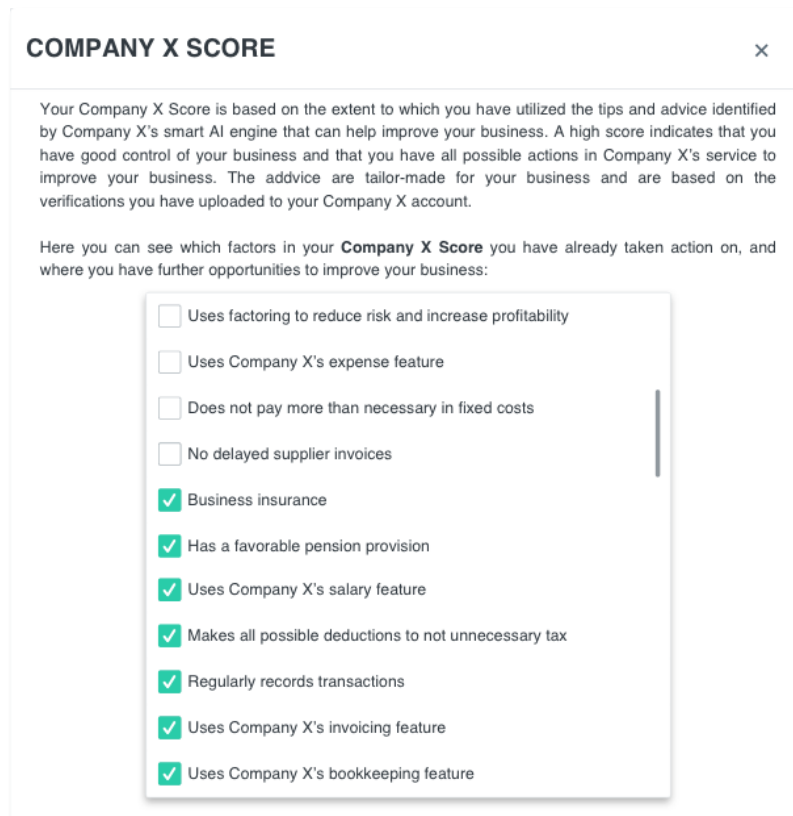


Figure 13. New explanation of the factors building up the score.

The explanatory popup for the score, seen above in Figure 13, visualizes what factors the user has fulfilled and what factors the user needs to take action on to receive a higher score. The hypothesis was that this will make it easier for the users to understand what the score was made up of and how they can improve the score.

4.4.2 Measure

The most important feedback that was received is presented in its respective feedback loop below. A list of all problems that the users stated in the feedback sessions and its solution-hypotheses can be found in Appendix D.

4.4.2.1 Content

Commonly expressed pains by the users regarding the content of the MVP were:

- They had trouble doing their administration work efficiently.
- They lacked knowledge about how to lower their tax.
- They had trouble to get an overview of important dates that the business has to comply with, such as dates for when to send in VAT-returns, declarations, and year-end accounts.
- It is hard to know how much money to take as a salary compared to dividends.
- They had to spend a lot of time to find the cheapest web-hosting service.

4.4.2.2 Communication

Some users expressed a loss of trust in the advice and add-ons due to difficulties understanding when it was a partnership, and when Company X did not take a share of the revenue. It was good that it was stated in the opt-in screen that Company X sometimes earned money when users purchased an add-on. However, the users expressed that it could have been clarified more specifically concerning each add-on presented. By doing so, users said that the trust both for Company X and the advice and add-on services presented would improve.

Multiple users requested more information about the advice so they could take an informed decision without leaving the MVP. The most commonly requested information were concrete examples of how the add-ons and advice could bring additional value to their businesses, and a step-by-step guide for how they were supposed to take action on advice or purchase an add-on.

Some users expressed that they were aware that Company X had to push add-on services to generate revenue to cover costs for maintaining the software and to be profitable. But instead of being exposed to add-on services which they perceived as advertisement, they would rather pay for the software, which they also stated they would be happy to do.

4.4.2.3 Design

It was hard for the users to see the connection between the score and the proposed advice and add-ons. Many started by first reading the advice and add-ons presented, and then they looked at the score, thinking the score was entirely separated from the rest. The users also thought the MVP looked empty and expressed that they probably would lose interest in the service if what they were presented with was everything the MVP had to bring.

The users also expressed that it felt strange to be pushed outside of Company X's service when clicking on "read more". They expected to stay inside of the MVP, wherefore, being pushed directly to different partners or information sites surprised them.

4.4.3 Learn

By considering the received feedback and prioritizing the feedback after severity and ease-to-push, the solution-hypotheses below were suggested to be tested and work as a basis for the development of the next MVP.

Solution-hypotheses for content related feedback:

- Advice about different parts of the platform can help the user work more efficiently.
- Providing concrete examples of how deductions can lower the total tax for users will increase the perceived value of the MVP.
- By presenting the most urgent and important dates, it will be easier to get an overview of important things to do.

Solution-hypotheses for communication related feedback:

- Transparency in the add-on formulation will increase the users' trust in an add-on.
- Visualizing the effect of taking action on advice or purchasing an add-on with graphs and numeric values will increase the user's understanding of the impact.
- A step-by-step guide for activating advice in the "read more" popup for the advice and add-ons on how to take action on the advice and purchase the add-ons will increase the number of users activating the advice and purchasing the add-ons.

Solution-hypotheses for design related feedback:

- Changing the position and layout of the score will increase the users' understanding of the connection between the score and the advice and add-on services presented.
- Adding features that will solve customers' pain will increase the overall perceived value of the MVP.

4.5 Fourth Iteration

In the fourth iteration, telephone interviews with six users were performed. The iteration cycle started by conducting a design studio to come up with ideas on how to improve MVP-3, and the result was then built in Sketch to form MVP-4. Then, a feedback session with the users was performed, and lastly, learnings from this cycle were concluded on how to proceed.

4.5.1 Build

The solution-hypotheses for MVP-3 regarding the design of the MVP was used as direction for the design studio. The design studio resulted in a new structure and that the users' most sought after features were added to the main page as seen below in Figure 14.

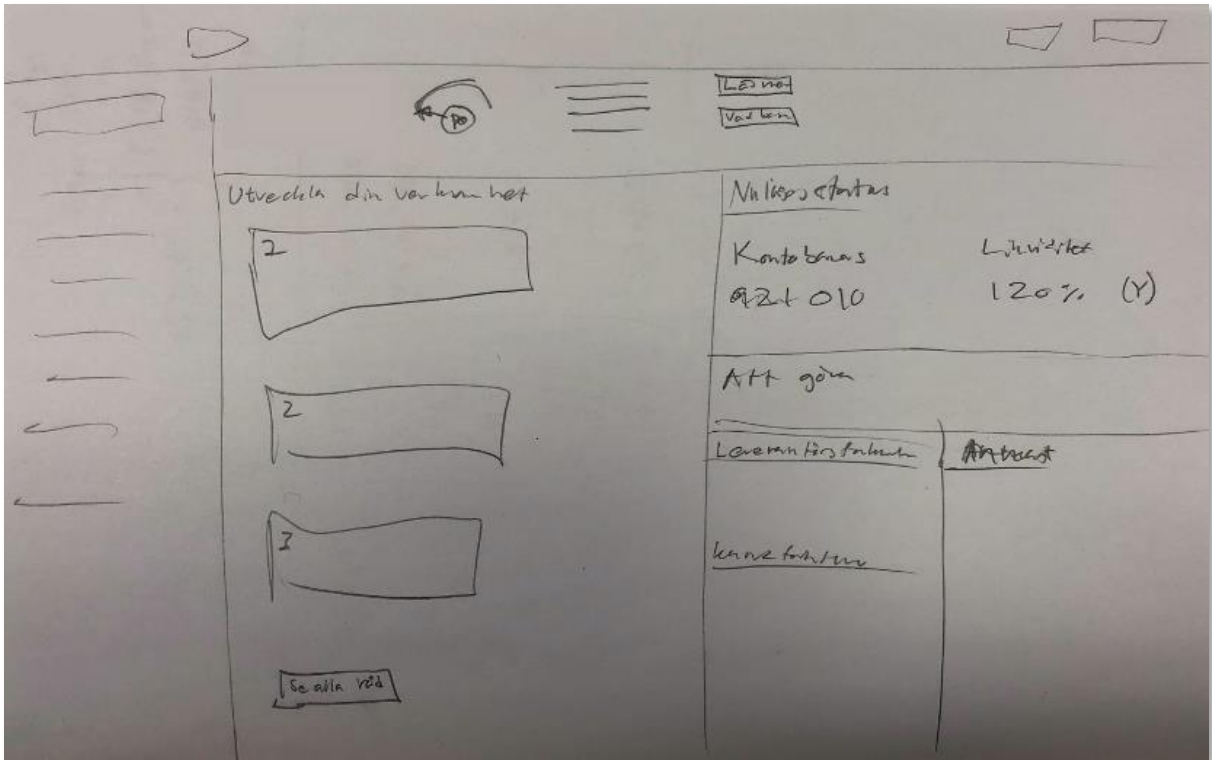


Figure 14: Design idea for MVP-4

The score was moved to the top of the MVP to test if it was easier for users to understand the connection with the rest of the MVP. To the right, requested features were added. However, some more changes occurred during the building of the MVP, as seen in Figure 15 below.

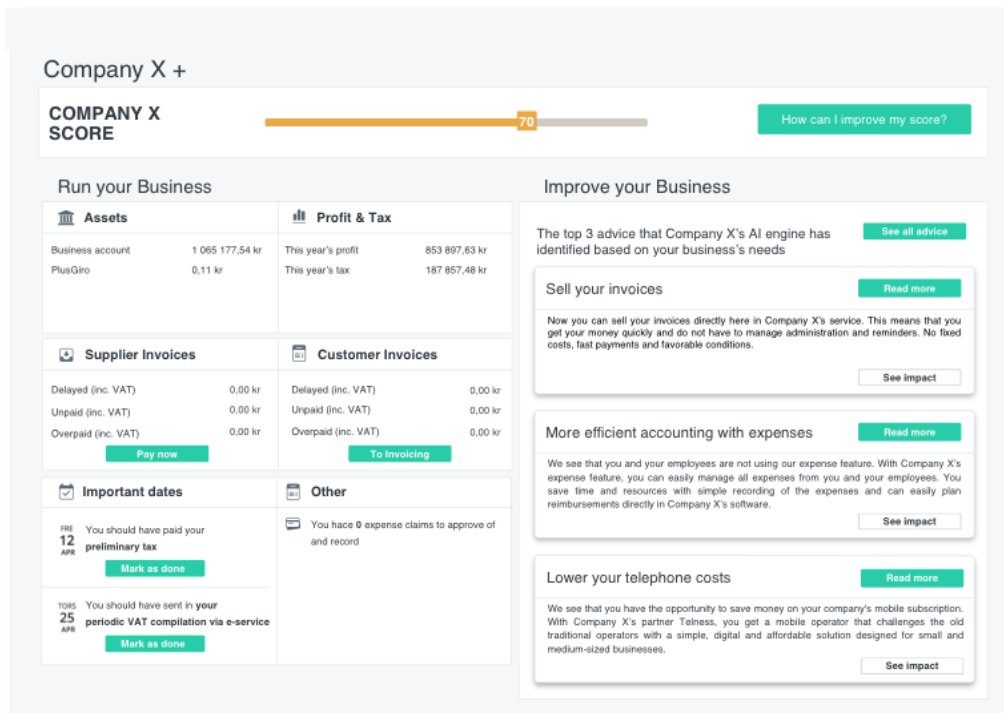


Figure 15. The main screen in MVP-4.

Except for the new structure of the score, new features such as outstanding supplier invoices and customer invoices were added to the left side of the MVP under the heading “Run your Business”. The purpose of these features was to gather the most important information the users needed to know to manage their business administration on Company X’s platform. MVP-4 also included a calendar with important dates, where the users could get an overview of upcoming tasks they need to adhere to and mark an activity as done after they had performed it.

4.5.2 Measure

The most critical feedback received is presented in its respective feedback loop below. A list of all problems that the users stated in the feedback sessions and its solution-hypotheses can be found in Appendix E.

4.5.2.1 Content

As previously discovered, the cash flow forecast that was presented in the MVP was not correct at all times for the users. It was based on the bookkeeping of their verifications, and because all users were not to date with their bookkeeping, they consequently did not see any value of the cash flow forecast in the MVP. However, users that were up to date with their bookkeeping expressed that it was a valuable feature to have. One feature that was requested by many users was a statement of the business’s preliminary tax.

Some users also expressed that they got irrelevant proposed add-ons, especially those who got one about factoring. Many of these users expressed fear of hurting their relationship with their customers if a third-party were to collect payments if a customer would be a few days late with its payment.

4.5.2.2 Communication

The perceived value of the presented add-on services differed a lot between the interviewed users. Some users perceived the add-ons as something that would only benefit Company X and would not bring any value to them as a user, while others expressed that the add-ons were great since it helped them improve their businesses and lower their costs.

4.5.2.3 Design

It was still perceived as hard to understand what Company X score was without reading the informational text in the popup window shown before entering the MVP. The general conclusion from the interviewed users was that the ease-of-use and understanding of the MVP did not align with the rest of Company X's software, which is perceived as educational and easy to use.

Multiple users expressed that it was hard to take action on advice or purchase an add-on, and stressed that even if they were interested, they had to go through multiple read-more-buttons and lost their interest along the way.

The general opinion was that the feature side of the MVP was more interesting than the advice and add-on side of the MVP. One user asked for the possibility to remove the side with the advice and add-ons, and another to make that side smaller because the interest for the left side was substantially higher.

Some information boxes on the left side were irrelevant for some users because they did not use the described feature in Company X's platform.

4.5.3 Learn

By considering the feedback and prioritizing the feedback after severity and ease-to-push, the following list of solution-hypotheses was suggested to be tested and work as a basis for the development of MVP-5.

Solution-hypotheses for content related feedback:

- If not bank synchronization is in place, the cash flow forecast will not be correct as the balance in account 1930 cannot be automatically synced against the users' business

bank account balance. Until bank sync is in place, the cash flow forecast will be senseless.

- Adding a preliminary tax statement will increase the value proposition of the MVP.
- Adding a budget tool will help in making more accurate liquidity prognoses for the users.
- By creating better trigger points for which users should be targeted with specific advice and add-ons, the perceived value of the MVP will increase.

Solution-hypotheses for communication related feedback:

- Improving transparency by highlighting if Company X makes money or not when users purchase an add-on will increase the trust for both Company X and for the add-on itself.

Solution-hypotheses for design related feedback:

- Adding a comment next to the score about the additional value a specific user will gain when taking action on advice or purchasing an add-on will increase the understanding of the score.
- By making it possible to take action on advice or purchase an add-on instantaneously by changing the layout of the advice box so that the user is not forced to “read more” first, will result in that more users will take action on advice and purchase add-ons as the sign-up flow will be smoother.
- Increasing the accuracy and customization of when advice and add-ons should be presented will take away the request to make the advice side of the MVP smaller.
- By improving the flexibility of the MVP by making it possible to customize some boxes to only include data relevant to users’ specific businesses, the perceived value of the MVP will increase.

4.6 Fifth iteration

In the fifth iteration, live interactions with six customers, and one phone interview were performed. The iteration cycle started by improving the MVP, followed by a feedback session with users, and lastly formulating the learnings from this cycle on how to proceed.

4.6.1 Build

The improved MVP from the previous iteration cycle is shown in Figure 16 below.

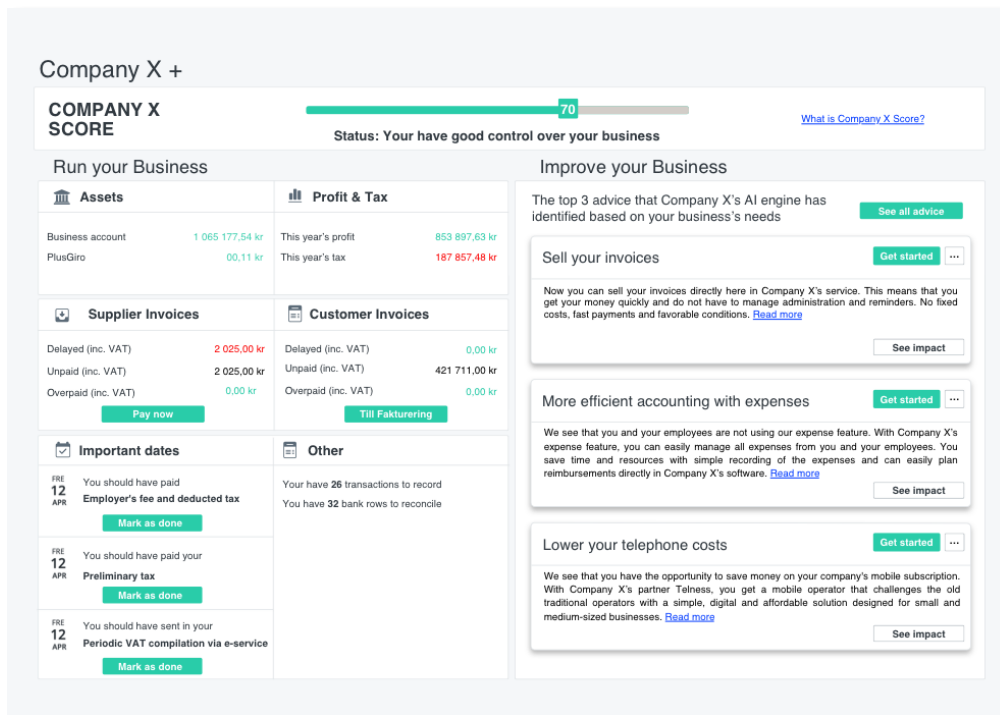


Figure 16. The main screen in MVP-5

The most critical changes made to the MVP was a more dynamic score, where users could hover the gray and green parts of the score to see what actions they already had been taken which made up their current numeric value of the score, and what they could do to further improve their score. Other improvements to the MVP were an added informational text about the users' individual score level, a changed layout of how the advice and add-ons were presented, and a preliminary profit or loss and tax calculation feature.

4.6.2 Measure

The most critical feedback received is presented in its respective feedback loop below. A list of all problems that the users stated in the feedback sessions and its solution-hypotheses can be found in Appendix F.

4.6.2.1 Content

The most important feedback related to content was that it was very effortful for the users to record certain verifications which they found complex and did not have previous experience from recording them. Many of the users were willing to pay between 50-100 SEK for a solution where Company X would record one verification that a user struggled with. The users also stress that they lack knowledge of how to manage legal issues, such as writing employment and business contracts and would, therefore, be happy to pay for a service where they could get help solving those issues.

4.6.2.2 Communication

One user was uncertain of what type of advice and add-ons that will show up in the MVP before they opted-in. It was good that there was information about the service on the opt-in page, but the user expressed a need for additional information to make the choice to opt-in more attractive. Another concern expressed by the user is that "gather many users" implies that everyone gets the same advice and that it is not customized.

The factors building the numeric value of the score was expressed to feel inaccurate. By taking action on advice or purchasing an add-on, their score could have increased, but they did not get better control over their company. It was also hard for users to understand exactly what their score implied.

If an add-on was considered to be complex and outside of Company X's main business, the users did not trust that Company X had the competence to provide them with the best advice for what solution and deal that would be most suitable based on their specific needs and situation. Some users expressed that they think Company X is competent at carrying out their main business, but they did not trust advice provided outside of their main expertise. They therefore also felt uncertain about whether the recommended third-party providers of the add-ons were actually the best for them or just a provider Company X happened to have a partnership with, and would therefore rather turn to a well-known provider themselves.

If purchasing an add-on service was connected with a big investment or required long-term commitment, the users generally felt doubtful to purchase the add-on from an unknown third-party provider. In those cases, they were more confident to purchase the service from a more well-known provider. When an add-on service required less engagement and was inexpensive, all interviewed users were more inclined towards innovative and more modern providers.

4.6.2.3 Design

The interviewed users in the fifth feedback round expressed that it was unclear what part of the score that indicated how well they ran their business and what part that indicated what actions they could take to improve the performance of their business further. They also expressed uncertainty about how to reach different levels in the score.

The users further indicated that they would lose interest in the advice and add-ons if they would be exposed to them too often. Most interviewed users showed an interest for the add-ons they were presented with even though some add-ons were stated not to be as interesting as others, but thought that their interest in purchasing an add-on would decrease if they would constantly be targeted with new add-ons.

Some users requested to fill in additional information to get more customized proposals of add-ons. By filling in the information themselves, they believed their interest would increase since the add-on probably would have a better fit to their business's needs and thus create more value for them. On the contrary, common for the users was that they stated that the sign-up flow was too complicated. They did not want to spend a lot of time purchasing an add-on. One user expressed that he would rather lose 500 SEK per month by not having the best mobile phone subscription plan, than spending two hours to make the effort of purchasing a better one.

A general thought among the users was that it was much information in a small space. For some, it was too much information to give them a good user experience; for others, it was a good platform for getting all the information they needed in one place. However, what they all had in common was that they wanted to see the most important information first to know what they needed to take action on first.

4.6.3 Learn

By considering received feedback and prioritizing the feedback after severity and ease-to-push, the list of solution-hypotheses below was suggested for further testing, but as the time ran out, there was no room for testing them in this case study.

Solution-hypotheses for content related feedback:

- Users are willing to pay for getting help to record certain verifications.
- Users are willing to pay for getting help with legal issues.

Solution-hypotheses for communication related feedback:

- Adding a video that explains the MVP in the opt-in screen will improve the users' trust in the service and their user experience.
- By dividing the score into two, where one score represents to what extent the user has taken all actions they possibly can to improve its business's performance, whereas the other score shall take the form of a check-box that indicates if the business is up-to-date with managing important administrative work such as important dates, payment of supplier invoices and payment of salaries, will increase the understanding of the score.
- By presenting an add-on from an unknown third-party provider next to a recommendation from a recognized and well-known player, the users' trust in the add-on will increase as well as the trust in the original un-known provider. As an example, when targeting users with an add-on regarding pension services from an unknown provider, their trust in the add-on and the provider will increase if a recommendation regarding how to best save for retirement is provided by the Swedish Pensions Agency is presented next to it.

- By including more than one provider in the recommendation of what add-on to purchase and visualizing the different values of purchasing the add-on from the different providers, the trust in the recommendation of the add-on will increase.
- Targeting users with add-on services that have a low level of complexity and commitment, and sufficiently supplying them, the chance of converting users on add-ons with a higher level of complexity and required commitment will increase later on. This because the users will have a positive experience from having a business relationship with Company X, and they are more confident that Company X can appealingly supply the service.

Solution-hypotheses for design related feedback:

- Not pushing add-ons at all times will increase the interest for an add-on at the time it is pushed.
- Filling in information about what add-ons and advice that is interesting for a specific user, will increase the users' interest in the pushed add-ons and advice.
- By developing an easy signup flow, the number of users purchasing add-ons and taking action on advice will increase.
- Offering flexibility and giving the user the possibility to customize the space with the data they want will increase the ease-of-use of the MVP.
- By visualizing what is needed to reach a higher score, the users' understanding and motivation to reach a higher will increase.
- A status bar separated from the score that indicates how the users run their business will increase their understanding of the score and their user experience.
- Offering a deal with the possibility to customize the deal even more by filling in additional data will increase the users' trust for the advice.

5 Elaboration of the Empirical Findings

This chapter provides an elaboration of the findings obtained from the case study. This chapter provides Company X with a body of knowledge for how challenges and opportunities related to the findings have been addressed, as well as recommendations for further work. The structure of chapter 5 follows the feedback categories in chapter 4; content, communication, and design.

The elaboration of the findings in chapter 5 is specific for the challenges and opportunities that Company X face. A general discussion for how these challenges and opportunities can be conceptualized to a more generic setting, as well as how the findings from this case study relate to previous literature is conducted in chapter 6, *Discussion of the Empirical Findings*.

5.1 Content

This section contains an elaboration of the potential content in Company X's value-adding service. The section addresses the different parts of the MVPs that have been tested, such as presented add-ons and advice, company analysis, performance score, and additional features. The pros and cons of including different features and components are discussed with recommendations grounded in an overall aim of optimizing the conversion rate of the revenue-generating add-on services.

5.1.1 Tailored Add-ons

One of the main findings from the empirical data was how strongly a user's perceived value of an add-on affected the willingness to purchase the add-on. In the first iteration, users highlighted the need for visualizing the value of purchasing an add-on service, and that the value needed to be higher compared to purchasing the service directly from the third-party provider. Later on, feedback from the third iteration showed the necessity of providing enough information for the users to be able to make an informed decision on whether to purchase an add-on or not. For many financial services, the cost was not identified as the main driver for purchasing the add-on. Already in the pre-study stage, users stressed the need for the add-ons to provide them with softer values such as stability and facilitating having control over their businesses. This increases the need for being able to visualize the additional value gained when purchasing an add-on to ensure that the users fully understand what value that conversion can create for them.

Further, one of the key factors that users said influenced their perceived value of the add-ons and advice was the degree to which the add-ons and advice were tailored to their specific needs. Already in the pre-study stage, users expressed the need for an add-on and advice to be tailored to their specific needs for it to be attractive. However, providing

tailored add-ons and advice was found to be a challenging task when testing the MVPs on the users' because the data stored in Company X's database were often incomplete or of insufficient quality to be able to provide tailored add-ons and advice satisfactorily. Three reasons were identified that affected the data needed for providing tailored add-ons and advice:

1. Users had recorded verifications incorrectly or recorded verifications on the wrong bookkeeping account.
2. No verifications had been recorded on the bookkeeping account that was used to determine the user's need for a specific add-on or advice, or users lagged in their bookkeeping.
3. The nature of the data stored in the database was not comprehensive enough to provide fully tailored add-ons and advice.

Therefore, it was often required to interview the user to receive the necessary information for presenting an add-on or advice tailored to users' specific needs in this case study. This could, for example, be to get an understanding of the user's business objectives as this could influence the outcome of the add-on or advice. To name an example, a user's attitude towards risk would influence whether they should be recommended to set up an occupational pension scheme or keep the profits in the company to later take out as dividends. During this case study, receiving complementing information about the users was both time-consuming and effortful. Even though this process generated a lot of valuable feedback from the users, it would be very ineffective and generate high costs when pushing the service at scale. Instead of retrieving the missing information by qualitative methods, a need for automation of the process of gathering user information arises.

One way to obtain missing information in an automated way was suggested by one interviewee in the fifth iteration round. That user requested to fill in additional information himself to get a more customized deal. Doing that would increase that user's willingness to purchase add-ons since the add-ons would then probably have a better fit for his business's needs and thus create more value. We believe that this is a good approach to meet the challenge in question. This could, for example, be in the form of letting the user checking different boxes to indicate the characteristics and objectives of its business on a separate settings page. Another alternative would be to provide the opportunity when the user is first starting to use the service, or in relation to a specifically presented add-on or a combination between the two. Proposedly, the information that should be provided has predetermined values based on the already existing data about the company and can be easily adjusted based on the preferences of the user. Implementing adjustable controls will increase the opportunity to provide better-tailored add-ons and advice. However, it also entails a more complicated development

process since the calculation on how an add-on or advice impacts a specific user's business has to consider more variables. Thus, we propose that an analysis should be made considering the optimal tradeoff between the degree to which the advice should be tailor-made, and the resources required to develop the service.

5.1.2 Business analysis

Another potential component of the service is an analysis of the users' businesses. In the business analysis, key metrics for the user's business can be presented together with other information to indicate the performance of the business. The purpose of a business analysis is that it should be a tool for the users when they want to see how their business is performing, and possibly also a benchmark on how their business performs in relation to competitors of similar size and within the same industry. A benchmark can be enabled by either using data from SCB (Statistics Sweden), that are providing statistics of all operating companies in Sweden and their financial ratios or by the using Company X's data about other users' businesses.

The purpose of including a business analysis in the service is to increase the frequency of use of Company X's service for each user, and thus the degree to what extent the user is exposed with an add-on. A business analysis was included in the first MVP but the feedback from the first iteration indicated that there were difficulties in designing a valuable business analysis for a majority of the users. This because many vital data points were missing or that it was difficult to communicate a business analysis that the users understood. Several users have stated that one of the main reasons for why they use Company X's software is because they are uninterested or have little knowledge in finance and business administration, which means that a business analysis easily loses its value as the users cannot understand its content as it is considered to be too complicated.

If a business analysis should be provided, it is a delicate balancing act between presenting an analysis that is easily understandable for all users, while it stills adds value to the users who are interested in a more thorough analysis. One way to solve this problem could be by providing a flexible analysis where the users can choose what type of analysis they want to see. This could either be by providing a number of fixed templates that customizes the analyses, or by having a fixed number of graphs, key metrics and similar functions where the user can choose what elements to display on their specific page. This strategy was however not tested in this case study as a business analysis was not included in the MVPs after the first iteration as an effect of the difficulty to communicate it in an understandable and valuable way.

Further, the feedback received in the first iteration also showed that it was difficult to communicate the connection between a business analysis and Company X's offers. Users

showed a general concern about whether the MVP was a business analysis tool or a way for Company X to earn money on their users by advertising add-on services. Therefore, the question arises whether a business analysis is something that should be provided as part of this service, or whether it is something that should be offered separately in another part of Company X's software.

5.1.3 Company X Score

At the start of the project, Company X had an idea of presenting a performance measure, "Company X Score", to the users. The score was supposed to illustrate how well the user's businesses performed, as well as improving the user experience and the number of users wanting to purchase add-on services by creating a gamification experience. The idea behind the concept of gamification is to motivate, engage, and reinforce the positive behavior of the users by creating a gamification experience in a product.

Initially, the idea was that the score should be based on financial key metrics. But, as previously discussed, the lack of data about the users' businesses also here made it difficult to assess a business's performance. However, as the amount and quality of data increase, this tool is something that in the future may be possible to produce and which then can create value for both the users and Company X. For users, it can be valuable as they can get information about how well their business performs and what actions they can take to improve their business's performance. For Company X, it creates value since they can offer their users a unique and valuable feature. Further research should be performed to investigate what data is needed to create such a score, as well as how the missing data can be obtained.

Another scope for the score that was tested in iteration 3-5 is a score that indicates how efficient the users are managing their business admiration tasks in Company X's software, and how they can make use of additional features in Company X's software to make the process more efficient. Proposedly, the score should be based on the number of Company X's features they use, how active they are in the product, as well to what extent they have activated add-ons provided by Company X. Depending on the company's specific characteristics, various advice and add-ons can be provided and their scores depend on whether they acted on it or not. This would not provide the users with the ability to know how their businesses are performing in quantitative measures, but it allows them to see if they are using Company X's software most efficiently. It also creates value for Company X by still creating a gamification feeling that could increase users' frequency of use as well as the conversion rate of their presented add-on services.

Based on the users' feedback in the different iteration rounds, it is apparent that it is a challenge how the score should be presented in an understandable way for the users.

User feedback shows that it is difficult to communicate both what the score indicates and why it is good for the users to have a high score. As late as in the fifth iteration, when multiple measures had been tested on how to visualize the score, one user expressed that it was still perceived as hard to understand what the Company X Score was without reading the informational text in the popup. The general conclusion from the interviewed users in the fifth iteration was that it does not align with the rest of Company X's software, which is perceived as educational and easy to use. Therefore, what the score should indicate and how it should be designed to be understandable and provide value to the users need to be further investigated. We recommend using a similar method as in this case study for further investigation, as this method has provided valuable feedback during a short period. However, as stressed in the third iteration, it was hard for the users to see the connection between the score and the presented add-ons and advice, and what effect taking purchasing an add-on or taking action on advice would have on both the score and on the users' businesses. Therefore, based on the findings in this case study we recommend separating the different parts of the score to make it more understandable. Possibly by having two different scores; one score that shows if the users have done everything that they need to do inside of Company X's platform, such as paying all outstanding supplier invoices, and one score that is used for gamification purposes to increase the users' willingness to purchase add-ons by showing to what extent the users have activated presented add-on services and advice.

5.1.4 Additional features

In the different iteration cycles, the interviewed users were asked about their pains in their daily business operations, as well as what they did to get an overview of their business's financial situation. The most common practice for the users was first to enter their online bank to check the balance on their business' bank account to determine the ability to pay upcoming expenses and supplier invoices. Then an external budget tool, most commonly a self-made tool in excel or just by calculations in their head, was used to predict the future financial situation. This was described as an effortful process that required a substantial amount of time.

When analyzing the users' behavior in Company X's software, quantitative data obtained from Company X's database and feedback from user interviews indicated that the most common user behavior was to enter Company X's platform just once a month, or even quarterly, and record all verifications that had occurred during this time.

If it would be possible to gather all the steps in this process and making it available in Company X's software, users could manage all of their daily business operations in one place. This could potentially change users' behavior in Company X's software and create substantial value for Company X by increasing the users' frequency of use. In the later

MVP's, additional features were investigated to understand what value this could provide to the users and how it potentially could change the users' behavior. However, the most efficient process for managing the tasks describes above would require a bank integration to be able to sync the balance on the users' bank accounts, as well as developing a budget tool. Therefore, the users' perceived value of the tested additional features has arguably been lower than it would have been if all required features had been in place. However, the cost of developing such features need to be considered as well as what additional value that would be created for the users and Company X. Further investigations about the different features are recommended to better understand the demand for the features and the development costs. We recommend testing the demand for different features by creating landing pages where the users can enter their email address if they are interested in the feature, as well as providing their thoughts on how such a feature should look and what would help them solve their pains. In that way, valuable feedback on how the feature could be developed is gained at the same time as the demand is measured.

5.2 Communication

The most critical risk with providing add-on services identified in the empirical findings is to generate badwill for the company the service is not communicated in an adequate way to the users. Nearly all users expressed that they felt that their integrity was violated when Company X looked at their data and stated that it is very important for them to know how Company X will analyze their data and what the purpose is. This section elaborates on the identified challenges and opportunities for the communication of the service as well as the communication of the add-on services and advice.

5.2.1 Communication of the service

In the first iteration, the risk of users perceiving the service as infringing on their integrity was discovered. This since employees at Company X had looked at their personal and arguably sensitive data to construct customized advice add add-ons. Users also stressed the importance of not pushing advice and add-on services based on the user's data before Company X had informed and been given approval from the users. The general concern among the interviewed users was that Company X is trying to start making money on the users' data. In the same feedback loop, respondents said that they did not want to be presented with information that they perceive as an advertisement when using Company X's software.

The above-identified risks could result in that more badwill than goodwill is created for Company X from those users who perceive the service as infringing or upsetting as it contains "advertisement". Therefore, there is a great need for considering how the service

should be communicated to the users. We have identified three different strategies for presenting the service: opt-in, opt-out, and mandatory.

The first option, making users opt-in to the service, was tested in this case study. By allowing the users to decide for themselves whether they want to use the service and that they have to give consent for Company X to analyze their data, will, based on the empirical findings, mitigate the risk of generating badwill. When an opt-in screen was implemented in the MVPs, where information about the service and in what way user data would be used, no more feedback regarding the violation of integrity issue was received. An additional advantage of choosing a solution where the users can decide whether to use the service or not is that it can enhance the image that the service is developed to help the users improve their businesses. This is believed to have a positive effect on the willingness to purchase different add-ons as the trust for Company X is believed to increase when users have a feeling that Company X is there to help them. One disadvantage of an opt-in solution is that all users will not be exposed to the advice and add-ons that are recommended. Thereby, there is a risk that fewer users are exposed to the offers that Company X potentially can monetize on. To attract users to opt-in to the service, we argue for the need to visualize the value it would bring to the users. In the fifth iteration, a user expressed uncertainty about what type of advice and add-ons that would show up in the MVP before she opted in. The user stressed the value of getting information about the service on the opt-in page but wanted additional information to make the choice to opt-in more attractive.

The second option is to present the service to all users by default, but let users opt-out from the service if they do not find it valuable. The opt-out strategy would enable users that are not interested in the service or that feel that the service is infringing on their integrity and privacy to stop using it. This could lower the identified risk but is still related to challenges as the users who are feeling violated would already feel that way when they choose to opt-out. From Company X's view, this would offer them more users that they can push advice to initially and proposedly also in the long-term as the number of users opting out is believed to be lower than the number of users opting in. However, the risk of violating users' integrity is still present wherefore we do not recommend this option.

The third option, that the service is mandatory, would make the service a mandatory part of Company X's software for all users. All users would be presented with the advice, add-on services, and features that Company X offers. Since some of the advice has the potential to generate revenue for Company X, it can be an advantage that the advice and add-ons can reach out to all users. On the other hand, it may be a disadvantage to make the service mandatory for all users, as there is a risk that badwill will be generated from the users who perceive the service as infringing on their integrity and privacy or those who

perceive its content as an advertisement. Based on the received feedback, we do not recommend going with this option since we argue that the loss of goodwill could have hazardous consequences for Company X.

Thus, we propose that Company X should go for an opt-in strategy even though fewer users will be exposed to the revenue-generating add-on service, with the argument that the generated badwill exceeds the positive effect of exposing more users to the add-ons.

5.2.2 Communication of advice

The risk that the presented add-on services are perceived as an advertisement has been elaborated on earlier in this chapter. Another critical challenge, identified in the first iteration, was users' loss of trust in Company X due to a lack of transparency about the revenue they make when users purchase different add-on services. This risk was reduced in the later MVPs by providing information in the opt-in screen about the fact that Company X earns revenue when users purchase some of the add-on services presented. However, in the fifth iteration, one user still expressed a loss of trust in the advice, add-on services, and Company X due to difficulties understanding when it was a partnership where Company X earned revenue, and when Company X did not take a share of the revenue. The user expressed that it was good that it was stated in the opt-in screen that Company X sometimes earns money when users purchase add-ons. However, the user stressed that it could be expressed more specifically in relation to the add-on in question. By doing so, the trust both for Company X and the advice would increase according to the user.

Another challenge regarding the trust for Company X and its provided advice add add-on services was identified in the fifth iteration, where a user stressed that if an add-on is complex and at the same time outside of Company X's main business area, giving information about the best solution for the user does not implicate trust. In those cases, uncertainty whether the recommended providers of the add-on are the best for that user's business's needs arises, and the user expressed that he would rather turn to a well-known provider directly. However, multiple interviewees expressed that suggesting multiple alternatives for providers of an add-on can create additional trust and confidence in both Company X and the add-on that is presented. Then they could easily see what add-on that would suit them the best and create the most value for them. However, this option requires that the user benefits more from purchasing an add-on from a third-party provider that Company X has a partnership with than from any other provider. Therefore, Company X should always work for having partnerships with third-party providers that offer add-ons that can create more value for the users than what other competing players in the market could. In addition to price, the additional value created by the add-on service could be in the form of that a user gains increased control

over its business, as outlined in the pre-study stage, but also by providing more easily accessible information and a smoother signup flow that saves time and energy for the user when searching for a service that its business needs.

The need for a smooth signup flow was seen in the fourth iteration cycle. In this iteration, multiple users expressed that it was hard to take action on advice and effortful to purchase add-on services, and stressed that even if they were interested in the advice or add-on, they had to go through multiple read-more-steps and lost their interest along the way. Further, in the fifth iteration, one user strongly expressed the need to clearly inform what the process was for purchasing an add-on and the need for a smooth signup flow. This user expressed that he would rather lose 500 SEK per month by not having the best deal, than spending two hours to make the effort of getting a better one.

5.3 Design

This section elaborates on identified opportunities and challenges for how Company X should design the user interface of the service.

5.3.1 Design of the service

Several challenges were identified concerning the design of the service. The service has been tested with MVPs in different iteration cycles composed of different features. Each feature has been elaborated upon previously, but some challenges were seen to be recurrent for all of them.

For example, in the third iteration, users expressed lack of understanding of how the different features in the MVP were connected. Further on, users in the fourth iteration stressed that the MVP did not align with the rest of Company X's software, as it was much more difficult to comprehend and not as educational. These challenges were taken into account during the development of all MVPs and the associated issues were seen to decrease as the MVPs evolved. This was concluded based on the lack of feedback from users about these issues, as well as letting the users explain how they interpreted the MVPs.

However, what was still experienced in the final MVP, was that a general feeling that the MVP had much information in a small space. This made it hard for some users to comprehend all of the information, while others expressed that it was a good platform for getting all information that they needed for managing their business administration in one place. The learning from this is that all users are unique and have different needs and knowledge. This increases the need for a dynamic service customized for the different users. Except for customization of advice and add-ons as previously discussed, we also argue that there has been a need for customization of the service itself. By enabling users

to rearrange features in the MVP, choose what features that create the most value for them, and by adapting the user interface based on their needs, we have experienced that the users expressed interest in the service has increased.

In this case study, it has only been tested to present the service and its content as a separate entity in Company X's software. Except for pushing it as a separate entity, we have identified another opportunity for where add-ons and advice can be pushed to users in Company X's software. Another approach would be to push the add-ons and advice when the users perform certain actions in Company X's software. For example, when users are making a deduction for the cost of a mobile phone, Company X can advise on making a deduction for a computer if the user has not already done so. Another possibility in this approach is to present specific advice or add-ons when a user is using a certain feature of Company X's service. For example, when a user is inside Company X's salary tool, the user can be presented with a pension service add-on that has the opportunity to allow the director and the employees to get more out of their occupational pension scheme.

Based on the feedback received when testing the MVPs, we believe that a separate page is a good solution for several reasons. On the page, specific advice and add-ons that are suitable for a user can be pushed and create a good overview for the user with regards to what can be done to improve their business. By being pushed with all advice in one place, the user can enter the page when they have the right mindset and have a higher interest in taking action on advice or when they are looking to purchase an add-on service. The risk that the user perceives the advice and add-ons as annoying or as advertisement is also reduced, as they choose whether they enter the page to take part of the advice and add-ons or not. However, there is a risk that the users would not visit the page frequently. Many users are not using Company X's software more than once a month, and when they do, they often have many other tasks to fulfill. Therefore, we improved the MVPs with additional features in MVP-5 to try developing a service that could improve the user's frequency of visiting both the content provided in the MVPs and Company X's software. Even so, this approach will most likely not expose the users to the advice and add-ons as much as when presenting it directly in different workflows. One possible solution for this is to start by having a separate page in the software for the advice and add-ons, and then gradually start pushing them in other parts of the software to start exposing users more and more. This will probably increase the conversion of users without risking upsetting the users too much by suddenly having advice and add-ons pushed everywhere within the software.

The other approach, to push advice in connection with certain features and actions, is related to both challenges and opportunities. The opportunity seen in this approach is that the users presumably already have the right mindset when pushed with the advice

or add-on, which could increase the conversion. The idea is that the user is more likely to act on advice or purchase an add-on because the threshold of doing so is lower when the user already performs a similar action. The main challenge is considered to be the mitigation of the risk that a user perceives the add-ons and advice as an advertisement if they feel that they are being exposed to them too often. This could harm Company X in the sense that the perceived value of their software would be affected by the advice and add-ons. Another risk is that the advice and add-ons can be perceived as disturbing because the user is in the middle of a process and does not want to be disturbed. This can also result in missing out on users that would be interested in advice or add-on, but that does not have time to consider them at that specific moment because they have a list of things that has to be completed during their visit in the software. However, it may differ how the advice and add-ons are perceived depending on the nature they have. If it is purely informative advice, we have a hypothesis that they are perceived as less disturbing compared to add-on services that can be perceived as an advertisement.

5.3.2 Continuous user feedback

When implementing the service into Company X's software, there is an opportunity to create a feedback loop from the users. The idea of this feedback loop arose in the pre-study stage where users explained why they did not use certain features in Company X's software. Many users had a clear reason why they chose to use an alternative solution to Company X's, which on most occasions was that Company X's feature lacked the required functionality. Therefore, in a situation where the user has a good reason not to take action on advice or purchase an add-on, or where Company X recommended advice or add-on based on an incorrect assumption, we believe that the user must be able to decline that advice or add-on. This creates an opportunity where the user can leave feedback on why they declined the advice or add-on so that the recommendation can be more accurate in the future. This also enables Company X to understand what advice and add-ons users are asking for, as well as the demand for the requested advice or add-on. Furthermore, it creates the possibility to inform specific users when the service has evolved to a level that can meet their needs to create new opportunities for conversion.

6 Discussion of the Empirical Findings

The discussion in the following chapter puts the empirical findings in chapter 4 and the elaboration of the findings in chapter 5 into a broader context. The findings specific for Company X are conceptualized by discussing them in a more generic setting to increase the applicability for other companies, as well as how the findings from this case study relate to previous literature.

6.1 Create a Great Value Proposition

The freemium business model entails many opportunities for companies providing internet-based and digital services, especially for startup companies with a limited budget for marketing and traditional sales operations. In the digital age and the emergence of social media, word-of-mouth referrals can result in exponential growth, and if the value proposition of the freemium service is designed successfully there is potential for generating substantial revenue (Seufert, 2014).

Company X, with an applied freemium business model, is often met by uncertainty from its customers, who questions the business model and its advantages. They are therefore commonly found navigating in an unknown environment, where it is hard to know what creates value for the user, how to design and present the value proposition of revenue-generating add-on services that are a necessity in Company X's business model, and if the user will understand the value in these add-on services. To sort out and understand the customers' needs and pains is therefore argued to be key for designing a successful value proposition and business model.

But just like Klein (2013) stresses that a designer's or product owner's vision of the final product rarely corresponds to what solves the users' problems, many of the initial assumptions in this study were also seen to be proven wrong. One major initial assumption was that the greatest value users would gain from signing an add-on was saving money. What however was found already in the pre-study stage, was that the greatest value does not necessarily have to origin in a reduced price, but rather by saving time or by creating an increased feeling of security and control. One example of what the interviewees stressed in this study, is that they found it effortful to compare deals from different insurance companies and the complexity to determine what insurance product that meets their requirements. Providing advice and guidance to help customers find insurance products that meet their requirements rather than finding the cheapest insurance was seen to increase the expressed willingness to purchase the insurance. This is widely stressed by different authors, such as Osterwalder et al. (2015), that argues for the importance of solving customer jobs and pains. An identified challenge for freemium companies is therefore argued to be a successful execution of the process to understand what jobs and pains their customers have. By using a qualitative hypothesis-driven method with short iterations in this study, we were able to, like Eisenmann, Ries & Dillard (2011) argue, identify many customer pains in a short time span, reject some of our initial

assumptions and reduce the existing uncertainty with maximized gained information as an outcome.

Early findings, such as the insurance example above, indicated the need for tailoring advice to the customers' needs, characteristics, and the situation they are in. As all customers are unique with different jobs and pains to be solved, there are endless of customization that can be made. However, the need for a higher degree of customization has, as seen in this study, been challenging to implement in some cases since a higher degree of customization and tailoring of add-ons increases the need for high-quality and comprehensive user data and resource-intensive product development.

A way to increase the customization in cases when there are insufficient customer data or when the product development resources are scarce is to give users the opportunity to provide additional information themselves. By giving the users the opportunity to provide information about their needs and preferences, the potential to bridge the gap between the two sides of the value proposition canvas, presented by Osterwalder et al. (2015), is seen to increase. As an outcome, we argue that freemium companies can create better-customized deals with higher accuracy and an increased perceived value of an add-on. Supported by Kumar's (2014) argumentation that the conversion rate will be severely negatively impacted if the user does not see the gained value, we argue that the user's involvement in the customization of advice will have a positive effect on the conversion rate, which was also found in the fifth iteration in the case study. The reason is that the users to a greater extent understand that the add-ons that are presented are customized based on the preferences the users have provided, and thus increase the perceived value and the user's willingness to purchase the add-on.

6.2 Bridging the Cognitive Bias Gap

The influence of the customer's perceived additional value of purchasing an add-on service is concluded by Wagner, Benlian & Hess (2013), in their study of converting users from free to premium, to be a critical factor for the attractiveness of the premium add-on service. However, the users' perceived value of an add-on service does not always coincide with a company's assessment of the value of the add-on, or even the actual value. It is, therefore, crucial to investigate why this gap exists so that measures can be taken to reduce, or even eliminate it.

As stated by multiple users in different iteration cycles, they did not fully understand the value the add-ons could bring to their business. This problem is argued to be partly related to Wagner, Benlian & Hess (2013) theory, where a catch-22 situation occurs before the user has signed up for a premium service. Before actually experiencing a service, it is hard to depict the actual value the service could bring, and thus the willingness to convert decreases. In this study, this problem was reduced by more clearly communicating what the specific add-ons entailed and providing concrete examples of the impact the add-on could have on the performance of a user's specific business.

6.2.1 Visualize the Impact and the Perceived Value

Another solution for reducing the cognitive bias gap is to visualize the impact the premium service will have. As experienced in the study and elaborated on in chapter 5, most importantly is to focus on what impact the premium service will have specifically for the individual user based on its characteristics and situation. However, as experienced in the fourth iteration, it can be hard to visualize the impact and perceived value to the targeted user in an understandable way. It is therefore important to test if the visualization is fulfilling its purpose to make it more clear what impact a premium service could have. If the visualization is considered to be too complicated and hard to understand, there is a risk that an opposite effect is achieved where the understanding of the value is reduced, as experienced in the first MVP of this study.

To bridge the gap between the users' perceived value and the actual value, this study identified the need to be able to visualize the value. Wagner, Benlian & Hess (2013) discuss how understanding the cognitive-affective relationship between a free service and a premium version can affect the conversion to the premium version. That a user who does not fully understand the perceived value is less likely to convert since they do not understand the difference it would do for them. This was experienced also in this study, where interviewees expressed that the lack of visualization of their gained value decreased their willingness to purchase an add-on. It was found to be important that the gained value was related to their specific business's characteristics and situation.

6.2.2 Customize When a Free Trial Is Not an Option

Providing more informative information about a premium service can be considered the first step to bridging the cognitive bias gap. As outlined by Wagner, Benlian & Hess (2013), the most impactful way of bridging the gap is to offer a free trial period of the premium service. By being able to try a product or service for free, a user can create an understanding of the value they would perceive from it. However, this solution is not fitted for all premium services, including financial products that are purchased on a one-time transaction basis, but better suited for subscription-based premium services.

An alternative solution shown in this study that increased the perceived value was to tailor the advice to individual users. As previously discussed, when the customization of an add-on or advice increased, the expressed willingness to convert increased. This, since tailored add-ons and advice allowed for more visual perceived values when the advice to a higher degree was based on the individual user's data. Osterwalder et al. (2015) argue for the need of designing the value proposition according to users' complete user profiles to boost their perceived value, which aligns with the findings in this study where user's interest for a given add-on or advice increased when the feeling that generic recommendations were given was removed and instead created a feeling that the advice was given specifically to each user and that the visualization of the value from signing it was based on their data.

6.3 Increase the Willingness to Purchase by Mastering the Vendor-Brand-Product Trust Relationship

Becerra & Korgaonkar (2011) stress that a user's lack of trust in a company is one of the primary reasons for why a user chose not to purchase products and services online. It is thus vital for a freemium company that wants to start selling add-on services in their freemium software that they try to push the add-ons in a way that maintains or increases the user's trust to the largest extent possible. In the following section, a discussion will follow for how the findings made from the case study relate to Becerra & Korgaonkar (2011)'s model, and how experienced problems relating to trust components could be practically mitigated to increase the level of trust and consequently the users' intention to purchase the add-on services presented to them.

Becerra & Korgaonkar (2011)'s model of the relationship between trust beliefs and online intentions shows many similarities to the empirical findings from the conducted interviews and tests of the MVPs in this study, on for example how users' attitude towards being presented with add-ons in different ways may differ. Becerra & Korgaonkar (2011) suggest that a trustor's online intentions, which consists of the intention to purchase products and services, and the intention to provide personal information, is influenced by the trustor's trust beliefs. The trust beliefs are in turn composed of vendor trust, brand trust, and product trust. Where vendor- and brand trust are dependent on the trustor's perception of the vendor's and brand's competence, benevolence, integrity, and predictability. The product trust beliefs arise from the product type, performance variability, the newness of the product, low levels of or bad experience with the product type, and the inability to inspect or touch the product. Becerra & Korgaonkar (2011) further suggest that vendor trust can be augmented by a high level of brand trust. If applying Becerra & Korgaonkar (2011)'s model to the case study carried out in this thesis, the trustor can be translated to Company X's users, while the trustee is Company X itself. The vendor trust can be translated into the users' trust in Company X, the brand trust to the trust in the third-party provider responsible for supplying the add-on, and the product trust to the trust in the specific add-on the user is being targeted with.

6.3.1 Benevolence Trust's Effects on Conversion

An important discovery from the first iteration in the empirical findings was that nearly all interviewed users stated that they were worried that Company X had the intention to start exploiting the users' data for commercial purposes to push add-on services, that were perceived as advertisement, to make money. Because of this, the users also stated that they experienced a decreased level of trust in Company X and that they were not willing to purchase the add-ons that were presented to them. In the interviews in the fourth iteration cycle, the users further expressed that it seemed like the add-ons only benefitted company X and did not provide any value to them as a user. Thus, instead of

achieving the objective that the users would perceive the advice for how different add-ons could bring value to the users' businesses as an added value in Company X's software, it had the opposite effect.

These findings can be explained and supported by Becerra & Korgaonkar (2011)' benevolence component in their trust beliefs and online intentions model. As previously explained, the benevolence trust refers to a vendor's, which in the case study equals Company X's, intention to act in the best interest of the customer. Based on the feedback from the users, it is clear that the way the add-ons were presented up until the fourth MVP harmed the users' benevolence trust in Company X. As supported by Becerra & Korgaonkar (2011), this also explains why the users stated that they were not willing to purchase the add-ons presented to them.

One way of improving the benevolence trust that was implemented and tested in the second MVP was to emphasize how the user would benefit from the add-on and inform about the purpose of pushing the add-ons. When users were presented with add-ons without any prior notice in the first MVP, they expressed a severe concern that Company X did not act in the users' best interest. In the second MVP, users were provided with information that Company X always has the intention to act in the users' best interest, and that the user had the opportunity to lower costs by signing add-ons as they were only presented with deals with a lower price compared to their current ones, and that the choice for whether to purchase an add-on or not was of course always up to the user itself. It was also explained to the users that by purchasing an add-on thorough Company X, they could receive a lower price compared to signing the add-on directly from the third-party provider supplying the add-on as Company X got a discounted price since it could aggregate many deals together. When users were provided with this information, they understood to a larger extent how they benefited from being presented with the add-ons and expressed that the likelihood that they would purchase an add-on increased.

An additional way of improving the benevolence trust originated from the feedback gained in the first iteration cycle and later tested in the second MVP, which provided the users with the option for opting-in to the service and thus whether to be targeted with add-ons or not. As companies who are making use of the freemium business model are fully dependent on being able to convert a subset of their users into premium paid-for services, this alternative might not come up as an intuitive strategy for many freemium businesses. But given the assumption that users who would not choose to opt-in for being provided with add-ons would not purchase them either way and that the users who see the value in being provided with the add-ons get a higher level of benevolence trust in the company as they were provided with the choice if they wanted to be presented with add-ons or not, the opt-in solution should be evaluated.

A way of making the opt-in solution more attractive that was tested in the MVPs is to create a package solution where additional value apart from add-ons is provided. In the study, this was made by presenting the add-ons next to non-revenue generating advice for how the users could improve their businesses' performance. In this setup, being presented with add-ons can be seen as the price the user pays for the additional value, instead of paying in hard currency. As freemium companies typically attract users with a lower willingness to pay compared to companies using a traditional business model, this setup might have a natural fit in freemium products. However, an important learning from the study was that this business model is not particularly intuitive to users as they did often not see the direct connection between getting additional premium value in the form of advisory services, and being exposed to paid-for add-on services. It was found from the study that it is thus important to be able to communicate in a clear way that being presented with add-ons is a necessity to get access to the premium value.

Another interesting finding from the third iteration was that some users were fully aware that Company X had to push add-on services to make revenue to cover costs for maintaining the software and be profitable, but that they instead of being exposed to add-ons would rather pay for the software, which they also stated they would be happy to do.

6.3.2 Increase Trust by Being Transparent

When first developing the MVP in this study, one hypothesis was that it was best not to inform about the fact that Company X earned revenue by providing the add-on services as this was thought to result in that the user would think they would not get the best price for the add-ons. But as pointed out in the first iteration of the empirical findings, it was quickly discovered that the users questioned if Company X earned money by providing the add-ons and that that they considered Company X to be non-transparent when presenting the add-on services.

Due to the critique received in the first iteration cycle, a change was made to the second MVP where an opt-in screen was added where the users were informed that Company X shared the revenue earned with the third-party provider supplying the add-on. Based on the feedback gained in the third iteration, this had a positive effect on the benevolence trust for Company X. However, the users interviewed in the third iteration cycle still expressed that they wanted Company X to explicitly state if they earned money or not in relation to each add-on they were targeted with. By doing so, users said that the trust both for Company X and the add-on would increase. After implementing this, no more feedback was received regarding a need for higher transparency. It turned out that users were generally not concerned that Company X profited from targeting them with add-on services, but rather that Company X was not transparent in the communication when doing so. This is supported by Morgan & Hunt (1994), who state that frequent and

extensive communication and information sharing increases trust in business relationships as it assists in aligning perceptions and expectations between business partners.

6.3.3 Mitigate the Risk of Integrity Violation

In the empirical findings and further outlined in the analysis, the most critical feedback received from the users concerning being presented with the first MVP was that they felt that Company X severely violated their integrity. Their perception was that Company X was looking at their personal, and arguably sensitive, data with the purpose to share it with third-party providers to monetize on it. The interviewed users expressed that they had always considered Company X to be a trustworthy company that acted in the best interests of their users, but the fact that they were now exploiting their users' data heavily deteriorated that image. The users further expressed a strong reluctance towards purchasing add-ons from Company X or any third-party provider as Company X was not acting honestly.

The users' attitude is supported by Becerra & Korgaonkar (2011) that state that a user's perception of a vendor's integrity influences the trust beliefs in the vendor, which further affects the user's willingness to purchase products and provide personal information to the vendor. The concept of integrity is described by Lee & Turban (2001) as a trustor's perceptions of a trustee's honesty, credibility, and adherence to an acceptable set of principles. In this case, the user, or trustor, clearly did not consider Company X, or the trustee, to adhere to principles they regarded as acceptable.

After receiving the feedback that users experienced a severe violation of integrity when being presented with the first MVP, changes were made to the later MVPs that resulted in that the users' feeling of integrity violation could be mitigated. In the later MVPs, the users were first presented with an informative text about how the service including the add-ons was constructed, and then given the choice whether they wanted to opt-in to take part in the service or not. They were also told that it was an "AI-engine" that had generated the advice for how different add-ons had the potential to improve their businesses' performance. After these changes had been implemented, no more feedback was received regarding integrity violation. Thus, by clearly communicating what the service implicated and how it was constructed, the feeling that Company X violated the users' integrity could be mitigated. An interesting, seemingly physiological effect, that would be interesting to further investigate was that the users' feeling of integrity violation was significantly reduced when the users were told that it was an AI engine that was responsible for digging in their personal data and not a physical person.

6.3.4 Competence Trust's Effect on Conversion

From the interviews conducted in the fifth iteration cycle, it was found that the users trusted Company X's competence to provide them with the best advice for accounting services such as bookkeeping, the preparation of VAT returns and year-end accounts as these services were considered to be closely related to Company X's core business, being an accounting software provider. However, when the users were targeted with add-ons that were considered to be outside the scope of Company X's core business, such as pensions, business insurances, and advice about how to set up legal contracts, they did not trust that Company X could provide them with the best advice, and would rather turn to a provider they considered to have better domain knowledge.

This phenomenon is supported by Becerra & Korgaonkar (2011) who state that a user's trust in a vendor and a brand partly arises from the competence trust in the vendor and brand. As previously stated, the vendor competence trust refers to the user's trust in that Company X has the competence to provide the add-on in a sufficient way. Similarly, the brand competence trust translates to the user's trust in that the third-party provider who supplies the add-on has the competence to provide it sufficiently. According to Becerra & Korgaonkar (2011), the vendor trust can be augmented by brand trust, which also the empirical findings in this study support as it was found that when the users were not willing to rely on Company X's competence to provide the add-on, they were still willing to purchase the add-on as long as they relied on the third-party provider supplying the add-on. In cases where the users considered that the add-on was not related to Company X's core business, it was thus important to highlight that it was not Company X itself who was responsible for supplying the add-on, but a third-party provider whose competence the users relied on.

An additional finding from the interviews conducted in the fifth iteration cycle was that when the nature of an add-on's complexity decreased and it could be seen as a commodity as the differentiation from other competing deals was low, the importance of competence trust decreased. Similarly, when the users had a high level of knowledge and experience from the add-on, the importance that Company X and the third-party provider were competent within the field decreased, compared to when the user's knowledge and experience from the add-on were low. An example from the study is when users were targeted with mobile phone subscription plans. In this case, when a low price was considered the most important criteria for making a purchase and most users were confident in what needs they had from a mobile subscription plan, they were willing to purchase the add-on from Company X even though it was outside of its core business. They were also willing to purchase mobile phone subscription plans even though it was supplied by an unknown third-party provider. This phenomenon is again supported by Becerra & Korgaonkar (2011) who state that the product type and the knowledge and

experience from a product influences the product trust. Thus, it was found based on the experiences from the case study, that when the users' product trust was high, vendor and brand trust had a lesser impact on the users' willingness to purchase add-on services.

An interesting finding from the interviews conducted in the fifth iteration cycle that could make a potential contributing addition to McKnight et al. (2002)'s trust beliefs model, and more specifically to the relationship between product characteristics and the importance of the brand's competence, was that when an add-on required a greater commitment, the importance of competence trust in the vendor and brand increased. Meaning that when two add-ons were considered to have an equal level of complexity, such as pension services and advice for how to set up legal contracts as tested in the MVPs, the competence trust in the brand had a greater influence when it came to signing pension services as the commitment was more considerable because it impacted the users for a long time into the future. Based on the experiences from the empirical findings, this was apparent when the users had no intention whatsoever to purchase pension services from an unknown third-party provider but were significantly more favorably disposed to purchase pension services from a provider they knew about and relied on.

6.3.5 Increase Trust with Predictability

The last of the components that make up Becerra & Korgaonkar (2011) trust beliefs is predictability. There were no discoveries from the empirical findings that can be directly related to the predictability component. However, during the development of the MVP, a hypothesis was stated for how a solution could be designed to increase the users' trust in Company X in relation to presenting add-ons with a high level of complexity. The idea was to start by targeting users with add-ons with a low level of complexity and commitment, which based on previous findings, would have a higher share of users purchasing them. If Company X and the third-party providers would be able to deliver the specific add-on in a compelling way, that would create the opportunity to target users with more complex add-ons in a successful way later on. This because the user would have been provided with proof that Company X could deliver on its promises and it would be easier to anticipate future behavior, and as supported by Becerra & Korgaonkar (2011), this would increase the likelihood that the user would be willing to purchase add-ons presented to them, even with a higher level of complexity.

Due to the nature of the study where there was no room for conducting tests over a longer period of time, the solution was not possible to test on the users in the MVPs. However, several users expressed that they were not convinced that Company X could deliver on its promises when presenting add-ons with a more complex nature as they had no prior experience from purchasing add-on services from Company X, which supports why this strategy might be proven advantageous.

6.4 Design a Smooth Sign up Process

Conversion of customers to premium add-on services entails both converting customers without an existing similar service, as well as the conversion of customers who already possess similar services. As discussed earlier, the perceived additional value of purchasing an add-on is seen as key for increasing the conversion rate. However, interviewees stress the importance that the process of purchasing the add-ons needs to be as effortless as possible in order for the add-ons to be attractive. It is not enough to just provide an additional value; the additional value also has to be perceived as higher than the switching costs arising when purchasing an add-on.

Depending on whether the user possesses a similar service or not is therefore seen as one factor affecting how big the perceived value of the add-on needs to be before a purchase decision becomes relevant. Like Klemperer (1987) argues that switching costs may affect conversion, one example of this is seen in the sixth iteration of this study. There one interviewee expressed that he would rather stay with his current solution than switch to a cheaper one if he had to go through a lengthy signup process. In this case, monetary values were not enough or did at least not provide sufficient value to overcome the transaction cost of switching services. Other multiple interviewees expressed that they lost interest in presented add-ons and because there were too many steps before they could take action and purchase an add-on. A solution for this that was seen to have a positive impact on the expressed willingness to convert was to create smoother signup flows and make it easier for the users to purchase the add-on services presented.

Caruana (2003) argues for the need to also deliberate switching costs associated with decision biases and risk aversion. That switching costs also involve psychological and emotional costs arising from social bonds or trust in a business. Bloom, Asher & White (1978) further describe how switching between two similar services can bring psychological and emotional stress, as well as a feeling of increased risk and uncertainty. This was expressed by some interviewees in the study who stated that some of their financial services were complex and it had been an effortful process to compare deals from different services as well as to get the best offering. These users expressed less interest in an add-on service presented to them because the process of purchasing their current service had been so effortful. For these users, the need for a smooth process and a high perceived value is argued to be substantially higher than for example customers who do not currently possess a similar service. Therefore, we argue that when providing premium add-on services, it is essential to take the customers' psychological exit barriers into mind to optimize the conversion rate.

6.5 Pains and Gains When Applying a Lean UX Process

As a concluding part of this discussion, the pros and cons of applying a Lean UX development process will be elaborated upon. In this study, one of the aims was to find a fit between the value proposition of the add-on services that Company X's would start to sell, and its users' needs and pains with the purpose to boost the number of non-paying users willing to purchase the newly offered add-on services. To find this fit in an efficient way, Lean UX methods were applied. As argued by Klein (2013), the use of short iteration cycles and user interactions facilitates in building the right product. These methods also helped gain valuable and honest feedback in this study. The methods were also used when developing the value-adding service and its advice and add-on services according to the users' needs and pains, instead of relying solely on company X's initial assumptions.

The main advantages of using a lean iterative development method in this study were to be able to quickly test how Company X's offered add-ons were perceived in a realistic context and to create an understanding for how the add-ons can be presented more efficiently to increase the users' willingness to purchase them. A great value that the Lean UX method contributed with was also the ability to identify many potential problems, challenges, and opportunities in a short time.

However, the majority of the user feedback collected was related to the pains and needs users had related to Company X's freemium software. This feedback did not bring a direct value for reducing the gap between the newly provided value-adding service and the users' needs and pains but was still valuable to Company X as they could use the information when planning the product roadmap. However, related to one of the aims of this study which was to bridge the gap between the users' needs and a new add-on service's value proposition, this can arguably be seen as a drawback from using the Lean UX method as processing all the data was shown to be a time-consuming activity. The value received from talking to real users is however argued to overcome the drawbacks. Therefore, we recommend the method of talking to real users in short iteration cycles as we consider to be of great value for a freemium company trying to extend its offerings with add-on services. The extra processing of data concerning product requests can be seen as a great value in itself to gain other valuable insights. It might also be possible to decrease the required processing of data by conducting more effective interviews and use more specifically formulated interview templates than used in this study.

Another challenge that was experienced in this study when developing the service was to assess the relative importance of different requests and concerns regarding the service as the feedback only came from a limited number of users. Therefore, we argue that it is important to not act solely on the feedback obtained from qualitative interviews. Instead, the feedback should work as inspiration to set up hypotheses that can be tested. However,

this implies that the feedback can be prioritized and evaluated accurately to lead to real progress, which Ries (2011) argues to be the biggest challenge when applying a hypothesis-driven development process. To work around this problem, the method used in this study was to prioritize the received feedback according to two different categories; the degree of severity according to the user who expressed the need or concern, and the ease to implement a corresponding solution. This helped to quickly test and evaluate the most important user needs and concerns. However, the risk when prioritizing the feedback after severity is that too much emphasis is placed on the users who scream the loudest, which necessarily not are the users that will become paying customers in the future. This might cause that the service is designed for the wrong target audience, and thus, as supported by Klein (2013), it is important not to rely solely on the users' feedback, but rather to use it as guidelines for further testing.

7 Conclusion

The use of the freemium business model has increased dramatically in tech startup companies in recent years. However, several challenges are apparent when trying to design a freemium business model to generate substantial revenue. The purpose of this study was to examine how companies with a freemium business model can practically approach the challenge of converting non-paying users into becoming paying customers. The aim of the study was consequently to provide guidelines for how to present and design the value proposition of add-on services to increase the users' willingness to purchase the add-on services offered to them. To fulfil the purpose of the study, a single case study of a freemium fintech startup that was facing these issues was conducted.

The study early identified that users' perceived value of add-on services does not always coincide with the supplying company's assessment of the value. The users' perceived value was also seen to be affected by what type of add-on they were presented with, as well as the characteristics of the users who the add-on was presented to. Therefore, an important challenge to master for companies that are trying to convert non-paying users into paying customers by providing add-on services was found to be the ability to visualize and communicate the value a user would gain from purchasing an add-on. It was found that a user's willingness to purchase an add-on increased when visualizing what concrete impact the add-on would have specifically for a user's business in monetary terms, rather than communicating how much users who purchased an add-on valued from it on average.

It was found to be particularly important to be able to visualize the specific impact an add-on service would have on a user's business in cases where the business owner already possessed a similar service. In these cases, it was found that the added value resulting from purchasing the add-on presented to them needed to be significantly higher than the switching cost purchasing the add-on would bring. Apart from monetary barriers, these users commonly showed psychological exit barriers as the acquisition of their current similar service had required a lengthy purchasing process. It was therefore found to be essential to understand the switching costs users faced, including psychological exit barriers, to provide an add-on with a high perceived value. In addition to being able to communicate the value in a clear way, it was found that by making the sign-up flow more efficient and by providing clear instructions for the step-by-step process of purchasing an add-on could help decrease the perceived switching costs and increase the willingness to purchase an add-on.

An additional challenge, which based on this study, proved important to be able to overcome, was the ability for the company that is offering add-ons to appear as trustworthy. A user's decreased level of trust in the company providing the add-on was

seen to reduce the user's willingness to purchase the add-on services presented to them. In this study, the main factors affecting the trust, and consequently the willingness to purchase add-ons, were the user's perception of the extent to which the company presenting the add-ons acted in the user's best interest, the company's level of transparency when communicating an add-on, its perceived level of competence in supplying the add-on presented, and the add-ons level of complexity and the commitment required for purchasing it. The findings from the study indicate that the trust, and consequently the willingness to purchase an add-on, could be increased by letting the user give their consent to be presented with add-ons, being fully transparent of the underlying business model when providing add-ons, and by partnering up with and utilizing the brand of well-known and reliable third-party providers when an add-ons complexity was high and not related to the company's main area of expertise.

8 References

- Anderson, C. (2009). *Free - The future of a radical price*. London: Random House Books.
- Argyris, C., Putnam, R., & Smith, D. (1990). *Action science*. San Francisco (Calif.): Jossey-Bass.
- Bart, Y., Shankar, V., Sultan, F., & Urban, G. (2005). Are the Drivers and Role of Online Trust the Same for All Web Sites and Consumers? A Large-Scale Exploratory Empirical Study. *Journal Of Marketing*, 69(4), 133-152. doi: 10.1509/jmkg.2005.69.4.133
- Becerra, E., & Korgaonkar, P. (2011). Effects of trust beliefs on consumers' online intentions. *European Journal Of Marketing*, 45(6), 936-962. doi: 10.1108/03090561111119921
- Bell, E., & Bryman, E. (2011). *Business research methods*. 3rd ed. New York: Oxford University Press Inc.
- Berry, L. (2004). *Marketing services*. New York: Free Press.
- Bushe, G., & Shani, A. (1991). *Parallel learning structures*. Reading, Ma: Addison-Wesley.
- Bloom, B., Asher, S., & White, S. (1978). Marital disruption as a stressor: A review and analysis. *Psychological Bulletin*, 85(4), 867-894. doi: 10.1037//0033-2909.85.4.867
- Bullard, E. (2018). *Freemium*. Salem Press Encyclopedia.
- Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer Switching Costs: A Typology, Antecedents, and Consequences. *Journal of the Academy of Marketing Science*, 31(2), 109–126. <https://doi.org/10.1177/0092070302250897>
- Caruana, A. (2003). The impact of switching costs on customer loyalty: A study among corporate customers of mobile telephony. *Journal Of Targeting, Measurement And Analysis For Marketing*, 12(3), 256-268. doi: 10.1057/palgrave.jt.5740113
- Coughlan, P., & Coughlan, D. (2002). Action research for operations management. *International Journal Of Operations & Production Management*, 22(2), 220-240. doi: 10.1108/01443570210417515
- Croll, A., & Yoskovitz, B. (2013). *Lean Analytics* (1st ed.). Sebastopol: O'Reilly Media, Inc.

- Dowling, G., & Staelin, R. (1994). A Model of Perceived Risk and Intended Risk-Handling Activity. *Journal Of Consumer Research*, 21(1), 119. doi: 10.1086/209386
- Eden, C. & Huxham, C. (1996). Action research for management research. *British Journal of Management*, 7, 75-86.
- Eisenmann, T., Ries, E., & Dillard, S. (2011). Hypothesis-Driven Entrepreneurship: The Lean Startup. Harvard Business School Background Note 812-095.
- Goodman, E., Kuniavsky, M., & Moed, A. (2012). Balancing Needs through Iterative Development. *Observing The User Experience*, 21-44. doi: 10.1016/b978-0-12-384869-7.00003-6
- Gothelf, J., & Seiden, J. (2016). *Lean UX*. Sebastopol, CA: O'Reilly.
- Gu, X., Kannan, P., & Ma, L. (2018). Selling the Premium in Freemium. *Journal Of Marketing*, 82(6), 10-27. doi: 10.1177/0022242918807170
- Haaker, T., Faber, E. and Bouwman, H. (2006). Balancing customer and network value in business models for mobile services. *International Journal of Mobile Communications*, 4(6), p.645-661.
- Klein, L. (2013). *UX for Lean Startups*. Sebastopol, CA: O'Reilly.
- Klemperer, P. (1987). Markets with Consumer Switching Costs. *The Quarterly Journal Of Economics*, 102(2), 375. doi: 10.2307/1885068
- Kumar, V. (2014). Making "Freemium" Work. *Harvard Business Review*, 92(5), 27-29.
- Lee, M. & Lee, J. (2005). Consumers' Initial Trust toward Second-Hand Products in the Electronic Market, *Journal of Computer Information Systems*, 46:2, 85-98, DOI: 10.1080/08874417.2006.11645887
- Lee, M., & Turban, E. (2001). A Trust Model for Consumer Internet Shopping. *International Journal of Electronic Commerce /Fall*. 6. 75-91.
- Mayer, R., Davis, J., & Schoorman, F. (1995). An Integrative Model Of Organizational Trust. *Academy Of Management Review*, 20(3), 709-734. doi: 10.5465/amr.1995.9508080335

McKnight, D., Choudhury, V., & Kacmar, C. (2002). Developing and Validating Trust Measures for e-Commerce: An Integrative Typology. *Information Systems Research*, 13(3), 334-359. doi: 10.1287/isre.13.3.334.81

Morgan, R., & Hunt, S. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal Of Marketing*, 58(3), 20. doi: 10.2307/1252308

Osterwalder, A., & Pigneur, Y. (2013). *Business model generation*. Hoboken, N.J.: Wiley.

Osterwalder, A., Pigneur, Y., Bernarda, G., Smith, A., & Papadacos, T. (2015). *Value Proposition Design*. New York: Wiley.

Pujol, N. (2010). *Freemium: Attributes of an Emerging Business Model*. SSRN Electronic Journal. doi: 10.2139/ssrn.1718663

Ries, E. (2011). *The lean startup*. New York: Crown Business.

Seufert, E. (2014). *Freemium economics*. Amsterdam: Elsevier/Morgan Kaufmann.

Shapiro, C., & Varian, H. (1999). The Art of Standards Wars. *California Management Review*, 41(2), 8-32. doi: 10.2307/41165984

Shapiro, D., Sheppard, B., & Cheraskin, L. (1992). Business on a handshake. *Negotiation Journal*, 8(4), 365-377. doi: 10.1007/bf01000396

SNI-information, pdf - SCB:s Företagsdatabas. (2019). Retrieved from <http://www.sni2007.scb.se/snipdf.asp>

Teece, D. (2010). Business Models, Business Strategy and Innovation. *Long Range Planning*, 43(2-3), pp.172-194.

Wagner, T., Benlian, A., & Hess, T. (2013). The Advertising Effect of Free -- Do Free Basic Versions Promote Premium Versions within the Freemium Business Model of Music Services?. 2013 46Th Hawaii International Conference On System Sciences. doi: 10.1109/hicss.2013.21

Wilson, F. (2006). *The Freemium Business Model*. 5 Paragraphs. Available: http://www.avc.com/a_vc/2006/03/the_freemium_bu.html.

Appendix A - Initial Assumption Exercise

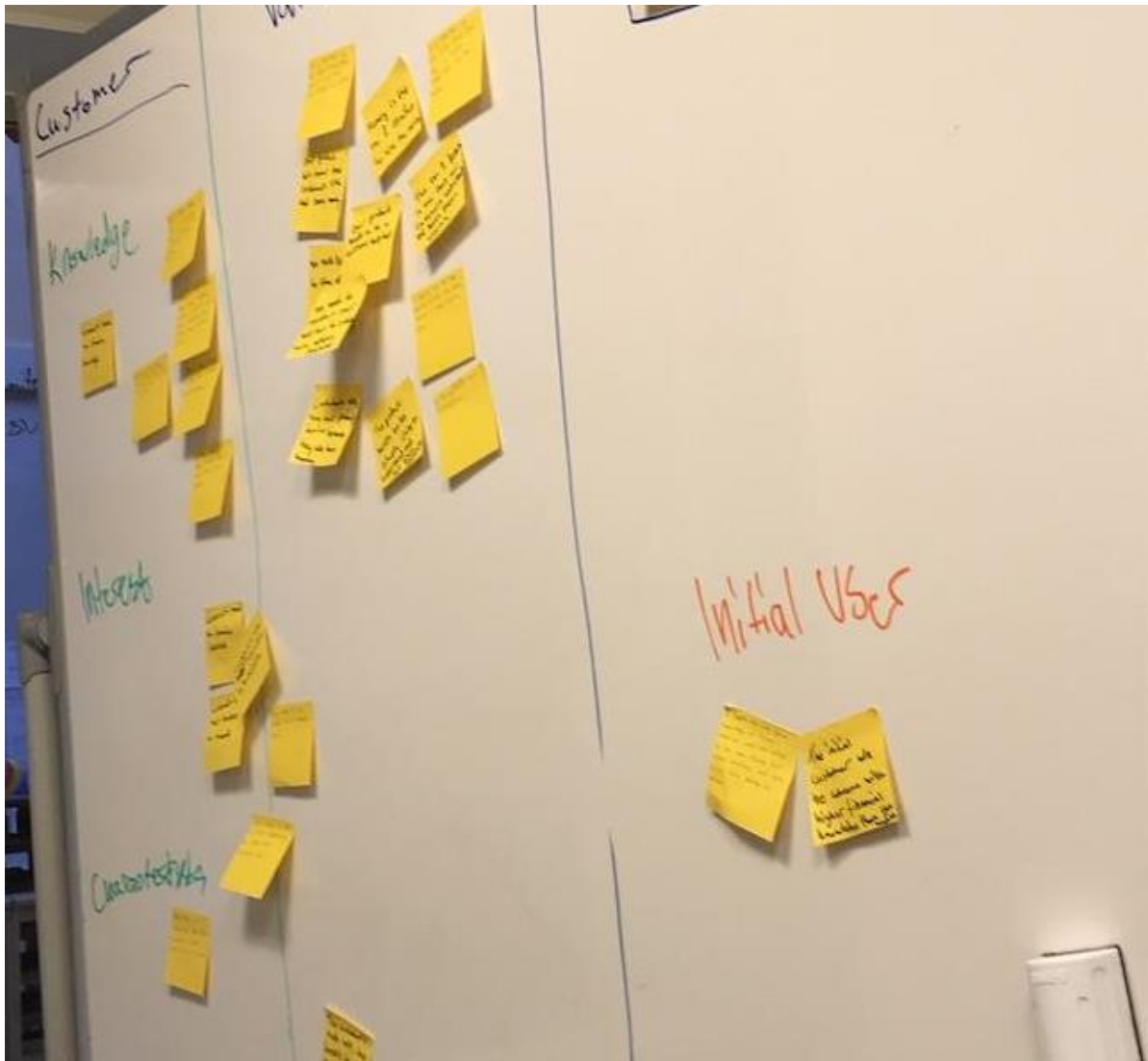


Figure 1. Picture from assumption exercise

Table 1. Assumptions

Customer Characteristics	Value offering	Communication	Initial User
We believe customers have low knowledge about finance and economics	It is important for our users that the deal is made specifically for their needs	Biggest risk for the service is our way to communicate it to the customer	Will have higher financial knowledge than the median user
Often do not know what financial deals they have today	Our #1 feature is one that is easy to understand and saves our customers money	Wants to know and understand the financial product before signing up	Have some knowledge of financial analysis and are willing to try new things.
have a hard time knowing how to analyze their business	It has to be simple to use, both easy to understand and not time consuming	Trust is an important issue for getting a customer to sign a deal	Their business will gain a lot from taking an advice

Haven't reflected over how different actions would impact their business (e.g. shorter due date on invoices)	Our product should lower the customers risk and save cash	Customer needs to feel safe and trust us	
Don't know what financial measures that can be taken to improve their business	We need enough amount of advices in order to ensure frequent usage of the service	Customers doesn't trust an algorithm as much as they trust a physical person	
Don't understand the current state of their business and know what needs to be done to improve it	Our service needs to be continuous, not a one-time thing		
Don't spend a lot of time researching for the best financial deals	It's important that our users benefit the most from taking an advice		
Wants to sign deals with trusted institutes (banks etc.)	Money is the #1 attraction to use the service		
Customers want their business to succeed	We need customer retention to keep our service alive		
Are not interested in bookkeeping, they do it because they have to			
Are not interested in their financial numbers			
Many of Company X's users doesn't have their business as their main source of income			
Our user base is highly diversified			
It is important for our users that they don't get disturbed too much when managing their administration (too many advices/pop ups etc.)			

Appendix B - Feedback First Iteration Cycle

Category	Feedback	Hypothesis	Severity	Implementation	Prioritized
Design	It is unclear that the MVP will be a part of and included in Company X's digital platform.	Using Company X's existing platform elements in the MVP will make the user understand that it will be a part of the platform	1	1	
	It is hard to understand how the Score is connected to the other parts of the company analysis.	By placing the Score at the top and adding a text that informs how the Score is connected to the analysis and pieces of advice, it will be easier to see the connection.	2	1	
	At first the pieces of advice were not recognized since they were "hidden" at the bottom left.	By placing the pieces of advice at the top just beneath the score, it will attract more attention and be clearer that the advice is one of the key value offerings with the product.	1	1	
	The general feeling when presented with the prototype is that it is a lot of information to take in, and the overall impression is that it is "messy".	By presenting the information texts when the user is hovering over a question mark or information icon, instead of just typing it out directly, the general impression will be less "messy" and the user can decide on its own when it want to show an information text.	1	1	
	Unclear what the different colors on the metric indicators is implying.	By changing the colors on the metric scales from black and green to orange, yellow and green, it will be easier to understand the meaning of the different sections of the metric scales since these colors are used for similar purposes in many other situations.	2	1	
	The cash-flow analysis took a lot of attention. Further, it is hard to interpret what the graph means.	By removing the cash-flow graph and instead add a liquidity metric together with the account balance and prognosis it will be easier to interpret the information and the general impression of the design will be improved.	2	1	
Communication	It is hard to understand the purpose of the service.	<ol style="list-style-type: none"> 1. By adding an initial informative text about the service will make the purpose of the service clearer. 2. By adding a heading that describes the value proposition and what the service is will improve clarity. 	1	1	

	The presented advice feels like advertisement.	<p>1. By presenting the advice as "Here is one alternative that we think you would benefit from", instead of "This is the best offer for you" the feeling of being presented with advertisement will be reduced.</p> <p>2. By asking if the customer wants guidance and help "Are you insecure about how to... We can provide guidance in..." instead of pushing them with advice and offerings, the feeling of advertisement will be reduced.</p>	1	1	
	There is a concern that Company X makes money on users' data.	By providing clear and transparent information about what the data is used for, and that no third party will get access to the user data, this concern will be reduced.	1	1	
	It is unclear that the pieces of advice are tailor-made based on the user's data.	By adding initial informative text about what the pieces of advice are based on, it will be clearer to the customer what the pieces of advice are based on and that they are tailor-made for their company.	2	1	
	It feels like a severe violation of integrity that employees in Company X are looking into personal verifications and data.	<p>1. By letting the user opt in to the service and being transparent about in what way the data is used, and how it will benefit the customer, it will not feel like a violation of integrity.</p> <p>2. By pointing out that it is an AI-engine that produces advice, the feeling of integrity violation will be reduced.</p>	1	2	
	Does not trust the service if the underlying revenue model is not clearly stated.	By being transparent about how Company X earns revenue the customer's trust is increased.	2	1	
	It is hard to see the value of signing a financial service via Company X, compared to sign it directly from the supplier.	By adding an initial informative text that states that Company X can provide a lower price by accumulating many deals will increase the perceived value of signing via Company X.	1	1	
	Hard to understand what the score actually means.	By adding a more informative text about how the score is made up, and what value it provides, it will be easier to interpret.	1	1	
	It is difficult to understand what the metrics meant. Do not have sufficient knowledge in economics to understand the information.	By adding informative, and pedagogical texts about what the metrics mean, and how they can be used, will increase the understanding and perceived value of them.	2	1	

	It was unclear that the metrics was benchmarking comparing the analyzed company's metrics with other companies in the same industry and size.	By making it clearer, and make a more pedagogical information text, it will be easier to understand the meaning and purpose of the metrics and benchmarking.	2	1	
Content	The metrics does not provide value since the presented metrics are not valuable to their industry or specific company characteristics	By choosing some metrics as default based on the characteristics of the company, and then adding the possibility to choose metrics from a list, the perceived value of the metrics will be increased. Since this will require a lot of development effort, a "fake door" is shown to measure the interest in the service.	2	2	
	The account balance prognosis is not accurate since the invoicing service is not always used.	By informing the users that their current and projected account balance will be more accurate by using the invoicing service, together with information about what additional values it will bring, such as automatic bookkeeping etc., the usage ratio of the invoicing service will increase and the data will be more accurate. However, the main reason for why customers is not using the invoicing service is because it lacks needed functionality.	2	2	*
	Hard to get an overview of upcoming costs. A budget tool is therefore important, but problematic to manage in Excel separated from the rest of the business information.	By adding a budget tool that can be connected to cash-flow prognosis and integrated with the other features in the platform, it will be easier to get an overview of the business's estimated financial future situation. However, this would take a lot of development effort, so by just adding a "fake door" at the menu bar to the right it will be possible to get an estimate for how sought-after such a tool is.	1	2	
	The prognosis is not accurate since the bookkeeping is not up to date and other known upcoming costs does not have a verification yet.	See above mentioned proposed solution.	1	3	
	When asking for credit from banks and other financial institutions, they often ask for the company's financial statements which is not easily accessible.	By providing the opportunity to export the financial information to e.g. a PDF, it will increase the value for the customer since it can be used in negotiations with banks etc.	2	2	

Hard to understand the regulations behind, and how to optimize dividends.	By adding a tool for how to best optimize the dividends in relation to salary and business objectives, that also provides information about legal regulations, it will increase the perceived value of the overall product.	2	3	
Difficult to know which salary can be withdrawn from the company, and how the salary best can be combined with dividends to optimize the tax impact on the business's profit.	See above mentioned solution. Also provide information about how the business owner can plan its salary throughout the year to have the best opportunity reduce the tax impact and not endangering the business's financial situation, by e.g. providing advice about taking out a lower salary throughout the year and then boost it in the end of the fiscal year.	1	3	
It is hard to know when the business is in risk of hitting the control-balance state.	By analyzing the company's historical data and adding forecasted costs, it will be possible to provide a warning if the business is in risk of hitting the control-balance state.	3	2	
It is hard to get an overview over fixed costs vs variable costs. Valuable to know how much that can be cut down in a situation low of cash.	By analyzing each account in the bookkeeping that makes up the different types of cost, and organizing them in relation to variable and fixed costs and present to the customer, the perceived value of the service will be increased.	2	3	
It is hard to know what subcategories that make up the different sections in the cost distribution diagram, and thereby being able to take action to reduce the costs.	By providing information about what costs that constitute an aggregated cost category and their relative impact, it will be easier to take action to reduce the total costs in the most efficient way.	2	3	
It takes a lot of time to get an overview of the company's financial situation. First checking the bank account, then the upcoming costs in a budget tool, checking the balance in relation to budget.	By implementing an integration with all major banks, it will be possible to import the account balance in the system and connect it to a budget tool and other features and thereby gather all valuable financial information in one place. This will save a lot of time and effort for the customer and increase the perceived value of the product a lot.	2	3	
Takes a lot of time to find and apply for grants.	By gathering information about all available grants in the market and push a notice about if a grant would be available to a specific company based on its accounting data, it would reduce the effort of finding information about available grants and increase the perceived value of the service.	2	3	

It is effortful and takes a lot of time to compare loans from different financial institutions and get the best interest rate.	By initiating a cooperation with banks, automatically provide the banks with a customer's financial statement so that they can make an assessment of their credit score and present offers of loans and interest rates base on the assessment, it will reduce the effort of finding the best interest rate a lot and increase the value of the product.	2	3	
It was difficult to know how to start the business. The business structure, organization of the board, employment contracts, shareholder agreements etc.	By providing legal guidance and templates for employment contracts it will reduce the pain and effort of starting a new business.	1	3	
Hard to know if the balance in the tax account is accurate and balanced with the bookkeeping. Similarly, hard to know the status for VAT. Pay or get paid?	By providing an integration with the tax authority the balance on the tax account can be checked against the bookkeeping and would eliminate this insecurity.	1	3	
Hard to know what deductions that can be made and that are approved by the tax authority	By providing information and suggestions for possible deductions based on the customer's bookkeeping data, it will be easier to know what deductions that can be made.	2	2	*
Effortful to compare deals from different insurance companies. Has to call all companies and get an offer with what is included and the price.	By initiating collaborations with insurance companies and thereby being able to make a comparison of different offers and being able to offer a smoother sign-up flow, the effort to get a good deal and sign it will be reduced.	2	3	
Since 90% of the cost in the cost distribution diagram was made up of salaries, it did not provide value.	By offering the users possibility to choose which costs to include, the customer can easily understand where they need to cut costs in their business.	2	3	
Difficult to determine how good the values in the profit and loss diagram is since no comparison from previous years are made.	By giving the opportunity to add previous years into the diagram for comparison, it will be easier the determine how the company has improved over time and thus provide a higher value to the customers.	2	3	

Appendix C - Third Iteration Cycle

Category	Feedback	Hypothesis	Severity	Implementation	Prioritized
Design	Hard to understand what the Score is made up of.	Users will understand the score by visualizing what factors that builds it up.	1	1	
	Users does not know which advice that is more important for their business.	Presenting the advice after value for the users will help them prioritize which action to take.	2	3	
Communication	Some advices are irrelevant/not interesting for the user.	Offering more flexibility and letting the user choose which kind of advice they are interested in will increase the perceived value of the service.	2	3	
Content	Only three advice feels a bit empty.	Offering more advice will give the user a higher perceived value of the service.	3	2	
	Users have troubles keeping track on their inventory and holdings.	Implementing a register for inventory and holdings will give a higher value and attract users to the service.	3	2	

Appendix D - Forth Iteration Cycle

Category	Feedback	Hypothesis	Severity	Implementation	Prioritized
Design	The users thought the MVP looked empty and that they would lose interest in the service.	Adding features that will solve customers' pains will improve the overall experience of the MVP.	1	2	
	Hard for the user to see the connection between the Score and the offerings.	Changing the position and layout of the score will increase the users understanding of the connection between score and advice.	1	1	
	Feels weird to be pushed outside of the platform when clicking on "read more".	More information inside of Company X's platform will increase the user experience.	2	2	
Communication	The effect of taking an advice on the user's company is hard to understand.	Visualizing the effect with graphs and concrete values will increase the user's understanding of the effect.	2	2	
	Loss of trust to advice due to difficulties understanding when it is a partnership and when Company X does not take a share of the revenue.	Transparency in the advice formulation will increase the users trust to an advice.	1	1	
	Does not understand how to activate an advice.	Step-by-step guide in the read more popup on how to activate the advice.	1	1	
Content	Have troubles doing their administration work efficiently.	Advice about different parts in the platform can help the user work more efficient.	2	2	
	Lacks knowledge about how to lower their tax.	Providing concrete examples on deductions can lower the total tax for users.	2	2	
	It is hard to get an overview of important dates that the business has to compile with. Such as dates for VAT-reports, declarations, closures etc.	By presenting the most urgent and important dates at the first page when the user logs in to the system to get an overview of the financial status of the company, it will be easier to get an overview of important upcoming dates.	2	2	
	Requesting a digital assistant, that can help and answer questions wherever you are on in the platform.	Implementing a digital assistant would provide an improved user experience for the user in Company X's all parts of the platform.	3	3	
	Much work to find cheapest web-hosting service.	Provide a comparison on different web-hosting services can lower cost and save time for the user.	3	2	
	Miss an economic overview of their company.	Providing a simple economic overview can give users better control over their businesses.	3	2	

Appendix E - Fifth Iteration Cycle

Category	Feedback	Hypothesis	Severity	Implementation	Prioritized
Design	Does not understand what Company X Score is without reading the popup.	Adding a text about the users points in the score will increase the understanding of the score for the user.	1	1	Green
	Left side of MVP more interesting than the advices, would like to make the advice part smaller.	Increasing the quality of the advice will take away the request to make the right box smaller.	1	2	Green
	Hard to take action on an advice.	Making it possible to take action on an advice directly, without reading more first, the conversion of users will increase due to an easier sign-up flow.	1	1	Green
	Some information boxes are irrelevant for some users.	Improving flexibility by making it possible to customize some boxes with data relevant for specific users will improve the value of using the service.	2	3	Red
	Users cannot see all of their "To-do things".	By increasing the size of the box with the to-do list, users will value the service more when they get information about everything they need to do in one place.	3	2	Red
Communication	Users perceive the advice as something that "probably" is good for Company X.	Improving transparency by highlighting if Company X do, or do not, make money on the users signing of a deal will increase the trust for both Company X and for the advice itself.	1	1	Green
Content	The cash statement is not correct at all times for the users.	Implementing bank synchronization will make the cash statement correct for the user by automatically syncing the balance.	2	3	Red
	Users find it hard to do closures.	Pushing Closure as an advice in the MVP will increase the conversion of users buying closures from Company X.	2	1	Green
	Not relevant to get an advice about factoring for all users.	Creating better trigger points for which users that should be provided with what advice will increase the service's experienced value for the user.	2	2	Red
	Users find the liquidity prognosis unusable since it is not accurate enough.	1. Adding a budget tool will help making more accurate liquidity prognoses for the users 2. Removing the liquidity prognosis since it is a pain for the user will increase their perceived value of the MVP.	2	1	Green
	Users find it hard to know how to use the system most efficiently.	Creating videos and blogposts with tips on how to use the system in the most efficient way will increase users perceived value of using company X's platform.	2	2	Red

Users would like to add preliminary tax in the MVP.	Adding a preliminary tax statement will increase the value proposition of the MVP.	2	1	
Users find declaration and closures hard to execute.	Pushing Closure and help with declaration as advice in the MVP will increase the conversion of users buying it from Company X.	2	1	
Users would like to have a statement of their tax balance to see if it is sync.	By integrating with Skatteverket and users bank, the users can see automatically if their tax balance is in sync.	2	3	
Users have troubles remembering if everything regarding salaries to employees is in order.	Adding a to-do list of salaries to the MVP would make the user's administration work more efficient.	3	2	

Appendix F - Sixth Iteration Cycle

Category	Feedback	Hypothesis	Severity	Implementation	Prioritized
Design	Fears to lose interest if pushed with advice too often.	Not pushing advice at all times, will increase the interest for an advice at the time it is pushed.	2	1	
	Some advice not as interesting as others.	Filling in information about what advice that interest the specific user, will increase the users' interest for the pushed advice.	2	2	
	Users does not want to be interrupted by advice in their processes on the platform.	Pushing advice after users have finished a process will not interrupt them in their processes.	1	2	
	Sign up flow is too complicated.	Developing an easy signup flow will increase the conversion rate of users acting on the different pieces of advice.	1	3	
	Too much vital information in a small space.	Offering flexibility and giving the user possibility to customize the space with the data they want, will increase the ease-of-use of the MVP.	2	2	
	Too much information in the first step of the advice.	Only pushing the selling point in the first step will increase the users' interest for the advice and their willingness to read more about it.	2	1	
	Uncertainty about how to reach different levels in the score.	Visualize what is needed to reach next level in score will increase users understanding and willingness to reach next level.	1	2	
	Want to see the most important information first to know what things that are most vital to execute.	Prioritizing the to-do-list will increase the user experience.	2	1	
	Unclear what part of the score that indicates how they run their business and what part that indicates the performance/development of their business.	A status bar separated from the score that indicates how the users run their business will increase their understanding of the score and their user experience.	1	2	
	Requests to fill in additional information to get a more customized deal.	Offering a deal with the possibility to customize the deal even more by filling in additional data	1	2	

		will increase the users trust for the advice.			
	Users does not want to be interrupted by advice in their processes on the platform.	Pushing advice after users have finished a process will not interrupt them in their processes.	2	2	
Communication	Users are uncertain of what type of advice that will show up before they opt-in.	Adding a video that explains the MVP in the opt-in screen will improve trust for the tool and their experience in the tool.	1	2	
	Formulation of the score for the users feel inaccurate, by taking some advice their score might go up, but they do not get better control over their company.	1. Improve the formula for how the score is made up to be more representative of company performance.	1	2	
		2. Divide the score into two, where one score represents to what extent the customer has activated advice and thereby improved company performance, whereas the other score shall take the form of a check-box that indicates if the business is up-to-date with managing important administrative work such as important dates, payment of supplier invoices, payment of salaries etc.			
	If the advice has a complexity and is outside of Company X's main business, giving information about the best solution for the user does not give trust.	Pushing the user to different partners where they can be given the right solution for their needs will improve the users trust for the advice.	1	2	
	Feel uncertainty about if the advice is something that is good for the user or something that is good for Company X.	By including a recommendation that an external, trusted, independent player has will increase the trust for the advice and the supplier that provides the financial service.	1	2	
	For big investments, it feels unsafe to sign some recommendation with unknown partners.	See above-mentioned proposed solution.	1	2	
	Uncertainty about if the recommended partner in an advice is the best.	Including more than one company in the recommendation and visualizing the different value of signing with the different parties will	1	2	

		increase the trust for the recommendation.			
	User does not want include phone calls in the sign-up flow.	Improving the signup flow and improving the user experience will improve user conversion rate of presented advice and financial services.	1	2	
	Does not know what the cost is for activating some advice, so loses interest for the advice because of time spent on looking for it.	Pushing the cost for activating an advice earlier in the flow will increase the number of users converting.	1	1	
	Unclear text in the opt-in, "gather many users" hints that everyone gets the same advice and that it is not customized.	Pointing out that the offerings from the partnerships are customized, rather than the different partnerships, will increase the value of advice being customized and thereby conversion rate.	2	1	
Content	Hard for users that work as consultants to know how much to charge their customers.	Users are interesting in knowing what their fellow users charge in hourly rates, offering this service is something the users are willing to pay for.	3	2	
	Company structures and building up companies is hard for the users.	Users are willing to pay for getting help with how to structure their businesses.	2	3	
	Some separate verifications create pain for the users to bookkeep.	Users are willing to pay for getting help with separate verifications.	2	2	
	Users lack knowledge about what type of insurance they need.	Explaining and offering insurances in an educational way will provide a value that the users are willing to pay for.	1	2	
	Users lack knowledge in legal issues, such as writing contracts.	Users are willing to pay for getting help with legal issues.	1	2	
	Users does not know how to invest their company's money.	Offering the possibility to get help investing money, by e.g. an investment robot, will increase the value proposition for the user.	2	3	

	When the users have repeating customers, they have to create the same type of invoice every month.	By automatically recommending the user to send the same, or a similar, invoice as the last months, the user experience can be enhanced.	3	3	
	Takes a lot of time to record all expenses.	Offering a credit card that automatically puts the expenses into the bookkeeping will minimize the users time spent on bookkeeping.	2	3	
	Users does not know how much they are charged for their financial services today.	Visualizing the users' financial charges and offering a license that lowers those charges, will be a service that the users are willing to pay for.	2	2	
	Tax is not interesting for the user at a daily basis.	Offering the user possibility to customize the boxes will increase the user experience.	3	1	

DEPARTMENT OF TECHNOLOGY MANAGEMENT AND ECONOMICS
DIVISION OF ENTREPRENEURSHIP AND STRATEGY
CHALMERS UNIVERSITY OF TECHNOLOGY

Gothenburg, Sweden
www.chalmers.se



CHALMERS
UNIVERSITY OF TECHNOLOGY