User Onboarding

An investigation in how to increase the activation of
new customers using design

A Master's thesis in Interaction Design & Technologies

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Abstract

This thesis have surrounded the topic of user onboarding, the process of letting new users acquire the necessary skills in order to become an active customer. In this case, an online accounting platform have been the object in focus. This have been accomplished by using an tailored design process consisting of elements from Human-Centered Design and Goal-Directed Design. The overall goal was to develop and implement a set of onboarding methods, which later would be evaluated using A/B experiments - an evaluation method where real and unaware users are involved. The result gave an indication that an assisted tour throughout the important features of the application could be beneficial in order to convert users to becoming active. However, the results of the three conducted experiments didn't exhibit enough differences to conclude the superior onboarding method. Therefore, it became clear that quantitative A/B experiments isn't a recommended method when performing labour of this kind. The work would have benefited from performing quicker iterations and to constantly include opinions from users.

Keywords: user, onboarding, ux, interaction, design, A/B, testing, experiments, design, usability

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Filip Carlén, Gothenburg, July 2017

Contents

1

Introduction

1.1 Background

We live in a world where we are being overwhelmed by information. With our connected devices, information can reach us anytime. This have sparked a new era - the information society - which have brought new behaviours into the world. A study illustrates that the attention span of an average person has decreased from twelve to eight seconds since the year of 2000 [McSpadden, 2015]. Jakob Nielsen [2011] states that users usually leaves a web page after 10-20 seconds, which tells that users are impatient online. This puts great demands on companies, which have to develop services that instantly attracts new customers. Otherwise, their potential customers will end up somewhere else. This is why *User Onboarding* is an important topic.

The concept of onboarding is taken from the organizational world, where onboarding is the process where new employees acquire the relevant knowledge, behavior and skills to become effective and skilled [Renz et al., 2014]. The long term idea of onboarding is to hire employees that are satisfied and will do a good job. The same idea could be applied to the software world. According to the UX designer Samuel Hulick, User Onboarding is the "process of increasing the likelihood that new users become successful when adopting your product" [Hulick, 2011]. In this case, the overall goal is to increase the amount of customers that becomes active, as well as increasing the number of pleased customers. In short, user onboarding is a discipline in UX design focusing on the user's first encountering with a product.

This thesis is done together with Bokio, a company which provides a free-to-use accounting application, targeted on small- to middle sized companies. Bokio offers services such as accounting, invoicing and salary payments, and they want to simplify these tasks by offering services that atomizes the process. It's regulated by law to do financial accounting, which forces every company to do it. This thesis focuses on investigating, implementing and analyzing how users can be introduced to the Bokio application, and how one can lead them to becoming successful and regular customers. To support the development of an onboarding process, a tailored design process consisting of elements from human-centered design and goal-directed design will be used. The onboarding process will be implemented and tested on actual users using an A/B test, which will tell if the new onboarding flow will result in better conversion rates.

Successful services manages to activate and retain customers by build habit-forming products. By studying user behavior and its applications within the field of user experience and usability, and by implementing it in the Bokio application, one can investigate what it is that makes people want to use a service over and over again.

1.2   Purpose

The aim with this thesis, is to increase the number of activated users in the Bokio web application. Activation can be measured in several different ways, which makes it important to determine what the relevant metrics are. Within this project, especially two different metrics are relevant to investigate. These two measurements can bee visualized in a funnel, together with other relevant parts of the onboarding process. Figure 1.1 displays these metrics, by the shape of a funnel, and the relevant metrics for this thesis is the two last ones. The ambition is to increase these metrics, with focus on users that returns to the application for a second session. In figure 1.1, this will be represented by the lowest level.
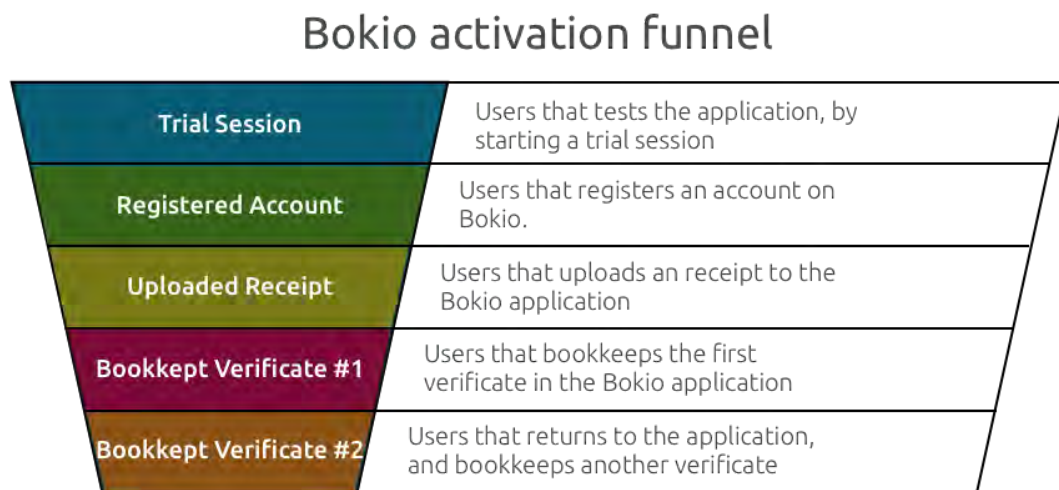
Figure 1.1: The activation funnel, visualizing the relevant metrics for this project

An increase in activation, depends on several matters spanning from marketing to usability. Since this thesis is within the field of interaction design, it's important to focus on those parts that are related to this subject. Even if some of the practises presented will take stand in other areas, their practical implications can be more than relevant. With these facts presented, the research question for this thesis is:

"What usability, UX and behavioral practices can be considered to be successful when supporting an online accounting application to increase its number of activated customers?"

1.3   Delimitations

The metrics chosen to determine the success can span over different periods of time. Due to the time frame of this project, the chosen metrics have to be possible to evaluate over a relatively short period of time. Due to the characteristics of accounting, active users might only take action once a month, it is not possible to do an accurate evaluation on of the retention of users. Since retention within accounting applications, have to be measured over a long period of time, this metric have been omitted from the project. Also, the final evaluation of the project have been conduced using no qualitative evaluation method, since the focus have been on investing how groups of users behave to a certain change.

The Bokio application consists of three distinguished services, accounting, invoicing and salary payments. This thesis will only focus on the accounting part, due to the time frame of the project. The onboarding practises under investigation will only treat desktop units, and therefore mobile and tablet practises will be excluded since onboarding practises on different devices results in different design choices.

2

Theory

This chapter will discuss the underlying theory of this thesis. The topics that will be covered are related to the concept of user onboarding, such as a description of what it is and why it is important. This section will also cover user psychology, to give a more theoretical framework regarding the practises explained in the onboarding section.

2.1 User Onboarding

The concept of onboarding is taken from the organizational world, where onboarding is the process which new employees acquire the important knowledge, behavior and skills to become effective [Renz et al., 2014]. The long term idea of onboarding is to hire employees that are satisfied and will do a good job. The same idea could be applied to the software world. According to the UX designer Samuel Hulick, User Onboarding is the "process of increasing the likelihood that new users become successful when adopting your product" [Hulick, 2011]. In this case, the overall goal is to increase the amount of activated customers, as well as increasing the number of pleased customers.

2.1.1 Elements of User Onboarding

It's difficult to determine the elements that are a part of user onboarding. Renz et al [2014] divides the user onboarding process into three phases; initial onboarding, help and support and re-engagement. The initial onboarding phase consists of helping the user to become efficient, phase two provides help and support to the user while using the service and the third phase is about activating users who have been inactive for a while. The authors continue to identify the elements of onboarding and describes elements such as registration, login, demo courses and welcome mails. On the other hand, Samuel Hulick [Hulick, 2011] and Intercom [2016] both mentions that the first step in user onboarding is when the potential user first encounters the service. However, Ruiari Galavan [2016] at Intercom states that onboarding doesn't have a final state, that it can continue forever. The more users explores an application, the more features they will discover. Users have to be onboarded to these features as well, which can make it endless.

2.1.2   Value Proposition

According to Intercom, an American company working with customer service, onboarding is the only thing that every customer will encounter and experience [Intercom, 2016]. Julie Zhue, product designer at Facebook, discusses this in her blog post "Designing the Beginning" [2015]. She also lists five questions that every designer should ask themselves when designing the first-time use experience of a service, where many of the questions is about demonstrating the value of a service within the first glances. Demonstrating the value is a recurring theme when researching about user onboarding. Samuel Hulick, well-known researcher within the field of user onboarding, argues that every successful onboarding process starts with a story [Intercom, 2016]. A potential customer invests time when investigating a new product, and he or she have expectations when signing up for it. As a designer, you have to understand what makes the product a must-have. You have to demonstrate the value to make the customers successful.

To demonstrate the value, a value proposition has to be developed. A value proposition is an articulation of the benefits a company offers to the customers [Osterwalder and Pigneur, 2003]. It's a promise to the customer, that the product will have an answer to the question he or she might have. Communicating this message instantly, is the key to a successful onboarding of new users. Gerry McGovern, author of the book "Killer Web Design" [2015] discusses this topic, but instead he calls it "care words". When a customers is browsing a website, they are looking for words that they care about and words that triggers a reaction.

Jakob Nielsen discusses the essence of a clear value proposition in his article "How Long Do Users Stay on Web Pages?" [2011]. He states users, if they don't find what they are looking for, will leave after a short period of time. On the other hand, web pages that demonstrates a clear purpose will keep users for a long time. These results are from a study conducted by Microsoft Research [Liu et al., 2010], where they analysed more than 2 billion dwell times. The overall conclusion is that page visits follow a negative Weibull distribution, which means that it is less likely that a user will leave a page the longer he or she stays.

Hulick mentions, in his book "The Elements of User Onboarding" [2014], that the moment when customers realizes the true value of a product is called "the aha moment". Unfortunately, he concludes that this moment often will be presented too late in the onboarding process. Therefore, he proposes that the true value of the product, should be introduced before a user starts using a product [Hulick, 2014].

2.1.3   Finding the Switching moment

An understanding of the potential users and customers is essential in all kind of design work. Well-known design methodologies such as user-centered design and human-centered design argues about putting the potential user in the center of the process, to be able to develop systems of good quality which will play a real value in the life of the users [Maguire, 2001] [Williams, 2009]. Designing a successful on-

boarding process doesn't differ. Samuel Hulick writes in "Intercom on Onboarding [2016], that the fundamentals when designing an onboarding experience is to understand the stories of the users - how and why the users ended up at your service. Further, Hulick discusses which people that you should ask in order to find answers to these questions, and concludes that one should talk with people that just have become successful customers. This moment can be called the "switching moment", according to practitioners of "Jobs-to-be-done" [Lamothe, 2014].

Jobs-to-be-done is a practise used to look at motivations of customers. Instead of focusing on which products a company wants to sell, Jobs-to-be-done is about understanding which purpose a product is used for; which "job" to be "done" [Institute]. To conduct user studies according to these principles, Lamothe [2014] points out what to focus on. At first, the research should not focus on the product; don't ask why people bought a new product. Instead, users should describe when they realized that their previous product weren't good enough and how people reacted when they said that they were about to switch. Lamothe points out that the study should be observant to motivational factors [Lamothe, 2014].

2.1.4 Appeal to Emotions

"If your website were a person, who would it be?" [Walter, 2011]. The previous quote is from Aarron Walter, Director of UX at MailChimp - a company that develops and provides marketing services. He proposes, in his book "Designing for Emotion" that every company should develop a design persona, a method for defining the personality of a product. This personality will be used consequently in the design process, as a tool to create design with a consistent result. Hulick also articulates the importance of building products that appeals to the emotions of the users [Hulick, 2014]. For instance, by combining texts, colors, animations and other methods that appeals to people, the users will respond emotionally to a service.

Furthermore, Hulick argues that when the user eventually have responded emotionally, it's time to convince them that your service is superior to others [Hulick, 2014]. By differentiating your service from others, by using testimonials and endorsements from customers, the advantages can be told without losing any trust. Also, using numbers indicates that people are actually using the service, is a powerful tool for convincing users [Hulick, 2014].

2.1.5 Signup process

When designing a signup, process there are two important factors that have to be avoided, in order to maintain the momentum a customer has generated. The user has just decided to try out a new service, and therefore the following steps have to be efficient in order to not slow down the pace. According to Samuel Hulick, the factors that have to be avoided are called are called Points of Friction and Points of Disconnect [Hulick, 2014]. "Points of Friction" are steps in the process that creates

confusion. An example is when a user stops the registration to ask herself why certain information have to be entered in order to proceed. "Points of Disconnect" are steps that moves the user away from the signup itself. The email address verification is a typical example of this, since it means that users have to switch to another application for period of time [Hulick, 2014].

Recalling the design persona, a method used to find the personality of the application [Walter, 2011], the signup process should behave as a conversation between the persona and the user [Hulick, 2014]. This implies relevant feedback when a user have taken the time to actually sign up.

2.1.6 Designing a First-run Experience

Patrick McKenzie says in a speech about marketing and engineering, that 40-60 percent of the customers signing up for a service will never use it a second time [Littlewood, 2012]. The conclusion is that a well-designed first-run experience of a software is essential. Samuel Hulick discusses how to design a first-run experience, and takes stand from a psychological phenomenon called "the Peak-End rule" [Hulick, 2014]. What the theory articulates, is that humans values an experience by the most intense moment (the peak) and by the ending of the experience [Do et al., 2008]. The first-run experience should, with this phenomenon in mind, be designed in a way that the user will conclude the journey with a success. What follows is a set of practises for designing a successful first-run experience.

2.1.6.1 Identifying the steps

The first-run experience should be designed in such way, that new users will encounter features that demonstrates the real value of the service. Samuel Hulick writes that the identification of the moments, where the value is demonstrated, is tricky [2014]. However, he presents a procedure on how to map out the suitable steps to be included when a user tries an application for the first time. In short, the procedure is about listing all the steps a user have to perform from its initial encounter, to the point where a success have been achieved. Consequently, the unnecessary steps, moments that doesn't demonstrate any true value, should be removed until the shortest and most efficient path have been accomplished. Hulick mentions that the number of steps doesn't correlate with efficiency [Hulick, 2014].

2.1.6.2 Introduce the Interface

After the steps of the first-run experience have been decided on, the behaviour of the first-run experience have to be tailored. At first, the interface of the service have to be introduced to the user. Websites and apps have different approaches to present and customize the product, where common approaches are wizards and interface tours. However, Hulick [2014] argues that the interface has to be as self-evident as possible. He states that users tend to fast-forward through these interface tours, eager to investigate the real product. Though, Samuel Hulick recommends one approach which he calls "Emerald City in the Distance", where the introducing

parts and the customization will be displayed on top of the real product. This approach of explaining and customizing the service, will be communicated in a such way that user won't get lost [Hulick, 2014]. Figure 2.1 illustrates this.
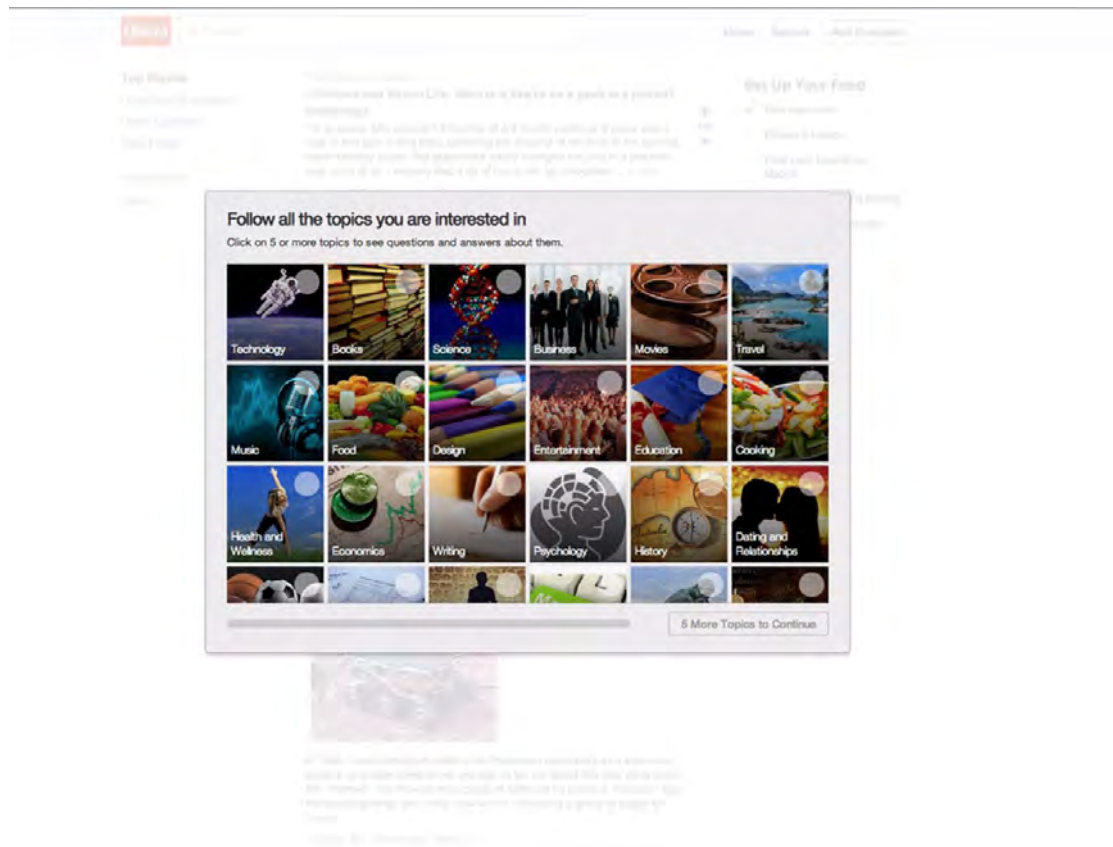
Figure 2.1: The "Emerald City in the Distance". Brought from Quora [Hulick, b]

2.1.6.3   First Impressions

Similar to the signup process, the first acquaintance between the user and the real system should behave as a first meeting human-to-human. The same polite behaviour should be exhibited; a user should be greeted, endorsed and helped throughout the first usage.

Some services are using tooltips and overlays to introduce the key features of the service, but the book "The Elements of Onboarding" [2014] doesn't recommend this approach - one cannot assume that users will memorize the information visualized. Instead, the purpose of overlays and tooltips should be to encourage the user to take action, which makes the user exploring the service. A first visit of an application tend to contain states and views that doesn't contain any information. The cause of these blank states is the lack of information that the user have fed in to the system. According to Samuel Hulick, these blank states have to be handled carefully [Hulick, 2014]. The design have to be gentle to the user, encouraging him or her in taking action. Another practise can be to show a hint of how the experience would be

visualized with content, but one should be careful when applying this practise since it can lead to confusion.

2.1.6.4 Keep Momentum

The momentum, achieved by all the previous steps, have to be maintained while leading the user towards his or her first success. Samuel Hulick continues to point out that helpfulness can't be overvalued [Hulick, 2014]. As the previous section stated, giving suggestions of potential actions that can be taken is an effective way of getting the user to explore the system.

According to Susan Weinschenk, people want to feel that they make progress and they want to complete things [Weinschenk, 2011]. By using progress bars and todo lists, one can lure the user to complete tasks and thereby exploring the service. To increase the possibility that users will complete tasks, a psychological phenomenon called "The Endowed Progress Effect" can be applied. The phenomenon origins from a study conducted in 2006, and the researches explains it as "a phenomenon whereby people provided with artificial advancement toward a goal exhibit greater persistence toward reaching the goal" [Nunes and Dreze, 2006]. This means that users are more motivated complete a series of tasks if they aren't starting from zero. Figure (2.2) visualizes this phenomenon.
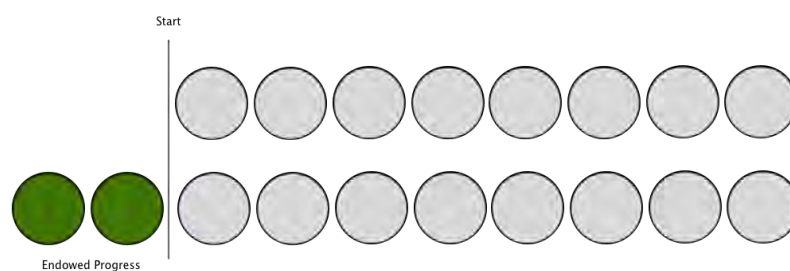
Figure 2.2: The Endowed Progress Effect

2.2 Behavioral Practises

This section will discuss behavioral practises; what makes people want to return to a certain service? It will offer a theoretical framework to the practises discussed in the previous section.

2.2.1 Fogg Behavior Model

Samuel Hulick states that onboarding is about changing the behaviour of the users [Hulick, 2011]. BJ Fogg, researcher at the Persuasive Technology Lab at Stanford University, focuses on the creation of systems that will change behaviour [2009]. As a part of his research, he has developed a model for understanding of human

behavior called Fogg Behavior Model, abbreviated FBM [Fogg, 2009]. The model states that behaviour is a product of three different factors - ability, motivation and triggers. A behavior occur when a user is triggered at the same moment as he or she has the sufficient abilities and is motivated enough.

Nir Eyal, author of the book "Hooked - How to Build Habit-Forming Products" [2014], helps out to dissect the FBM. A trigger can be both external and internal, and it is a cue to the user to perform a behavior. External triggers are triggers that are suitable placed within the environment of the user, such as advertisements, notifications and recommendations from friends - triggers from the outside world telling what to do. Internal triggers are different, since they are connected with thoughts, emotions and routines. According to FBM, a change in behavior doesn't occur when a user are motivated and have the ability. A user have to be triggered, which makes the timing of the trigger essential [Fogg, 2009]. He also states that triggers are more important than ever, since the evolution of computers and other communication technologies makes it possible to take action immediately.

The FBM mentions three core motivators for humans. At first, humans seek pleasure and want to avoid pain. Humans also seek hope and want to avoid fear. The last core motivator, according to Fogg, is that humans seek social acceptance and wants to avoid rejection [Fogg, 2009]. The last factor in FBM is ability; a user have to be able to take action. According to Fogg, ability should not be mixed up with practise since people tend to be lazy and don't want to spend unnecessary effort. Instead, he renames ability with "elements of simplicity", since simplicity is a way to enhance the ability. Nir Eyal [2014] brings up a model to enhance ability through simplicity. At first, one must understand why a person uses a service. Consequently, one should map out the steps a user have to perform to get a job done. When all of this is done, the unnecessary steps should be removed - creating the simplest possible process [Eyal, 2014]. Fogg also deconstructs simplicity into six parts; time, money, physical effort, brain cycles, social deviance and non-routine. If one of these parts is missing, simplicity can't be achieved [Fogg, 2009].

2.2.2 Habits

Nir Eyal [Eyal, 2014], introduces the Hook Model. By letting users go through four distinctive steps - trigger, action, variable reward and investment, the user will form a habit. This is valuable, since products that manage to change the routines of its customer, are less vulnerable for market competition. But, building products that offers a habit change isn't trivial. The paper "Eager Sellers and Stony Buyers: Understanding the Psychology of New-Product Adoption", published in Harvard Business Review [Gourville, 2006], is centered around the question why products fail even if they are superior compared with existing alternatives. The author mentions that customers compares new products with their old ones, and treats improvements as gains and shortcomings as losses. But, people tend to overvalue the shortcomings compared to the improvements, and the customers don't review

these losses as trivial changes of their habits [Gourville, 2006].

An example of an innovative and simplified solution that can't manage to outrival an existing solution, is the keyboard market [Eyal, 2014]. Developed in the late 19th century, the QWERTY keyboard was designed by placing frequent keys far apart from each other, due to the technical limitations on the contemporary mechanical structures. This keyboard layout have lasted into the digital era, and an overwhelming majority are using it. New keyboard layouts with a smarter and more ergonomic placement of keys, have been developed. But, learning a new keyboard layout is a major behavioral change, and the trade offs aren't worth it. People stick with their accustomed way of typing [Eyal, 2014].

The article by Gourville, gives some examples on how to develop products that customers will adopt to [2006]. At first, you have to carefully balance the behavioural changes of the product. You have to accept the resistance from customers, by being patient, but also strive for minimizing the resistance of the product. This can be done by searching for people that both loves your product and people that haven't encountered it yet.

In an interview with Harvard Business Review, Charles Duhigg states that about 40 to 45 percent of all our daily decisions are formed after habits [Duhigg]. In a TED Talk, Duhigg [2013] discusses the power of habits, and presents "The Habit Loop", consisting of three steps in figure 2.3.
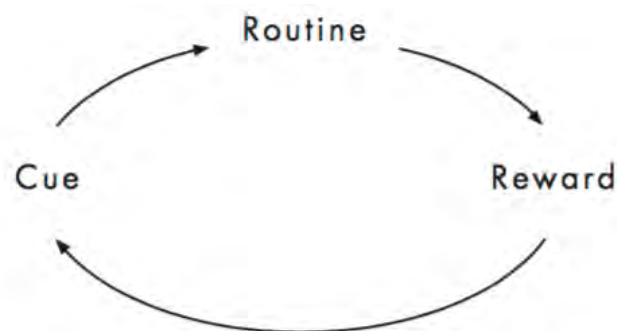
Figure 2.3: The habit loop, [Duhigg, 2013]

What the habit tells that every habit has a cue, which triggers the behaviour. What follow is the routine, connected to the habit itself. Ultimately, there is a reward which helps tells the brain to remember the pattern to the future. In order to change a habit you have to decide ahead of time what to do when encountering a certain trigger and what the ultimate reward is going to be [Duhigg, 2013].

2.2.3 Rewards

Both Eyal [2014] and Duhigg [2013] mentions rewards as an important factor when building habit-forming products. Eyal calls it "variable rewards", a term with origin

in neuroscience; it is not the reward itself, rather the need of stilling the craving for a reward that triggers an action [Eyal, 2014]. Variable rewards can be divided in three categories, the tribe, the hunt and the self. When developing habit-forming products, a balance of these three kinds of variable rewards are necessary - it will lead to a higher level of recurring customers.

Variable rewards of the tribe, are rewards that makes us accepted and included by people in our surroundings. Rewards of the tribe can be demonstrated by the boom in social media [Eyal, 2014]. Social media offers a curated stream of news from friends and topics of interest, which will give rewards in the shape of messages, likes and other forms of social validation. Rewards of the hunt have origin in the primal behaviours of the human race. The hunt for resources where the fundamental part of surviving. According to the Maslow's hierarchy of needs, resources it's the basal need of the human kind [Janet et al., 1987]. This behaviour of hunting, have been programmed into our brain, but with a radically changed society - the hunt have moved to other places with other rewards. Gambling, for example, is one example of variable rewards of the hunt [Eyal, 2014].

The last variable reward, brought up by Nir Eyal, [2014] is rewards of the self. A reward of the self is about solving problems, conquering obstacles and performing tasks, where the the personal satisfaction is the reward itself. This topic is related to the self-determination theory (SDT), a theory on human motivation [Deci and Ryan, 2008]. The SDT concludes that people have desires for autonomy and the feeling of competence. These ideas can be integrated when developing products and services, to create rewards of the self. These practises have been brought into the domain of video games, where level systems and badges gives the player the feeling of progress, and gives a feeling of satisfaction [Eyal, 2014].

To up sum this section, variable rewards can be used to create services that people want to revisit. This by combining variable rewards that plays on our urge to seek for social endorsements, our primal behaviour of hunting for rewards and our need for self-determination.

2.2.4   Time investment

In 2012, an article got published in the Journal of Consumer Psychology, called "The IKEA effect: When labor leads to love" [Norton et al., 2012]. The authors of the article, conducted four studies where the participants built sets of Legos, assembled IKEA furniture and folded origamis. The purpose of the experiments was to measure how the participants valued their own creations, and the results were striking - they valued their self-assembled creations as high as expert creations. The conclusion of this study, is that once a person invests time to complete a set of tasks, he or she seems to over-value the achievement, which consequently will result in stronger relations to it [Norton et al., 2012].

The IKEA effect plays a significant role in user onboarding. The practise of letting a user successfully accomplish a set of tasks in an initial state would, according to the the previous presented theory, result in a higher number of customer that reuses a service. Nir Eyal dedicates a chapter in his book "Hooked - How to Build Habit-Forming Products" [2014] to this topic; users have to invest time into a service, in order to get engaged. This statement is the opposite of traditional opinions regarding usability, where simplicity is the the aim when designing products. An article [Chang et al., 2007] states that "attaining simplicity is a key challenge in interaction design", and presents an approach in how to develop minimalist design. However, Don Norman puts the headline "Simplicity is Highly Overrated" in a paper (2007). Norman argues that when people are in front of a choice between two similar products, they will chose the one that has the most features to offer. His conclusion is therefore that people strive for simplicity, but won't choose it, if it results in the absence of new and cool features [Norman, 2007].

Nir Eyal [2014] doesn't argue whether or not to aim for simplicity, rather he mentions that users should invest time in a service. Personal investment will lead to a better understanding of the service, and the knowledge that it will become better with use. Further, Eyal mentions some practises that can be used for making users investing time into an service [Eyal, 2014]. By gathering content and information from the user, they will be more committed to that service. Social factors, such as gathering followers and gaining reputation from the community, is also a way to let users invest time in the application. Finally, letting users invest enough time to gain a skill, is an effective way of retaining customers. By doing so, the user will gain a feeling of success and mastery - a reward of the self. An increased rate of skill, will also connect with the Fogg Behavior Model [Fogg, 2009], where higher ability will increase the possibility of a new behavior (Figure 2.4).
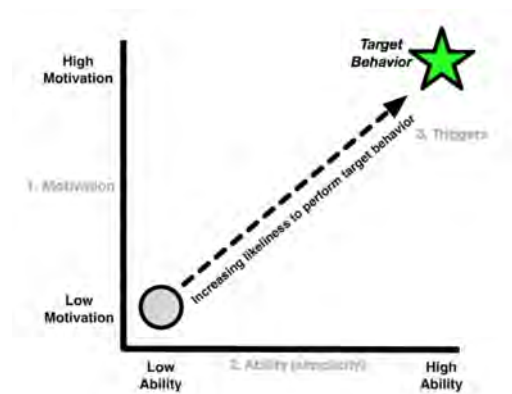
Figure 2.4: A graphical representation of the Fogg Behavior Model, [Fogg, 2009]

3
Methodology

In the field of interaction design, several different design frameworks exists such as User-Centered Design (UCD), Human-Centered Design (HCD), Goal-Directed Design (GCD) and Participatory Design (PD). These frameworks consists of a vast amount of different design methods, which can be combined in order to develop the design process of choice. This thesis have been conducted using a methodology with inspiration from Goal-Directed Design and Human-Centered Design. This section of the thesis will include a brief introduction of HCD and GCD, followed by a description of the methods that will be used in the study. At first, an introduction of design research will be done.

3.1 Design Research

In 2012, William Gaver published an articled named "What Should We Expect From Research Through Design" [Gaver, 2012], where he explores several approaches on design research. Gaver takes off by examine the current landscape of design research, and states that research through design is often questioned for its non-standardized formality and it's non-quantifiable results. Consequently, Gaver discusses established research theories from the scientific and psychological academies, unravelling their approaches and investigates if it can be applied in design research. Regarding traditional scientific research, one of its criterion is falsifiability. However, Gaver states that design theory is unfalsifiable, and according to these criterion - design research is unscientific. Since design is about solving wicked problems, problems with unclear definitions and ever changing requirements [Galavan, 2016], no true answer exists to the question. Gaver states that design research should not aim for being falsifiable, since it would not be design [Gaver, 2012]. Design is about investigate "what might be", rather than "what is" which differentiates it from traditional scientific research.

In natural science research, frameworks and methodologies have been standardized, creating a recommended path from question to answer. Convergence of that kind haven't been achieved in design research where the amount of design manifestos are continuously growing [Gaver, 2012]. The lack of shared paradigms will therefore lead to the consequence of absence in progress. But, disregarding these previous statements, designers shares values which leads to common approaches.
Ultimately, the paper "What Should We Expect From Research Through Design" [Gaver, 2012] concludes that design research shouldn't be compared with traditional

research. Instead, it should do research on it's own terms. Gaver continues stating that design is more convergent that one might expect, but that a common agreement of principles might not be a pursue of its own. Instead, a wide diversity in theories and practises might lead towards greater development of new methods and frameworks. At last, Gaver recommends that research through design should take advantage of its strength in developing several solutions to a given problem. This will lead to a result consisting of solutions from different perspectives [Gaver, 2012].

3.2 Human-Centered Design

Human-Centered Design (HCD) is a design framework focusing on humans and its relation with an object [Maguire, 2001]. The framework emphasizes the value of meeting requirements, by incorporating the perspective of the intended users as well as involving them into the process - a usable system meeting requirements can be achieved. It's practises have been standardized by ISO 9241-210:2010, Ergonomics of human-system interaction – Part 210: Human-centred design for interactive systems [ISO, 2010], which consists of recommendations of how to manage a design process.

Martin Maguire describes the key components of HCD [Maguire, 2001]. At first, a HCD process requires an active involvement and understanding of the potential users and tasks. Henceforth, a design approach committed to the HCD principles calls for an appropriate distribution between users and system. Maguire continues by stressing that an HCD process is implemented by using an iterative pattern in multi-disciplinary design teams. In summary, HCD is an iterative design approach that extensively relies on user involvement, in order to develop solutions that responds to the needs of the people using the end product.

The iterative manner that marks the essentials of an HCD process, is in ISO 9241-210:2010 divided into four phases. Stepwise, these four phases are processed, until considered done [ISO, 2010]. At first, a research phase consisting of labor that implies a thorough understanding of the intended users, is conducted. This knowledge will thenceforth be used in specifying the relevant user requirements, followed by a design phase where all the previous understanding will be used in order to create relevant solutions. Ultimately, this circle of steps that forms an iterative pattern, terminates by evaluating if the current design solution meets the requirements. Otherwise, additional research, requirement definition or design phases will be conducted. Before the iterative manner starts, a phase of planning is required in order to successfully implement HCD [ISO, 2010]. Figure (3.1) a graphical representation of the ISO standard.
HCD is an anticipated design methodology, but not everyone joins the chorus of praise. Donald Norman at the NN group, have written a controversial paper named "Human-Centered Design Considered Harmful" [Norman, 2005b]. He argues that a majority of the products in the world have been designed without conducting any user studies. Instead, he discusses that people adopt to tools rather than the opposite. Norman concludes that HCD focuses too much on users, and states that
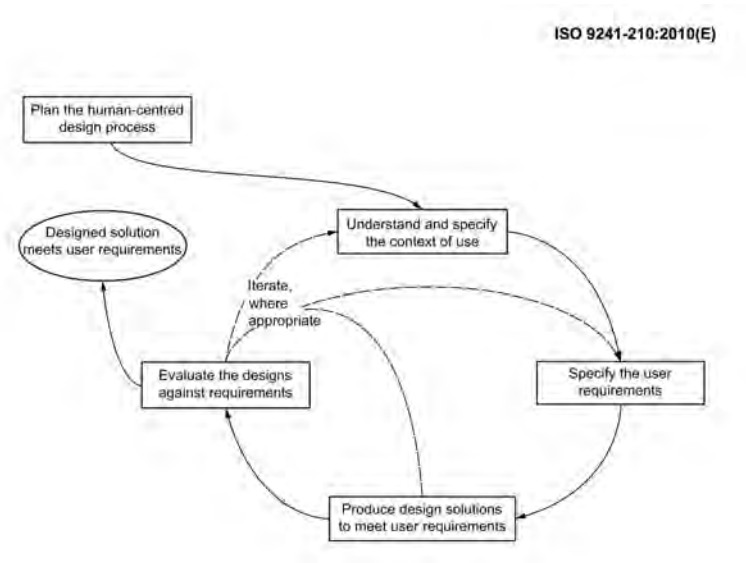
Figure 3.1: ISO 9241-210:2010, Ergonomics of human-system interaction – Part 210: Human-centred design for interactive systems [ISO, 2010]

sometimes ignoring the users can lead to great design [Norman, 2005b].

Many organizations around the world, uses an HCD approach to do design work. Among them is the prestigious IDEO, a global design company that is working with helping organizations to be innovative [IDEO, 2015]. IDEO have developed a customized HCD approach consisting of three different phases, similar to the phases in ISO 9241-210:2010 [ISO, 2010]. The phases are Inspiration, Ideation and Implementation. The inspiration phase consists of studies to better understand people. In the ideation phase, the primary goal is to generate ideas. Ideas that will be tested and refined until they are feasible solutions. Ultimately, the implementation phase brings the solutions to life [IDEO, 2015].
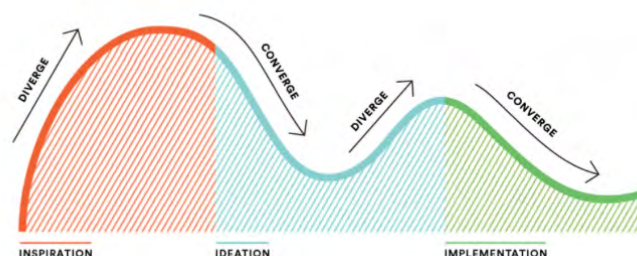
Figure 3.2: The HCD approach used by IDEO [IDEO, 2015]

3.3 Goal-Directed Design

Initially developed by Alan Cooper, Goal-Directed Design (GDD) is a methodology for behaviour-oriented design areas [Cooper et al., 2014]. It's fundamentals lies upon gathering a thorough understanding of the needs, motivations and goals of the intended users. The design approach was developed by practises from reality, and lacks backing from theoretical foundations [Williams, 2009]. However, the methods connected to the GDD framework have similarities with anthropological and ethnographic studies. The take-off point in GDD, is mental models. Cooper states that software that follows the mental models of the system, can eliminate complexity and provide a cognitive framework that support users and leads them into accomplishing goals. Mental models are the key in bridging the gap between the domains of the system design and the every-day of the user. [Cooper et al., 2014].

In GDD, the primary objective is to identify the goals of the users [Cooper et al., 2014]. Goals are separated from tasks and activities, since goals are behaviorally driven. People are motivated by goals, and a by focusing on it in design work, unnecessary activities can be reduced and a better performance can be achieved. Donald Norman, in his book "Emotional Design", presented three levels of cognitive processing - visceral, behavioral and reflective [Norman, 2005a]. Cooper has developed three types of user goals corresponding to these cognitive processing levels - life goals, end goals and experience goals [Cooper et al., 2014]. Experience goals are personal and simple goals, usually hard for users to articulate. The feeling of smartness and control, as well as amusement are typical experience goals. End goals are goals associated with tasks; using products or a services in order to perform activities. Life goals are related to the dreams and aspirations of users, which moves them out of context from isolated products. Worth mention, especially in this project, is that customers might have different views from regular users. Cooper mentions that they have to be acknowledged, but they don't have to be fundamental when designing [Cooper et al., 2014].

A Goal-Directed Design approach is divided into six separate steps - research, modelling, requirements, framework, refinement and support [Cooper et al., 2014]. It starts out by researching current landscape regarding the chosen problem area and its potential users. Methods such as observations, interviews, market reviews and literature studies are used at this stage. Next step is modelling, where the outcomes from the research phase are used to develop models that represents behaviour. Personas and workflows are common activities in this phase. The personas and workflows are usable in the next phase, the requirements definition, where scenarios that meets the goals the users are being developed. All the previous phases, makes the framework definition possible, where designers defines the visual, behavioral and physical framework. What follows this phase is refinement, where the designer continues to work on the framework definition, but in more detail - focusing on implementation. Ultimately comes the phase of development support, where designers assists the technical team [Cooper et al., 2014].
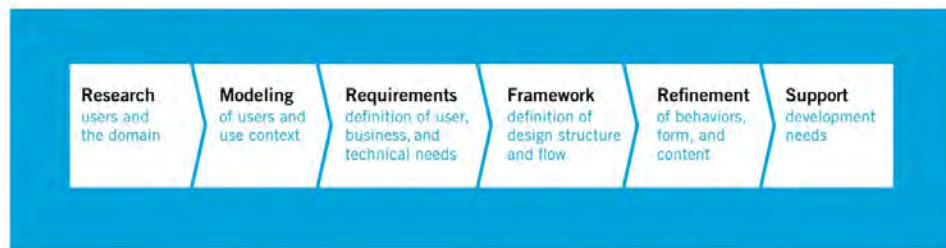
Figure 3.3: The Goal-Directed Design Process [Cooper et al., 2014]

3.4 Design and Research Tools

Conducting a design process using the GDD principles, one can see similarities with HCD. Coopers regularly articulates how valuable a substantial understanding of the users are. However, Cooper constantly discusses about users rather than humans, which brings User-Centered Design to mind. Nonetheless, the way Cooper discusses about the goals and how user goals are driven by human motivation with anchoring in human needs and dreams, one can see similarities with HCD [Cooper et al., 2014]. By investigating the design activities in both GDD and HCD, the similarities becomes even clearer. This leads to the discussions that HCD and GDD are similar design approaches, but with a semantic difference regarding the primary focus. Therefore, a combination of them both will be a suitable design approach in this project.

The structure of the approach in this project, will include the three phases defined by IDEO - Inspiration, Ideation and Implementation. Since this project depends heavily on evaluation, it will be included as a phase in the process. The chosen set of methods for each phase will be a suitable composition from both GDD and HCD. What follows is a description of the phases and the methods that are planned to be used in this project. The order of the methods presented, will form the intended chronological order.

3.4.1 Inspiration

The inspiration phase, taken from the IDEO field guide [IDEO, 2015], is the first step of the iterative process an HCD process pursues. The purpose of this phase, is to get a deep and thorough understanding of the people that will be using the service. Within this thesis, an extensive inspiration phase is highly recommended. Samuel Hulick [2014] and Intercom [2016] discusses the value about finding the a value proposition and the switching moment, which implies a research phase. Nir Eyal [2014] recommends an understanding of users and their habits. Therefore, when investigating how to increase the rate of activated customers, the people that will be using it have to be understood.

3.4.1.1 Literature Review

Performing research on existing material, such as reading up on current research and theories as well as investigating rivaling products, is a great starting point in design work [IDEO, 2015]. Cooper states that doing a literature review, will help out when formulating questions for subsequent interviews with stakeholders and users [Cooper et al., 2014].

3.4.1.2 Site Analysis

Bokio depends heavily on data-driven decisions. To support decision making of this kind, Bokio have connected their service with Google Analytics - a tool used for studying user behavior on sites. By using an analytics tool, one can gather measurable quantitative data, valuable in decision making. Since Bokio have used Google Analytics for a while, a high amount of data on user behaviour have been gathered. In this project, usage analysis of the site will be extensively used throughout the whole process. Therefore, a design activity focusing on understanding the current status of the site together with previous data, is recommended.

Google Analytics makes it possible to investigate visit counts based on for example the location, time and the device. It's also highly customizable, giving the opportunity to collect the chosen set of data for a certain purpose. As well, Google Analytics makes it possible to follow customer journeys, tracking each step they will take throughout a complete session [Google, 2017]. Intercom [2016] recommends tracking of user sessions as a method to determine where the bottlenecks are during a first-time-usage of a service.

3.4.1.3 Interviews

IDEO [2015] calls it the most essential part of the inspiration phase, since interviews are the best way of understanding the motivations of the people one are designing for. The method is effective; by talking to relevant stakeholders and potential users and asking them questions - they can describe how they perceive the domain. Interviewing can be done in several different manners. Usually, three main interview approaches are brought up - structured, semi-structured and unstructured [Baxter and Courage, 2005]. The different interview approaches can be distinguished by the amount planning that have been done before conducting the interview. Structured interviews depends heavily on pre-determined questions, usable when conducting quick interviews. The type of data received, when using the structured interview type, is usually quantitative but it depends on the questions asked. An unstructured interview is, as the title indicates, the opposite to structured interviews. The behavior is similar to a regular discussion. Semi-structured interviews is a combination of the both. On beforehand, the facilitator plans a set of questions that can be asked, and during the interview, the facilitator asks follow-up questions to get a deeper understanding [Baxter and Courage, 2005].

Finding the people to talk with, is another important activity with interviews. IDEO

refers to a design activity called "Recruiting Tools", used to determine which people to interview [IDEO, 2015]. Within this method, IDEO recommends focusing on both extreme users and mainstream users to get opinions from a wider range of people. According to Cooper, one should identify subject matter experts (SME) early in the design process [Cooper et al., 2014]. A SME is an authority within the domain of interest, and therefore often an expert user. Cooper also recommends talking to both customers and users. Interviews with customers should focus on goals and motivations, mostly regarding their current situation. According to practitioners of the methodology called jobs-to-be-done - an area of studies which focuses on customer motivations [Institute], user studies shouldn't be focusing on products. Instead they should focus on the relation people have with their products. One interview activity that can be used to identify the relations people have with products is "The Five Whys" [IDEO, 2015]. The method is as simple as effective; by asking five consecutive whys on a given question, the interviewee eventually will present motivations and emotions regarding that topic.

3.4.1.4   Observations

Ethnographic studies are relevant when one want to gather a deeper insight in a given domain. Therefore, observations of processes and human behaviours are commonly used. Since the domain of this thesis is the financial world, and primary accounting activities, observations have to focus on the habits surrounding it.

There exists a plethora of different observation methods. Both Cooper [2014] and Baxter et.al [Baxter and Courage, 2005] refers to contextual inquiry - an interviewing technique combined with observations. Contextual inquiry is based on four main parts - context, partnership, interpretation and focus. This means that the interview should take place in the context of use which is the natural environment of the interviewee. This gives the opportunity to observe and ask questions as the interviewee perform tasks. To make it easier, the facilitator and the interviewee should develop a collaborative partnership. Afterwards, the participant will help out to interpret the results of the study. Finally, the designer have to be focused on the purpose of the study, navigating the participant into performing tasks that will answer questions [Cooper et al., 2014]. Contextual inquiry implies on designer involvement.

3.4.2   Ideation

Ideation is the design phase where all the knowledge from the previous phase are collected and compiled, in order to develop design ideas. According to IDEO, this phase will help the interpretation of the gathered information and understand if it makes sense. This phase will also lead to hypothesis and prototypes, which at a later phase will be implemented and evaluated [IDEO, 2015].

3.4.2.1 Compile knowledge

Affinity diagram, or KJ analysis, is an effective method used to compile knowledge and to find the main features of the design solution [Maguire, 2001]. By writing down all the knowledge gathered on post-it notes, the designers will sort these notes in suitable groups. IDEO mentions similar methods in their field guide, but divides them into several activities that targets more substantial goals. At first, IDEO brings up the design activity called "find themes", where designers sorts post-it notes into categories, which they later uses to identify key themes [IDEO, 2015]. This activity have clear similarities to the affinity diagram. The results can be used to create insight statements, a method to distinguish insights that answers the design challenges from non-relevant ones. Consecutive, the insight statements will be rephrased using a method called "How Might We". By rewrite the insight statements as questions that prelude with "how might we", the designers can generate possible answers [IDEO, 2015].

3.4.2.2 Personas

Within the goal-directed design methodology, a modelling of users is essential when developing design solutions that will correspond to the goals of the users [Cooper et al., 2014]. A useful and frequently used approach when modelling users, is personas. A persona is a representation of the needs of users, and is an archetype shaped from the characteristic personal traits of users [Maguire, 2001]. Personas are modelled as fictional characters, which implicates the name, age, gender, occupation, goals and other information that makes them relatable [Pruitt and Grudin, 2003]. Alan Cooper [2014] articulates that personas are based on previous research. By taking use of the comprehensive research done in the inspiration phase, accurate and valuable personas can be developed.The benefits of developing personas, and using them throughout a design process, are diverse. At first, personas helps out extensively in communicating goals, motivations and visions within a team and to stakeholders. Personas can also help out in building consensus and to test the feasibility of current design solutions, by offering a quick valuable reality-check.

Alan Cooper articulates that people have it much easier to relate to personas than flowcharts and lists of features [Cooper et al., 2014]. The reason of this, is because personas have the ability of making designers feeling empathic towards the potential users, their goals and their motivations. Instead of talking about non-humanized potential users, a well-crafted persona can shape the impression of a real person. Grudin and Pruitt [2003] compares personas with method acting, a methodology within acting. An actor indulged in method acting, puts great attention to detail when developing his or her impression of a character. The amount of detail might lead to a scenario, where the actor can act in completely new situations. When using personas, the ambition is to achieve a similar result [Pruitt and Grudin, 2003].

It's important to understand that personas doesn't represent real users, which implicates that personas never can replace user studies and user tests [Cooper et al., 2014]. Another critique regarding personas, is the difficulty in determine whether a

persona is accurate [Chapman and Milham, 2006]. Finally, people tend to overuse personas - they should only enhance the design process [Pruitt and Grudin, 2003].

3.4.2.3   Journey Mapping

Journey mapping, is a design activity used to tell a visual story in order to understand how users behave and how to address their needs [Kaplan, 2016]. A journey map will have the shape of a timeline, paired with the determined user goals and user actions. It also contains how the user will think and feel during the the different phases. The ambition with journey mapping is to create an overview of the user experience. In the IDEO field guide [2016], journey mapping is one of the activities. According to the field guide, the timeline of the journey map should start of when a customer first becomes aware of the service, followed by their first interactions and how they becomes recurrent users. Finally, IDEO want the journey map to describe how the service impacts the life of the user.

Journey mapping is similar to what Samuel Hulick describes in his book "The Elements of User Onboarding" [2014]. He recommends designers to understand the stories of users, how and why they eventually ends up at a certain solution. Journey mapping, though, is a more extensive design activity that requires an thorough research phase where the information have been compiled and used to develop both personas. When developing journey maps, it can be beneficial to understand the moments of truth of the solution [Grocky, 2014].

3.4.3   Implementation

The implementation phase takes the design solutions, developed in previous phases, to life. This section will describe the key activities of the implementation phase.

3.4.3.1   Key Path Scenarios

Key path scenarios describes how a persona interacts with a certain product by demonstrating the pathway [Cooper et al., 2014]. A key path scenario is down to detail on which functional and data elements a user interacts with throughout his or her experience with a service. Compared to journey mapping, a key path scenario is without the expressions and thoughts of a user. With that said, a key path scenario can be evolved from journey maps. Key path scenarios have similarities with the design activity Samuel Hulick recommends when designing an onboarding process, where the designer should design an efficient path which leads the user to success [Hulick, 2014].

3.4.3.2   Prototyping

Prototyping is one of the most important design activities there is. It's simplicity and cost efficiency, makes it essential whenever a new design solution will be further developed. Due to its popularity, there exists a wide range of different methods used for prototyping, spanning over several levels of complexity. On the bottom level,

there is "rapid prototyping", an activity used to take ideas from abstract to tangible within minutes [IDEO, 2015]. Rapid prototypes can take several shapes, including simple sketches, storyboards and role playing. The advantage of the method is to communicate ideas within teams.

Prototypes can be elaborated to the extent where they can be used for testing. Maguire describes three elaborated prototyping methods, all possible to use in the evaluation phase [Maguire, 2001]. At first, there is paper prototyping, a method that can be described as the next step from rapid prototypes. The graphical interface is sketched upon papers, and can simulate interactions by moving around elements. Software prototyping is a method where the prototype is digitized, making the interactions more realistic. This kind of prototyping takes more time time than prototyping on paper, and isn't recommended early in the process. The last prototype method mentioned by Maguire [2001] is wizard-of-Oz prototyping, a method where the user interacts with a system that is being operated by a person.

3.4.4   Evaluation

The evaluation phase is not part of the core phases that IDEO includes in their design process, but evaluation methods are part of their ideation phase [IDEO, 2015]. Yet, the ISO 9241-210:2010, Ergonomics of human-system interaction – Part 210: Human-centred design for interactive systems [ISO, 2010], mentions evaluation as a distinguished phase. The purpose of evaluation is to test whether a design solutions meets the requirements that have been set up and weather a user responds to it sufficiently. Within this project, a well-executed and focused evaluation process is of high value, in order to gather data which will be compared to other design solutions. The result of this project depends on the gathered data.

3.4.4.1   A/B Testing

A/B testing is an evaluation method used to compare two different solutions to each other. By implementing two separate versions of a website, and allow real users test it, one can do statistical analysis on which version that performs the better. A/B testing is not isolated to the evaluation phase, since work have to be done in both the ideation and implementation phase. In this project, the A/B testing framework plays a prominent role along the whole design process.

According to Optimizely [2017], the A/B testing process consists of six steps. At first, data have to be collected in order to understand the factors that can be optimized. This understanding will be used to identify goals, usually the metrics that determines whether a change or optimization is successful. Important to note that these goals aren't user goals, they have nothing to do with the motivations of people. Subsequent, hypothesis have to generated. These hypotheses will be used to generate the ideas that the A/B testing will treat. When this is determined, variaties of how the the experiment can be executed will be developed and implemented, leading to a realization of the experiment. Finally, the result have to be analysed

by comparing the outcome of the experiment [Optemizely, 2017].

In the blog post "How to A/B test landing pages" [Academy, 2017], ten different guidelines for effective A/B testing is mentioned. It's mentioned that one should only run one test at a time, in order to not mix up the result. Several different tests in parallel can interfere with each other, since it can be difficult to know which change that points towards a result. The article also mentions that the version each test subject will have displayed should be assigned randomly, in order to get unbiased results. Another guideline the article "How to A/B test landing pages" [Academy, 2017] brings up, is that it's possible to test major interface changes and not just minor ones. One example that is brought up, is that an A/B test can be conducted by both testing two completely different pages to each other. I comparison, this is a major change and minor changes are different colors on buttons.

A/B testing have been a subject of criticism. Martin Goodson, former research lead at Qubit, discusses this topic, and concludes that most A/B testings are conducted by people that have little knowledge within statistics [Goodson, 2014]. He gives some advices when performing A/B testing, that takes stand in statistical standard practises. At first, use valid hypotheses. Also, start off by doing power calculations to get an estimated sample size. Do not interrupt the tests too early, and try to validate the tests by repeating the tests [Goodson, 2014].

3.4.4.2   Usability Tests

Usability testing is a collection of evaluation methods, with a common purpose to test the product or service on intended users. Jakob Nielsen [2012] says that one should "... get hold of real users and sit with them while they use the design". Since the HCD methodology is all about designing for the people that will use the service, and relies on an active involvement of people throughout the whole process, usability testing is a key when understanding if the assumptions have been correct. A typical usability test are conducted by giving the test subject a series of tasks to be performed. While the subject performs the tasks, the facilitator observes and take notes [Maguire, 2001].
The recommended amount of test subjects, varies between different sources. Martin Maguire recommends doing tests with 8-25 persons [Maguire, 2001]. However, Jakob Nielsen states in an article that it will be enough to perform tests with only five people [Nielsen, 2000]. The more users you test with, the less you'll learn since the addition of new information will decrease for each new test subject. Another factor is that design work is iterative, and by conducting extensive tests with several users, time is squandered.

3.5   Ethical Considerations

The ethical issues that may arise, is the balance between corporate secrets and the academic purposes. Even if no disclosure agreement have been signed, there are still things that Bokio works with that shouldn't be public. This issue will be addressed

through discussions with the concerned parts, who can determine weather information can be public or not.

The data that will be used to analyze the user behavior, will be anonymous. There is no possibility to find out the identity of individual users in Google Analytics. However, it is possible to track the behaviour of individual users, since every user will be received a unique id. This id can't be used to look up the identity of the user. Still, it's important to point out that there exists one possibility to find out the real identity of users. By tracking the behaviour of anonymized users in the Google Analytics tool, one can see the links users have been visiting in the Bokio application. A part of these links contains the Bokio user id, which makes it possible to look up the identity in the application database. However, there is no need to identify individual users in this project, and therefore these problems won't arise.

4

Process

The process of this thesis focused on getting a thorough understanding of the users and customers of Bokio and what makes them becoming active users. This in order to design a new onboarding flow where new users encounters the fundamental parts of Bokio as soon as possible. As described in the methodology section, the intended methodology for this thesis is a customized one with inspiration from goal-driven design and human-centered design. This section will in detail describe the overall execution of this process, by narrating the different parts.

4.1 Inspiration

As described in the methodology section, the inspiration phase consisted of methods with the purpose to widen the design scope and to gather as much information as possible regarding the current design problem. A thorough inspiration phase have been performed containing literature reviews, website analysis, customer interviews and surveys.

4.1.1 Literature Review

The theoretical research related to this project were surrounded by understanding the concept of user onboarding as well as the psychological aspects connected to how users and customers behave when using certain service. Also knowledge in bookkeeping is essential when working with accounting applications, research on financial accounting had to be performed. The goal was to gather basic knowledge regarding the subject, in order to feel confident when talking to users.

4.1.2 Website Analysis

An analysis of the current state of Bokio was conducted early in the process. The execution consisted of three different methods. At first an analysis of the current state of the Bokio service, conducted by analyzing the usage metrics of Bokio. Subsequently, a tear down of the current onboarding flow was performed, with the ambition to identify inconsistencies and pitfalls of the service. At last a short review of the competitors on the market was conducted.

4.1.2.1 Usage Analysis

In order to get a correct image of how customers behave while using Bokio, the previously gathered user data have been reviewed. Bokio have primary been using Google Analytics to gather user data, and this tool made it possible to review both collective as individual user data. Especially usable tools from Google Analytics, useful while gathering data in an inspiration phase, are the user explorer, the cohort analysis and the behaviour overview. The user explorer made it possible to track the behaviour of individual users by following them through sessions; by following their sequences of actions and their visited pages. The cohort analysis, is a tool where Google Analytics displays behaviour over time for a set of users. The behaviour overview, offered by Google Analytics, is a tool where the user is free to customize their own view of statistics. Figure 4.1 displays how Google Analytics looks like.
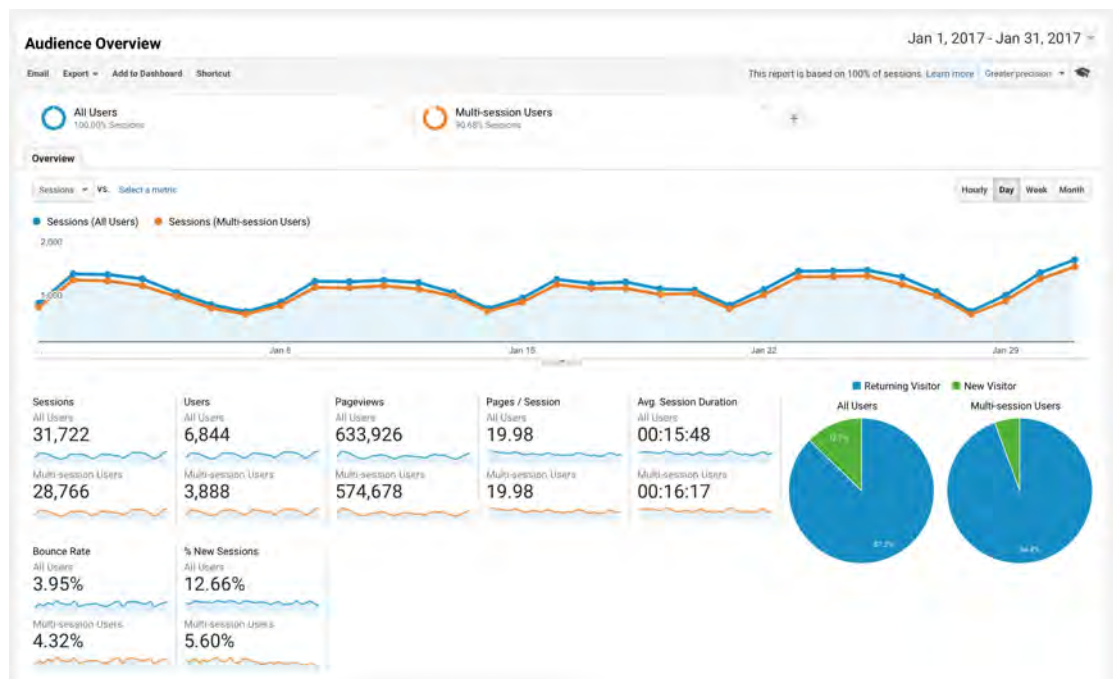
Figure 4.1: The Google Analytics Dashboard

Bokio has an extensive database which includes all the information needed to maintain a web application. In this thesis, the database have been used in combination with Google Analytics to find metrics and statistics on usage. The goal of the usage data review was to find patterns in the usage, that would be usable when formulating requirements in later phases.

4.1.2.2 Onboarding Teardown

Inspired by Samuel Hulick, UX designer and author of the book "The Elements of User Onboarding", an onboarding tear down have been performed in order to identify the problems and inconsistencies of the current onboarding flow of Bokio [Hulick, 2014]. It's also a process where one can be familiar with the application

and the relevant features. The tear down was done by doing a walkthorugh of the process of getting started with Bokio. This included a test session, exploration of the application, registration of an account and bookkeeping of the first receipt. All encountered inconsistencies were noticed, even ones that didn't relate to the current research question.
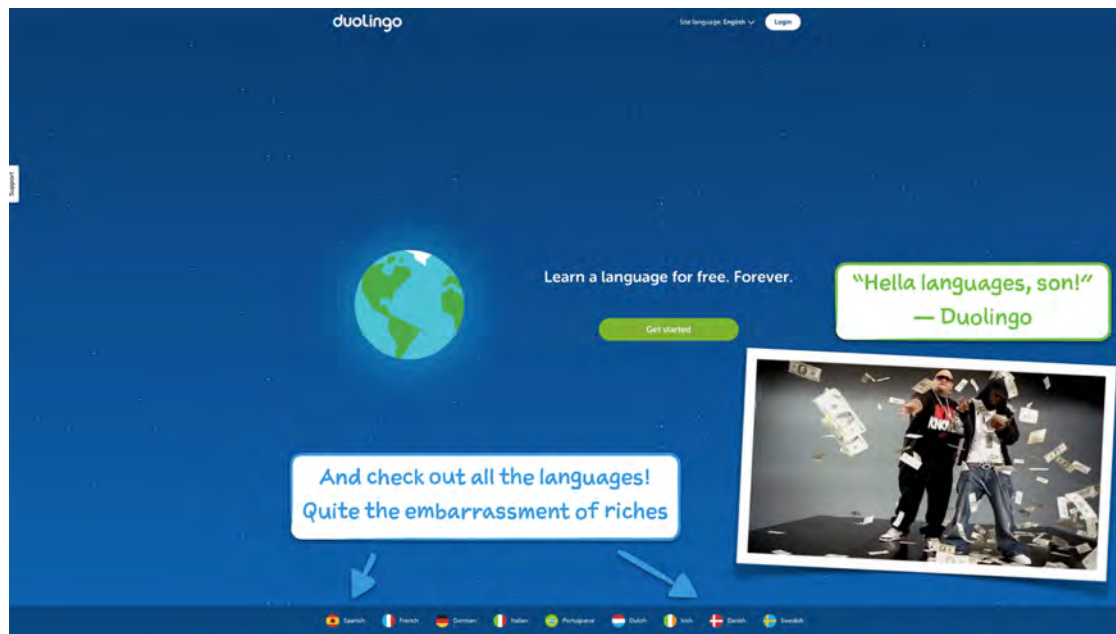
Figure 4.2: Image of an onboarding teardown performed by UserOnboard.com on the web application Duolingo. [Hulick, a]

In order to perform a decent tear down, one had to look through tear downs performed by other people. The purpose of this was to understand what one would focus on, and how to argue whether a design choice is either correct or not. The works of Samuel Hulick was a great source of inspiration, since it consists of several onboarding tear downs; both from websites and mobile applications. The onboarding tear downs concerns a vast variety of different applications, which contributed to lots of inspiration. The tear down was compiled as a slide show, a format that offers both structure and lucidity.

4.1.2.3 Competitors

An investigation of the closest competitors to Bokio have been performed. The purpose of this investigation was to gather inspiration on how onboarding can be executed in services which serves the same purpose as Bokio. Three competitors were analyzed, and they were selected since they are among the strongest competitors in the accounting software business. The competitors were Visma, Speedledger and Fortnox.

The process of analyzing the competitors consisted of performing a series of actions until one got familiar with the application. The series of actions chosen should
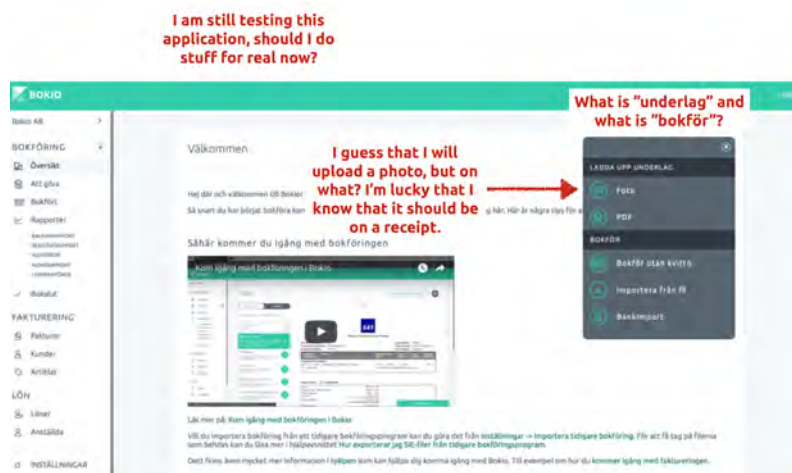
Figure 4.3: A snapshot from the Bokio application. Used in the onboarding tear-down. This image visualizes the overview screen of Bokio toghether with comments

also be as similar as possible to the tasks performed in the onboarding tear down of Bokio. Thoughts and feelings were noticed, and compiled together with screen-shots in a document, where they could be used at posterior phases. The key findings from the investigation of competitors is presented below.

Visma
- Visma costs money, but offers a 20 day trial version.
- You need to sign up with email and password before entering the application.
- Displays a welcome screen with a progress bar, which is a decent way to make new users feel welcome.
- Gives the opportunity to create a test company, where users can explore the app in a safe environment.
- In the accounting view, there is no clear path or goal. Gives a disorderly impression.
- The help section is separated from the application, which implies that users have to remember a lot of information.
- It's information overload, and advanced features are left without adequate explanations.

Speedledger
- Speedledger costs money, but offers a 14 day long trial version.
- Speedledger offers a brilliant demo session, including a get started guide that is very easy to follow. They make use of several onboarding practises, and manage to build a hype.
- They displays important options at the peak of motivation, and therefore manages to get the user exited.
- The tutorial to introduce the important features doesn't feel heavy, rather it empowers the user to really understand by performing actions.
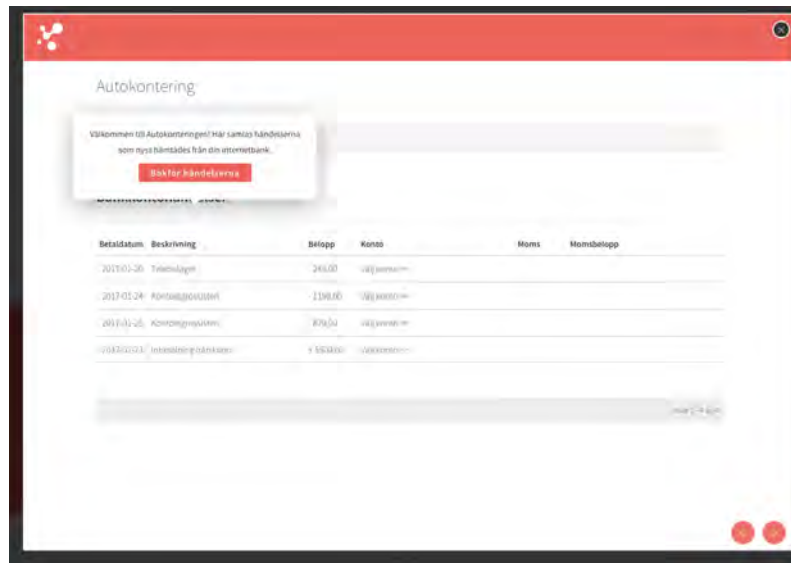
Figure 4.4: The competitor analysis consisted of testing different accounting applications in order to get inspired. This is a screen-shot from Speedledger

- Gives the user the possibility to explore the simplicity of the application, before asking the user to register an account.
- The user spends time to enter all important settings during the first visit.

Fortnox
- Fortnox costs money, and doesn't offer a trial version.
- Very messy landing page, where it is hard to understand where to begin.
- Users have to make an order to get started.
- Fortnox offers help if you want to switch from another accounting service.

Over all, the competitors analysis gave valuable insight in the dos and the don'ts in how to onboard users to an accounting service.

4.1.3   Discussing with users

The major part of the inspiration phase consisted in talking to the users of Bokio, in order to understand how they feel when using the Bokio application. In a project of this kind where the focus lies on designing a new onboarding flow, the part of the application which targets new users, a great value lies on understanding initial feelings and outcomes of the users. In this thesis, the ethnographic studies have been focusing on gathering opinions and get an insight in the everyday life of users as well as understanding their habits regarding accounting in general and Bokio in particular.

4.1.3.1   Interviews

The interviews were conducted using a semi-structured method, consisting of several pre-planned and open questions which left room for the interviewee to ask follow-up questions. The interview were divided into three different sections, beginning with general questions to get an image of the interviewee. The second section of the interview focused on experiences with accounting, investigating if the the interviewee had any accounting experience before using Bokio and if so - what application had been used and how was that experience. The last section focused on the actual user experience with Bokio, trying to understand when the interviewee felt that Bokio was worth continuing to use and how his or her habits was regarding accounting and bookkeeping. The last section of the interview also focused on the emotional experience of Bokio.

To gather participants to the interviews, two different communication channels were used - social media and e-mail. Bokio have a highly active group at Facebook, where users can ask each other questions. The users in this channel consists of the active users segment, and was a good way to reach users. Reaching users by e-mail gives the opportunity to select a more customized segment of users, for instance users that just have registered an account.

In total, four interviews were conducted. The ambition was to meet the users in person, but due to the geographical spread of the users of Bokio, a majority of the interviews had to be conducted over telephone. The interviews were subsequently transcribed.

4.1.3.2 Interview Guide

- **General Questions**
    - What's your name?
    - How old are you?
    - Where do you live?
    - What do you work with?
        * Is it the company that you have on Bokio?
            · How many employees?
- For how long have you been using Bokio?
    - How is your experience with accounting?
    - Have you been using similar softwares as Bokio?
        * Why did you stop using it?
        * When did you realize that you wanted to switch?
    - What is important with an accounting application?
    - How did you get in touch with Bokio?
    - Do you remember the first time you used Bokio?
        * What got you to test it?
        * What was your first impressions with Bokio?
        * Did you create a test account?
        * Was it clear where to start?
        * Was Bokio self-explanatory the first time?
        * When did you realize that Bokio was "the thing"?
- What part of Bokio do you usually use?
    - How often do you use Bokio?
        * How does that differ from previous experiences?
    - What is the first thing you do when you use Bokio?
- What problems do Bokio solve?
    - Which parts of Bokio do you love?
    - What makes you crazy?
- Is there anything that Bokio lacks?
- Something you want to add?

4.1.3.3 Ad Hoc interviews

A couple of Ad Hoc interviews were performed during the inspiration phase of the project. An Ad Hoc interview differs from the ordinary interview, since they isn't planned in advance and is conducted in a more spontaneous form. Due to the shape of the interview, one can not transcribe the interviews and the notes from the interviews are limited. In total, four Ad-Hoc interviews were conducted in different settings and the interview subjects had professional experience within financial labour and accounting. Some of the interviews were more extensive than others, and the topics spanned from the technicalities in bookkeeping to the habits surrounding them. The Ad Hoc interviews were conducted face-to-face.The location of the interviews were different, for example at the office of people with professional experience and at the Bokio office. The interviewees were both customers and non-customers.

The key findings from these interviews mostly surrounded how routines and behaviours regarding accounting looks, and the most salient finding was that people tend to postpone their accounting until the very last day. This results in a moment of stress for people, and is therefore seen as a dull task. The Ad-hoc interviews gave the possibility to demonstrate the Bokio application to the users, and to take part while they discovered features they enjoyed. These features was the receipt scanner and the atomized accounting entry. Also, the generated reports as well as the supplier's invoice features were appreciated.

4.1.3.4 Survey

To get supplementary research besides the interviews, a survey was compiled. The survey consisted of 20 questions, similar to the ones asked in the interviews. Therefore, the questions had to be formulated differently in order to gather valuable answers. Since surveys makes it difficult to collect exhaustive answers, the amount of open-ended questions had to be few. Instead multiple choice questions were used extensively. In order to collect participants in the survey, the Bokio Facebook group consisting of active users were used. In total, the survey gathered 56 respondents. The respondent were contacted using a user group on social media and every interested user could participate in the survey.

4.1.3.5 Survey Guide

- How old are you?
- What is your gender?
- Where do you live?
- In which business do you work?
- What is your experience level within accounting?
- For how long have you been using Bokio?
- How did you find Bokio?
- How many employees does your company have?
- Which sections of Bokio do you use?
- Have you been using another accounting software before using Bokio?
  - Which softwares have you been using?
  - Why did you stop using them?
- What made you try out Bokio?
- What was your first impression?
- How easy was it to get started?
- When did you realize that Bokio was someting to continue to use?
- What do you love with Bokio?
- What makes you crazy with Bokio?
- What do you miss with Bokio?

4.1.3.6   Key Findings

The survey gathered 56 respondents, and the complete outcome of the survey can be found in Appendix B. The age distribution was widely spread, but the gender distribution was more heterogeneous, with a distribution och 85% men and 15% women. The geographical distribution is evenly spread all over Sweden, but with an emphasis in the larger cities. The most popular business area, based on the respondents, is consultancy and IT. The previous experience with accounting is low with a mean of 2,3/6. Most users are relatively new in using Bokio, and a vast majority of 84% have been using Bokio for a shorter time than 6 months.

People have found Bokio by searching for a an accounting service online. Regarding the sizes of the companies that are connected to Bokio, the size is small. 100% of all respondents have registered with a company where the number of employees is five or fewer . 78% of the respondents are even one-man enterprises. Approximately 60% of all the users that responded to the survey articulates that they use Bokio on a weekly basis, and 60% of them haven't used an accounting software previously.

Regarding previous experience of accounting softwares, the most common ones used are Visma and Speedledger, even if other softwares are mentioned by the respondents of the survey. Users tested Bokio since it's was free and that it looked simple and easy to use. Also the first expression of Bokio was great, with a mean of 4.9/6. The process of getting started was also good, with a mean of 4,78/6.

On the question regarding what users enjoys with Bokio, a majority of the users answered the simplicity. On the other hand, the question regarding what in Bokio that annoys users, the users have very different opinions and everything from the lack och flexibility to the slow support processes was mentioned.

To sum up the survey, the most important key findings is that the respondents are very pleased with Bokio and love the simplicity of the system. The reason that it's free gives the users the possibility to explore the application without winding up to anything. The users also articulates that the first impression was great and that it was really easy to get started.

4.2   Ideation

The goal of the ideation phase was to collect all the information from the previous inspiration phase, with the purpose to find patterns. Patterns which could be used when formulating and developing solutions. Since this thesis focuses on user onboarding, and mainly to investigate how one can activate users as efficient as possible, the ideation phase mainly focused on formulating requirements. Requirements which could be used when developing personas and journey maps - all which would be used later when prototyping key path scenarios.

4.2.1 Compile Knowledge

The knowledge compilation consisted of three parts, all of which lead one step closer towards a set of requirements as well as personas and their journey maps. At first, all of the valuable information gathered from the inspiration phase were gathered. In practise, this means that the transcribed interviews were read through and interesting quotes were saved. The most salience results from the survey were saved, together with quotes from the open-ended questions. Since the survey also gave statistics and numbers on for example the experience levels of the users, as well as their demography, it were collected. Also, all of the valuable information from the usage data, the evaluation on competitors and the tear down of the current onboarding process, were saved.

The valuable information is usually collected and written down in post-it notes, but in this case the information were collected using a software called Trello. Trello can be described as a virtual board, where cards containing information can be placed in different sections. It simulates the work usually done with post-it notes in a decent way. Using this tool, all of the collected knowledge were at gathered in different groups, were each group contained related cards. In the end, when all of the cards were sorted properly - the groups got titles which clearly would describe the catalogued cards. In total, 16 categories were generated. Figure (4.5) visualizes Trello with categories and the different findings sorted underneath.
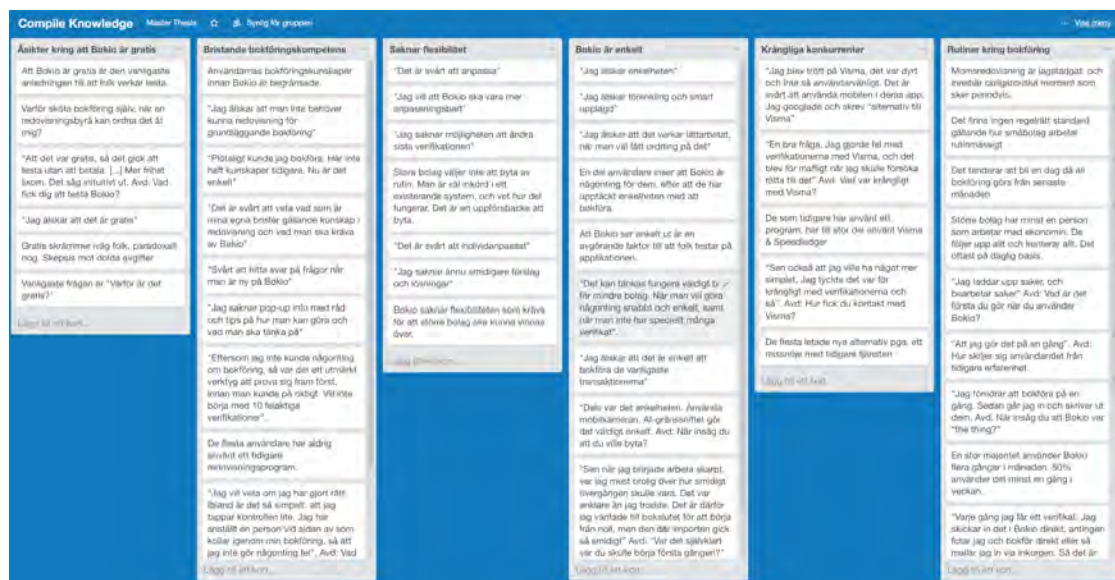
Figure 4.5: An image from the knowledge competition part, where different findings are sorted in different categories.

What followed was the insight statement phase, where the categories produced in the previous step were used to generate insight statements. For each category, or themes as it's commonly refered to, one to three insight statements were developed. These were later rephrased with wording "How might we", which made it easier to

find requirements. This, because the answer to the "How might we" statement is a requirement. These statements were, with the use of Trello, grouped after priority. Since all of them isn't connected to the problem of the thesis, a separation had to be done.

4.2.2 Requirements

The knowledge compilation phase resulted in 24 different phrases formulated with in the form of "How might we..". However, only 19 of them had the priority of mid to high. In order to find requirements, one simply had to answer the questions in a satisfying manner. Since the list of "How might we.." statements grew massive, the number of requirements became numerous as well, and therefore it became clear that all of them never could be integrated in the solution. However, due to the breath of the design scope it's an expected scenario .

The requirements generated didn't have to have the same priority as the previous problem statement formulated with "How might we..". Therefore, a new priority list had to be developed. A list with significantly less high prioritized requirements. In total 19 requirements ended up with the highest priority. Figure (4.6) visualizes the elaboration of the requirements.

"How might we..."	Requirements	Priority	Difficulty	Category	
How might we get more users to understand the power of digital storing	Introduce the digital storing of receipts and invoices	Mid		Educate	
How might we get user to understand the efficiency of the receipt inbox	Introduce the receipt inbox	Mid		Educate	
	Remind users of the receipt inbox	Mid		Activate	
	Make users send their first receipt to the inbox	Mid		Educate	
How might we get users to store the receipt both in the physical and digital domain	Educate users about the difference between the digital and physical receipt	Low		Educate	
	Show the value users of organizing documents	Low		Educate	
How might we get more users to recommend Bokio to others	Using share functions in the app	Low		Activate	
How might we get new users to test modern bookkeeping during their first session.	Force new users to test modern bookkeeping	High		Understand	
	Have example receipts to test with	Mid		Understand	
	Guarantee that the modern bookeeping works properly	Mid		Understand	
How might we get non-technical users to understand the power of automation	Demonstrate how Bokio automizes the bookkeeping process	High		Understand	

Figure 4.6: The final requirements were elaborated from the "How might we" statements. Here is an image from the compilation.

The requirements were organized in groups based on which stage in the onboarding process they belong. Due to the information given during these phases of knowledge compilation, and the topics from the literature study, the onboarding process can be organized in five phases. These phases are Convince, Understand, Invest, Educate and Activate. Figure (4.7) visualizes a graph on how the motivation level of the user should vary during an optimal onboarding. As one can see, the level of motivation should increase step-wisely until the moment that the user have decided to register an account. From that moment, the focus is to maintain that level of motivation during the first session; to the extent that they return.
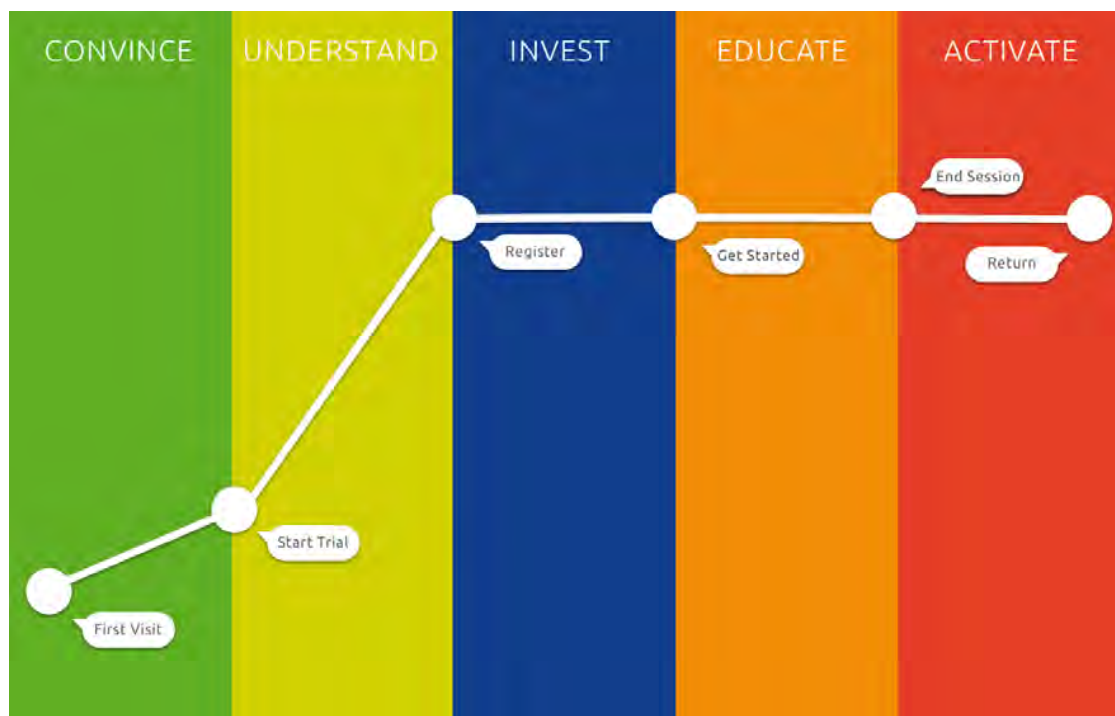
Figure 4.7: A visualization of how the motivation level should vary based on the different onboarding phases of the project.

This model of motivation level is based on the book "The Elements of Onboarding" by Samuel Hulick [Hulick, 2011]. The first usage should be without friction and the users should feel that he or she progresses all the time. Keeping momentum is essential during a first visit, and during the first moments of a first visit the user have to be successful and feel like a winner. By recalling the section in the literature study that treats user psychology, one remember that user onboarding is about changing behaviour. The Fogg Behaviour Model was a model that told that a behaviour change occurs when a users have gathered the sufficient abilities and is motivated enough [Fogg, 2009]. Therefore is the education phase essential, where these abilities will be gathered. An Investment phase is also important, since the user spends some actual time with the software and feels invested and don't want to leave. However, the user can only endure the education and the investment phases if they have been motivated enough the understanding phase.

4.2.3   Personas

During the phase of inspiration, where the purpose was to broaden the design scope, interviews and surveys was conducted in order to investigate how current users experiences Bokio. Apart from the findings that was elaborated to requirements, findings regarding the user demography and their experience levels was discovered. These findings are valuable in further development, especially to remind oneself that the final implementation will target real world users. The method commonly used for this is personas. In order to develop personas, the answers from the interviews and the survey had to be collected in order to find patterns. Patterns that later could be transformed to archetypes based on their experience level, personal traits and similar.

After gathering the findings from the survey and the interview, four different personas could be developed. Since the characteristics of these personas can be seen as extremes, one had to make them more human. These also had to be developed in a manner that motivates a certain behaviour. Also, in order to make the persona connected to the Bokio application, their experiences in bookkeeping as well as their technical competence is described.

In Bokio, a registered user is connected with one or more companies, since the accounting labour a method to declare the transactions of a company. Therefore the personas had to be connected to a company as well. From the surveys and the interview, findings regarding the company size and the businesses could be found. That gave a good hint on what kind of companies that exists in Bokio. Since the company is fundamental in Bokio, they had to be integrated in the personas as well. Therefore, each persona have a company and information regarding which sector they are working with, the size of it, the company history and the financial status can be found.

The ambition with the personas was to capture four different extremes in regards to bookkeeping experience and technical competence. Together, the personas and the company they are connected to, would help in designing an onboarding flow in which all their weaknesses and strengths would be taken into account. The personas can be seen completely in Appendix C

4.2.4   Journey Mapping

The journey maps in this thesis is highly connected to the personas. The purpose is to describe how a persona would react and feel during their first acquaintance with Bokio, and the journey maps will be helpful when developing a new onboarding flow. Since each persona have different experiences and competence levels regarding bookkeeping, as well as different goals and concerns, they will react differently to different parts. By developing one journey map for each persona, the different perspectives in the onboarding flow could be captured. Some of the personas have little to no experience with accounting and similar labour, and therefore might react

differently to certain steps than users with long experience.

The journey map consisted of four different parts. The main focus is the touch points, which is the different steps in the onboarding flow. One can see a touch point as a key action that a user takes, and one example of this is "decide to sign up" or "bookkeep the first receipt". The remaining three parts are all connected to the touch point. At first it's the goal, which specifies the what the persona want to achieve at this specific touch point. Next is the thoughts of the persona, what's on the personas mind. At last, the journey maps concerns the emotional experience of the user. This is visualized by a graph which indicates how the emotional level differs on each touch point, together with a quote that expresses the current feelings. Figure (4.8) visualizes an early draft of the journey maps. The journey maps for each persona can be seen in Appendix D.

Figure 4.8: An early draft of a journey map for Christina

4.3 Implementation

During the previous two phases, the fundamental work in understanding the current situation have been done. The phase of inspiration focused on gather as much information and knowledge as possible. That knowledge have later, in the ideation phase, been transformed into requirements, personas and journey maps. This have now lead into the implementation phase, where key paths and prototypes will be developed until they'll finally will be implemented for testing in a real setting.

4.3.1 Key Path Scenarios

The goal with the key path scenario, a scenario that could be translated to the onboarding flow, was to gradually increase the motivation of the user until that moment that they got hooked. Then the ambition is to maintain that level of motivation until the user feels confident and want to return. In this thesis, this scenario is divided into five different phases. They are called Convince, Understand, Invest, Educate and Activate. The ambition is that the "Convince" phase should only be at the Bokio landing page, which is the part of site site where user can decide to register. After that follows the "Understand" phase, where the ambition is to present the key features of Bokio and what Bokio can do. The "Invest" phase is the phase where the user should invest time in importing previous bookkeeping and to set all

settings. Recall the IKEA factor from the literature study, the more time a user invests in a product - the more likely he or she is to return. The "Educate" phase is about educating the user of key concepts and how to use the application the best way. This is also the last phase that will occur during the first session. After that the "Activate" phase starts, where user should be reminded to return. Figure (4.9) shows a simple sketch of these phases.
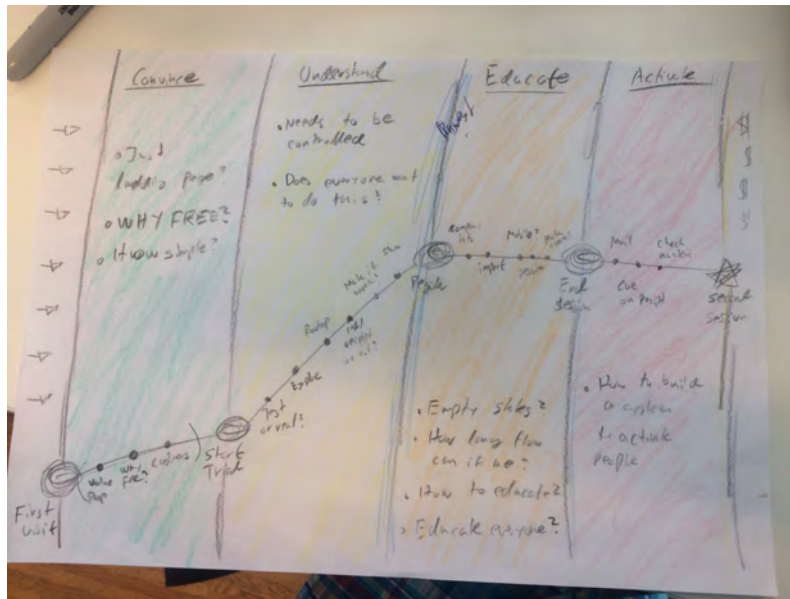
Figure 4.9: The five different phases of the onboarding flow, developed for this project.

The hypothesis is that all of these five steps is essential when onboarding a new user to the Bokio application. To elaborate these phases, each phase had to include isolated steps in which users can perform actions. For example, one of those steps could be "Register", all of these steps will be compiled in a key path scenario, which suggests a flow that users should be lead through in order to be completely onboarded. Figure (4.10) displays an early draft of the key path scenario.

4.3.2 Prototyping

In this thesis, several different means of prototyping have been used. Recall the methodology section, where it's mentioned that prototyping can be as simple as simple doodles on a piece of paper, up to a complete technical implementation. Within this thesis, the whole stack of means of prototyping have been used so some degree. From it's bottom level where simple paper prototypes have been used to explore different and isolated views, up to the actual implementation of the different onboarding practises that will be put to test. For simplicity, everything that are related to the technical prototyping will be covered under the topics withholding implementation.
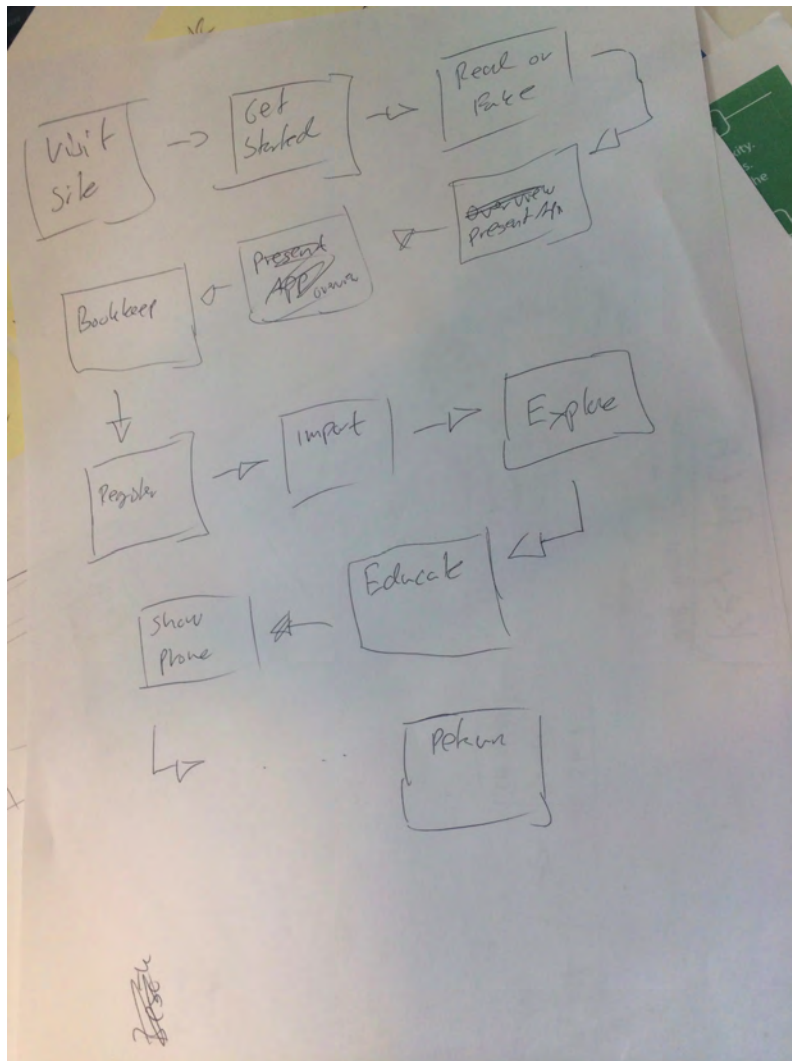
Figure 4.10: An early draft of the key path scenario. It would be changed during several iterations

In order to prototype the onboarding flow, a software called Balsamiq Mockup was used. It's a simple tool which gives the possibility to create simple and interactive design mockups. Due to the simplicity of the tool, it's possible to test brief ideas with a high pace. When developing the prototype, the ambition was to implement the complete key flow designed in the previous step. By using as many of the theories and practises as possible from the theoretical fundamentals that this thesis is based on. Figure (4.11) displays a view from the prototype developed in Balsamic Mockups.

Since this thesis will explore a set of different onboarding practises, the onboarding flow prototype developed in Balsamiq Mockup was mainly used to get an overview of the different practises that could be used in Bokio. Even it the shape of them was about to get changed over different design iterations, it was valuable to remember which parts of the Bokio application that should be included and introduced to new users.
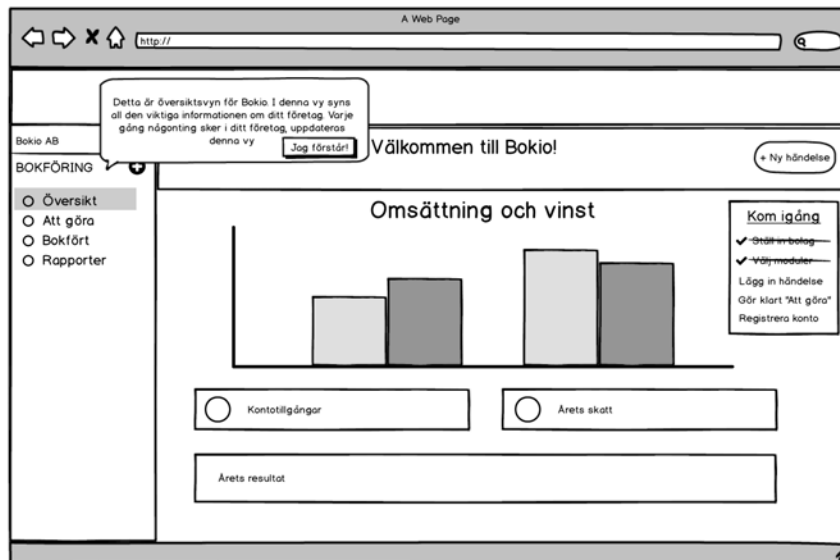
Figure 4.11: A view from the Balsamic Mockups prototype. It visualizes the overview in Bokio, together with two diffeent onboarding practises (Onboarding Todo and Onboarding Tour)

In this thesis, independent onboarding practises would be tested consequently. This means that isolated features from the prototypes flow would be selected, elaborated and eventually implemented in the Bokio application where real users could be testing them. The reason for testing isolated practises, is partly due to the guidelines the article "How to A/B test landing pages" [Academy, 2017] mentions, where A/B tests should be performed independently with isolated variables. It's also partly due to the design process of this thesis, which follows an iterative manner. This gives the advantage of exploring the success of one practise before developing the next one, and base it on the previous results.

4.3.3 Analytics Implementation

To develop a robust system that would keep track if a user have been activated or not, was essential in this thesis. Before starting, there was two possible solutions to do this. At first, a look-up in the database could be done. This by customizing a SQL query according to the desired information. The second method was to look at the user data gathered in Google Analytics. Both these methods had their drawbacks. The SQL queries consisted of lots of manual labour, and could not in an easy way be integrated with third party tools for A/B testing. The drawback with Google Analytics, was that it was hard to find good activation statistics. It simply was not possible to check how many users that had registered an account and bookkept a receipt on the same day. Only statistics on the numbers of new users could be found, as well as how independent users behaved during sessions.

The solution to this was to build a new system to collect activation metrics. This

was done by implementing a new database table called "UserActivation", which would keep track on when a user got activated. A user can be activated in two ways, hard activation and soft activation. A soft activation occurs when a user has entered a a post in the book for the first time. A hard activation occurs when a user has entered a post in the book a second time, but only if it has passed 24 hours since the first post receipt. The reason for the 24 hour limit, is because it's a suitable way to make sure that the user has returned to Bokio for a second session.

In order to send the activation data to Google Analytics, where they later could be used in third party applications, events had to be sent. The solution was to set up conversion goals in Google Analytics, and then connect them with the user data from the Bokio backend system. In practise this means that when a user is activated - soft or hard - the Bokio backend will send an event that connects to a conversion goal in Google Analytics. This makes it possible to follow up on how many users that gets activated during a chosen period of time. It also made it possible to evaluate how a certain change in the system would influence the rate of activation.

4.3.4   A/B Testing Framework

A/B testing is an essential part of the thesis, since it's the method of choice to gather and analyze how a certain interface change actually influences the rate of activation. There exists several different methods to implement A/B testing to a website.The most advanced one is to build one from scratch, but lots of companies offers A/B testing frameworks. In this thesis, the A/B testing framework from Google was used. Mostly due to the extensive usage of other Google related frameworks such as Google Analytics and AngularJS.

4.3.5   Onboarding Implementation

When the user data gathering and the A/B testing framework was planned and implemented functionally, the different methods to onboard users had to be implemented. The overall goal was to compare which different theories and practises that could be be considered to be successful, and therefore a selection of these had to be implemented in the Bokio application and put to test. Overall, three different theories and practises based on the research was implemented and put to test. All of the practises implemented were released in production on the actual Bokio application. This differs from the intended plan, where the purpose was to test one onboarding flow and determine its rate of success. It became clear that it would be hard to accomplish this during the time frame of this thesis, and therefore independent methods would be used in the experiments instead.

Since the Bokio application is a web application, the implementation was made possible using HTML, CSS and Javascript. As mentioned before, the frontend framework that Bokio uses is AngularJS - a highly popular framework which simplifies the development of single-page applications with an MVC structure. Since everything

would be released, everything had to work properly without bugs. This put demand on the development. However, some solutions were made based on the the short time span of the A/B test, and therefore had temporary solutions. One example of this was the usage of web cookies to store information between sessions. But, web cookies are limited, since they don't save state between devices. This means that a user can't access it's previous if he or she is using different devices during the onboarding progress. However, the assumption was that users would be onboarded on one device before using multiple. Figure (4.12) shows an image of the implementation.
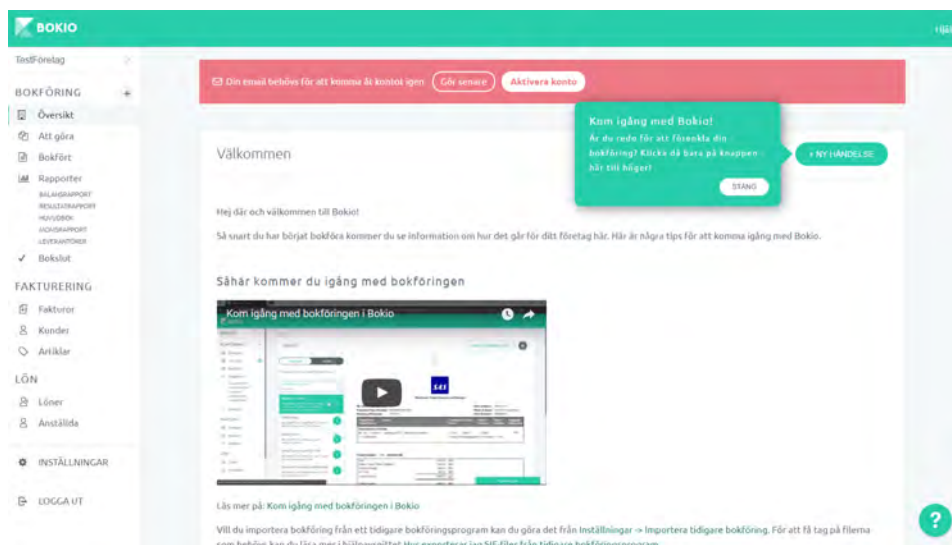
Figure 4.12: The overview of Bokio together with the first tooltip in the Onboarding Tour

Valuable to mention is that the different onboarding practises were implemented on only desktop devices. This is due to two reasons. At first, the majority of the users use Bokio on desktop devices and therefore that was the priority. Secondly, mobile and tablet devices have a smaller screen and called for other design choices. The time was unfortunately not enough to design and implement for different devices.

4.4 Evaluation

The evaluation phase of this thesis focuses on A/B testing. This method will use real users in a real setting, and without telling the users that they will be exposed to a test. The A/B test method is the only evaluation method that is used during this thesis.

4.4.1 A/B Testing

As mentioned previously, the A/B test is the only evaluation method used in this thesis. This means that the analysis after each onboarding test will be based on

numbers gathered from actual usage. The A/B testing is made possible by using the Google Optimize framework, as described in the implementation section, and it can be seen in figure (4.13) Every different onboarding practise is compared with the Bokio application as it looks today; a version with no additions to the onboarding. The reason for the testing of independent onboarding practises, was to make it possible to benchmark them properly. It several different practises would be tested together, one can't evaluate which of the changes that impacted the result of the test. However, some of the tests had different versions that was compared to each other.
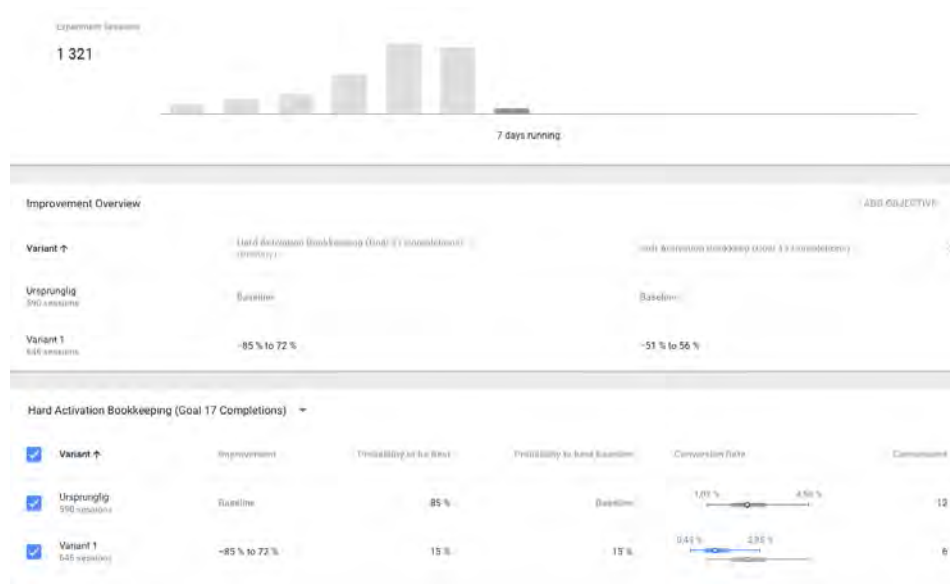
Figure 4.13: The dashboard of a running experiment in Google Optimize.

The determination the success rate is based on the previously implemented goals - hard activation and soft activation. Each completed goal was registered in the A/B testing framework as well as in Google Analytics. This made it possible to follow the reported results on a daily basis. Usually, a test will be active until one tested version is significantly better than the others. Significance means that the result an experiment is not a coincidence, and is a concept within statistics. Indication will in this thesis mean that the experiment haven't reached significance but it's leaning towards a variant. It's incorrect to draw any conclusions based on the indicated result. Due to the shortage of time in this thesis, and due to the time it takes to collect activation data - especially hard activation data - it wasn't possible to achieve significance. Therefore, the tests were active until some of the tested versions indicated to be better than the others.

The onboarding methods implemented were tested separated from each other. This means that the onboarding methods that were exposed for the first test, wasn't used in the consecutive ones. This means that most successful onboarding method from one experiment, wasn't elaborated further. Completely new implementation were used in the subsequent experiments. This was a decision taken in order to be able

to evaluate as many different onboarding practises and methods as possible during the time frame of this thesis.

5
Results

The result of this thesis will be presented in this chapter. This thesis performs an investigation in which onboarding theories and practises that can be considered to be successful. Therefore the result will be presented partially as a explanation in why different practises were chosen and partially the quantitative evaluation of these.

5.1 Inspiration

This section will present the results from the inspiration phase. The inspiration phase consisted of all the different methods performed in order to gather data, that would be usable in understanding the users and their experience with the Bokio application.

5.1.1 Usage Analysis

The usage data analysis was conducted with the aim to understand how users behave when they uses the Bokio application. Two different sources were used to find data on user behaviour, and they were Google Analytics and the Bokio database. Initially, a look-up in the database to find out the current state was performed, and the result is therefore based on the state of January 2017. This state is presented in Table (5.1), and surrounds hard and soft activation - the metrics introduced in section 4.4.1.

Table 5.1: The initial data for the Bokio application.

Registered Companies	Soft activation	Hard activation
10595	5201	3178

It's important to consider that these numbers aren't calculated in the same way as the activation metrics that was developed and used in later phases, and therefore these numbers can't be compared to them. One crucial difference is that this data is based on company activation, and the developed activation system is based on user activation, since a user can be connected with several companies. However, it gave a hint on how the current behaviour looks like. As also mentioned, different tools offered by Google Analytics were used to understand the current status of the user behaviour. Interesting findings was that active users tend to use the mobile version of Bokio to a higher extent than non-active users. Also, the user flow analysis showed

that there exists no major bottlenecks during the first visit at Bokio. The first visit didn't offer a clear path through the application, since users tend to explore the application in their own manner.

5.1.2 Onboarding Teardown

The onboarding teardown ended up in a 190 pages long slideshow, which in detail explained the inconsistencies in the current onboarding process. The slideshow is organized in chronological order, based on the sequence of actions that a user have to perform in order to be familiar with the application. The final result of the teardown was a set of key findings.

- There is no structured path through the application during the first visit. The user have to explore it by herself.
- The trial version that Bokio is offering isn't a trial. It's just an account where you do work without saving it.
- There is no help provided when it's needed. It would be suitable to inform the user at critical sections.
- The section where the user is photographing a receipt and the Bokio application then automatize the bookkeeping, is the major strength of the application. However, it's hidden behind several steps and there is no clear path to discover it.
- Account activation is just a method to save the already entered information.
- There is no clear goal with the first visit. As a user, you are just thrown into it.

5.1.3 Interviews

In total, four interviews were conducted. The interview template was developed as a foundation, but the style of the interviews was semi-structured - every interview wasn't identical. The given situation also mattered, since most interviews was conducted over telephone. However, the interviews gave valuable information regarding users and their relation to Bokio. The transcriptions of the interviews can be found in Appendix A.

What's striking after the interviews, is that all of the interviewees describes that Bokio is simplifying their financial labour. Almost all of the interview subjects responded that accounting is a boring task that they rather not spend time with. Since the features that atomizes the process exist, they can spend more time on tasks that are more connected to their business. One interviewee responded that Bokio gives him more freedom, and that he can do things on the run. This due to the mobile features, and especially the receipt scanner. The receipt scanner is also mentioned by other interview subjects as a feature that surprised them, and one user even mentions that it was the single reason that he switched to Bokio. Other moments, that can be defined as switching moments, was the need for something that isn't limited

to platforms that used Windows. Also, the urge for simpler solutions was important.

In short, the key findings from the four conducted interviews was that the interview subjects looked for a simpler accounting platform, and that the free charge model of Bokio made them test. The freedom that Bokio offered made them hooked, and the features with receipt scanning and atomized accounting impressed them to that extent that they wanted to stay.

5.2 Ideation

This section will discuss the ideation phase, which is the process of formulating requirements based on all of the information gathered in the inspiration phase.

5.2.1 Compile Knowledge

The results from all of the previously conducted user studies was collected in the knowledge compilation phase. All interesting findings were collected and sorted using the KJ evaluation method. In total, 16 different statements were developed. Some of these statements can be described as an umbrella term for the different findings in each category. These eventually lead to insight statements which are listed below. An insight statement is, as previously described, a rephrasing of the category to a format that easier articulates the different needs.

- **Bokio stores invoices and receipts digitally.**
    1. Users like to store their receipts and invoices in a digital format.
    2. Users doesn't seem to use the receipt inbox that much.
    3. Users have to store the original receipt and invoice.

- **Users finds Bokio from Google and from friends.**
    1. The only marketing channel used is Search engine optimization.
    2. Pleased users tend to recommend others about the service.
    3. Using even more SEO, Bokio can be present in the moment where users are motivated to switch.

- **Users enjoys modern and automated bookkeeping.**
    1. Modern bookkeeping is the part where most users realizes that Bokio is worth using.
    2. Modern bookkeeping have to be even more present during the user's first session.
    3. To demonstrate modern bookkeeping, there should be possible to test using a demo receipt.

- **Bokio stores invoices and receipts digitally.**
    1. Users like to store their receipts and invoices in a digital format.
    2. Users doesn't seem to use the receipt inbox that much.
    3. Users have to store the original receipt and invoice.

- **The average user.**
    1. A male, 30-39 years old and living in a large city.
    2. Having experience within IT. Not so much experience with bookkeeping.
    3. The average user have easier to understand the advantages with automatization, due to his experience in technology.

- **Users tries Bokio because it is for free.**
    1. A free service makes the testing threshold very low.
    2. A free service might create a worry that there are hidden fees.
    3. Users are very curious why Bokio is free.

- **Bokio is inflexible.**
    1. There is little to non possibility to customize the service according to personal needs.
    2. Experienced bookkeepers might be irritated. They want to customize it according to old usage.

- **Bokio is simple.**
    1. The easiness comes with the lack in flexibility.

- **Users lacks competence in accounting.**
    1. The average user have very little experience with bookkeeping.
    2. The easiness in use, can harm some users since they won't learn how to do it for real. As soon a problem occurs, they have hard to know how to do it.
    3. Users have to be educated.

- **The competitors to Bokio are complicated.**
    1. When users want to switch, they are disappointed with their current system and highly motivated to find a new one.
    2. Users finds Bokio by searching for alternatives to their current system.
    3. Competitors are used by tradition in most cases.

- **Users have routines regarding their bookkeeping.**

1. By developing routines surrounding the usage of Bokio, the usage becomes more frequent.
2. There are laws that says that users have to be active users.
3. Small companies regularly wait until "the last day" to bookkeep.

- **The first usage is faltering.**
  1. Users might wait until a new bookkeeping year before starting with Bokio.
  2. Users want to try the service with a fake company, until they feel ready to start for real.

- **There exists a couple of obstacles during the first visit.**
  1. Inexperienced users lacks a good startup routine, including help and tutorials.
  2. When the import feature is working properly, users can avoid the clean slate.
  3. When the import feature doesn't work, the support have to be fast and helpful.

- **Bookkeeping is boring.**
  1. Users describes that Bokio makes bookkeeping funny.
  2. People don't want to spend time on bookkeeping.
  3. A lot of people are being fined because they forget to bookkeep.

- **Bokio impresses during the first usage.**
  1. The first impression of Bokio was very good, according to active users.
  2. Active users realizes fast that Bokio is something to continue to use.

- **Mobile usage.**
  1. The mobile usage is really low compared to desktop usage.
  2. Active users says that they uses the mobile regularly.
  3. Mobile users likes the possibility to bookkeep "on the run".

- **Problem to activate users.**
  1. Problem to activate users to a real extent (Only 37.5%).
  2. Due to the bookkeeping law, users have to be active.

These insight statements went through another round of rephrasing, where they were written with a sentence starting with "How might we". The "How might we"

statements are questions that, if all fulfilled, will contribute to an optimal onboarding. These statements were later prioritized.

5.2.2 Requirements

The total collection of requirements, their priority and in which onboarding phase they belong are displayed below. All the requirements have been prioritized based on how important they are. Due to the time constraint, all requirements cannot be fulfilled and therefore a prioritization had to be done in order to make the project focus on the most relevant tasks. For example, all of the requirements belonging to the Convince phase have gotten a low priority. Since the Convince phase treats topic that derives to marketing and psychology, they weren't the primary object of study.

Table 5.2: Requirements belonging to the Convince phase

CONVICE	Priority
1.1 The landing page should be transparent about the revenue model	Low
1.2 The landing page should show how Bokio earns money	Low
1.3 The landing page should show usage data	Low
1.4 The landing page should be designed so it will lead the user to a section where the user can chose to try it out	Low
1.5 The landing page should not force the user to take action	Low

Table 5.4: Requirements belonging to the Invest phase

INVEST	Priority
3.1 The Bokio application should describe the import feature initially	Mid
3.2 The Bokio application should offer an import feature for previous labour that is easy to understand	Mid
3.3 The Bokio application should offer customization possibilities	Low
3.4 The Bokio application should offer an import feature tailored for recently started companies	Low
3.5 The Bokio application should make users proceed, even if the import feature isn't working properly.	Low
3.6 The Bokio application should offer different onboarding flows based on different customer segments.	Low
3.7 The Bokio application should ask users how confident they are in regards to bookkeeping.	Low
3.8 The Bokio application should offer a simple feature for transferring receipts to the application.	Low

Table 5.3: Requirements belonging to the Understand phase

UNDERSTAND	Priority
2.1 The Bokio application should force new users to test modern bookkeeping	High
2.2 The Bokio application should make sure that users understand what the atomisation actually does	High
2.3 Advanced users should explore the Bokio application as soon as possible	High
2.4 Users of the Bokio application should experience the simplicity	High
2.5 Users with previous experience with accounting should understand that the Bokio application is more efficient	High
2.6 The Bokio application should assist inexperienced users during the first session	High
2.7 The Bokio application should offer a trial session where users can experiment with test data	High
2.8 The Bokio application should lead new user towards the first bookkept receipt	High
2.9 Users of the Bokio application should be surprised by how simple and easy Bokio is	High
2.10 The Bokio application should the relevant tools during the first session	High
2.11 The Bokio application should make use of lots of positive feedback during the first session	Mid
2.12 The Bokio application should guarantee that modern bookkeeping works properly during the first usage.	Mid
2.13 The Bokio application should demonstrate how the automation process works	Mid
2.14 The Bokio application should offer demo receipts to test with	Mid
2.15 Users of the Bokio application should experience how much time that can be saved	Low
2.16 The Bokio application should let users skip the startup routine	Low

Table 5.5: Requirements belonging to the Educate phase

EDUCATE	Priority
4.1 The Bokio application should introduce the help section	High
4.2 The Bokio application should make to users realize that bookkeeping on the run is a time saver	High
4.3 The Bokio application should introduce digital storing of receipts and invoices.	Mid
4.4 The Bokio application should introduce the receipt inbox	Mid
4.5 The Bokio application should teach advanced users a new accounting approach	Mid
4.6 The Bokio application should show help sections when it's needed	Mid
4.7 The Bokio application should promote users to search for help when they are uncertain about something	Mid
4.8 The Bokio application should make it possible for users to undo things.	Mid
4.9 The Bokio application should educate users of the difference between the storing of digital and physical receipts.	Low
4.10 The Bokio application should educate the user of the value of organizing documents.	Low
4.11 The Bokio application should propose routines for users	Low

Table 5.6: Requirements belonging to the Activate phase

ACTIVATE	Priority
5.1 The Bokio application should advertise the mobile application	High
5.2 The Bokio application should make users saving a bookmark on the home screen of their mobile phone.	High
5.3 The Bokio application should remind users of the mobile version.	High
5.4 The Bokio application should remind users of the receipt inbox	Mid
5.5 The Bokio application should help users to develop routines	Mid
5.6 The Bokio application should provide cues, which will be sent to new users in order for them to take actions.	Mid
5.7 The Bokio application should include share features	Low
5.8 The Bokio application should push notifications to users to remind them.	Low
5.9 The Bokio application should get users to visit the application frequently in order to coordinate.	Low

5.2.3 Personas

The ambition with the personas was to capture four different extremes in regards to bookkeeping experience and technical competence. Together, the personas and the company they are connected to, would help in designing an onboarding flow in which all their weaknesses and strengths would be taken into account. The personas can be seen completely in Appendix C

5.3 Implementation

The implementation phase became the most time consuming phase in this thesis. However, this was expected since the last level of the prototypes became to realize them through programming. The first step was to create an easy reviewable key path scenario. This was realized as a flow chart. This flowchart were later transferred into a prototype in Balsamic Mockups, which made it interactive. Finally, a selection of the interesting parts of this flowchart prototype were implemented and tested independently from each other through quantitative A/B tests, in order to evaluate their rate of success.

5.3.1 Key Path Scenarios

The key path consists of different activities related to the different onboarding phases that have been developed in this thesis. These activities differs from requirements, since they are a solution which will take the requirements into consideration. Important to state once again, is that the key path scenario isn't a successful solution. It's a prototype, and it can be said to be a proposal to the solution. However, since the final result of this thesis is a quantitative evaluation of different onboarding practises with origin in previous research, the key path scenario isn't elaborated and evaluated to no further extent. It can be said to be a method for identifying onboarding practises that later will be tested independently. Thus, this method was proper in showing where the different techniques should be applied.

The developed key path scenario went through several iterations, before it was sufficiently elaborated and ready to be realized in an interactive prototype. Below in figure (5.1), the final key-path is visualized.

The only activity in the Convince phase, is "Visit Start page". The reasons are duplex; partly because this thesis omits practises related to marketing and acquisition and partly to the few activities that actually is actionable when visiting a start page. Users tend to only browse for convincing information on which they later take a decision whether the service is worth exploring further. This is explained in detail by Samuel Hulick in his book "The Elements of Onboarding [Hulick, 2014].

The goal of the Understand phase is to build motivation for the user, by letting him or her perform a series of actions where ultimate result is the feeling of accomplish-
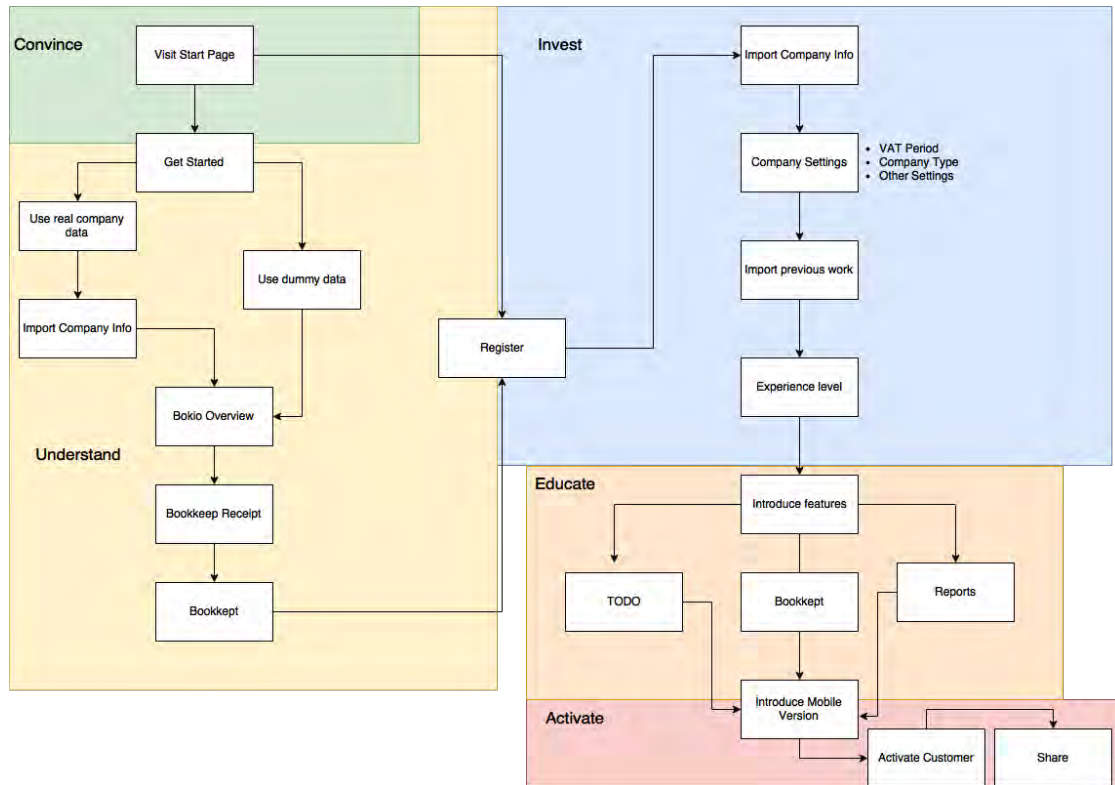
Figure 5.1: The key-path scenario developed. The five phases are displayed togheter with activities belonging to these

ment. The research study indicated that users, if not immediately, understood the strength of Bokio after the first post entered in the book. Therefore, that activity would be what the whole Understand segment would lead to. As one can see in the flowchart, the "Bookkeep Receipt" activity isn't the only activity in the Understand phase. One can also see a branched step, where the user can choose between using real company data or dummy data. Findings from the research phase indicated that users tend to create a parallel company in Bokio (Bokio supports several company connected to one user). The reason for the parallel company was to explore the service without the risk of doing anything wrong. Therefore, the new Bokio onboarding flow would support this behaviour by offering the possibility to try out Bokio with demo data. Important to understand is that the complete Understand phase can be done without registering an account. The reason for this, is because a register flow is a point of friction. By easing the first session of Bokio, the registration flow won't appear until the peak of motivation have been reached. However, eager users can choose to register right away.

The Invest phase begins when the user starts to enter information in order to register an account. Optimally, this would happen when the level of motivation level is as high enough. The user have experienced all of the great parts of Bokio before deciding, and hopefully this means that the user will spend time to enter all of the mandatory credentials that a registration flow implies. The ambition is that the first encounter with Bokio, during the Understand phase, have been so well executed that

the user can invest even more time in signing up. This will make use of the IKEA factor [Norton et al., 2012], since users who invest more time in a service tend to stick with it for a longer time. However, this is very important balance and there is no right or wrong nor a general solution for all users. In this key path, all of the settings that is mandatory in order to start the accounting will be entered during the Invest phase.

The user have through the first three phases gotten convinced that Bokio is worth to explore further, have experienced the strength of Bokio and have invested time in entering all relevant information in regards to the company. What follows is the Educate phase, where the user will explore the rest of the application in order to see what else that it offers. This is part of the onboarding flow as well, but one have to be even more careful in leading the user in this phase, since one can accidentally make users feel stupid, which is a condition that should be avoided. The Educate proceeds during the complete first session of the Bokio application. This doesn't mean that users will stop being educated after the first session. However, the Educate phase results in the Activate phase where users will be reminded to come back.

In the research study, it became clear that users who uses the mobile version of the Bokio application is more inclined to use Bokio more actively. Therefore, one crucial way to activate users is to advertise the mobile version of the application. If this is done correctly, the user will understand that all of the strength with Bokio is reachable from an ordinary smartphone. This can result in a behavioural change where users can register their expenses immediately. Apart from advertising the mobile version of the application, other activation methods exist. In the key path scenario developed, the generic activity "Activate Customer" is used, and these activities is everything that happens in between the user ends her first session and starts her second one. The activity "Share" is also part of the Activate phase. The idea with this is to let users who have enjoyed Bokio to tell their friends about the app.

5.3.2 Prototyping

The prototype was developed in Balsamic Mockups, a computer software that enhances the development of interactive prototypes. The goal was to develop a prototype that consisted of different onboarding and behavioural practises, but should still correspond to the key path scenario. The idea was to explore how a flow could be realized, and by making use of its interactivity - have a discussion whether certain solutions would be better or not.

The prototype focused on two of the five onboarding phases of this thesis - Understand and Invest. It became clear that these two phases would be most suitable to begin with, since they explores the possibility of gaining and maintaining momentum during a first session. It's also the two phases that easiest can be directed, due to the progressive manner of getting to know an application and later be a registered user. As explained in the previous section, the Understand phase is about leading the user

through a series of tasks in order to gain momentum and to ultimately achieve a success. This can be seen as a sequential process. The Invest phase mostly consists of signing up to a service, and is by default a sequential process.

The figures below shows the key parts of the prototype, which combined together will form the onboarding flow for this stage of the onboarding flow. This version of the prototype is about exploring and experimenting different practises and their optimal positioning and timing. Figure (5.2) shows the initial part of the onboarding flow. Every user will start by entering the company name, in order to make users work on something that matters. If the company name can be found, which means that it exists in the national company databases, it will also import the relevant information regarding the company. However, the main purpose of this section is to let the user decide if he or she wants to register an account immediately or start by exploring the application impartially.
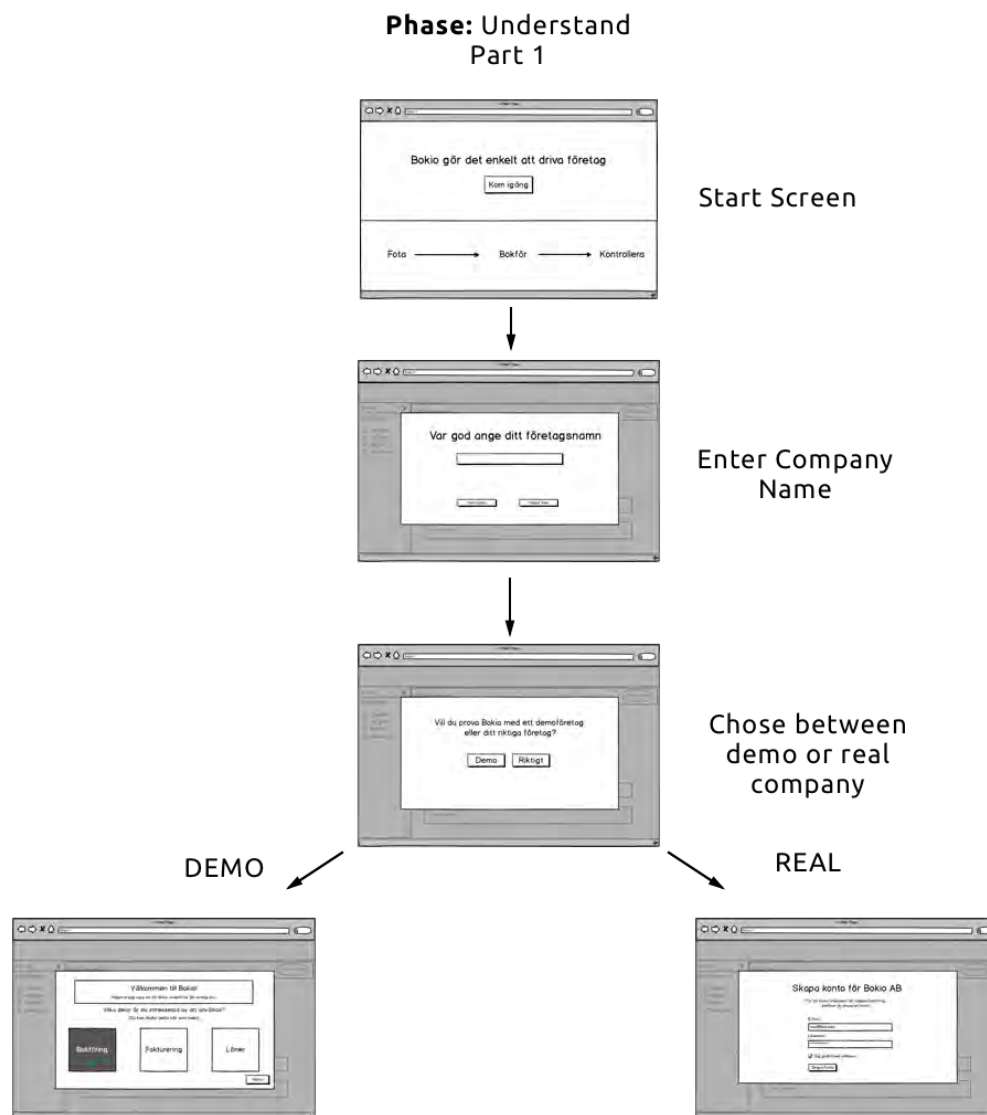
Figure 5.2: The initial steps of the onboarding process

If the user selects to test Bokio during a demo session, he or she will be greeted by the system and then decide to explore the application though a demo tour or not. This choice leads to an onboarding tooltip guide will explain the key features of Bokio and lead the user through the accounting part of the application, since this thesis only focuses on onboarding of the accounting part. Not only a tooltip guide will lead the user through the application; an onboarding todo list will also be displayed. The onboarding todo is a method where the system recommends a series of task in order to be familiar with the application. In the onboarding todo, the first two items are already completed. This is a way to make use of the endowed progress effect, an effect where one make use of the human instinct of striving towards completion [Hulick, 2014]. Altogether the onboarding todo and the onboarding tooltip guide will lead the user towards the first bookkept receipt. The duality of onboarding techniques at this stage will ensure that users will understand what the first actions will be. Figure (5.3) displays this section.
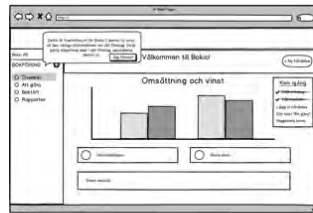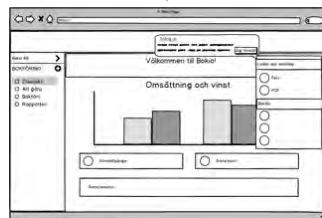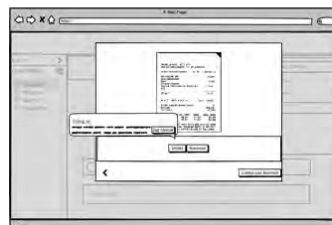
Figure 5.3: The user can chose if he or she wants to be guided during the first encountering with the Bokio application

In figure (5.4) the next series of action is exposed, which mostly is a continuation of the previous task. The user have uploaded a receipt to Bokio. Instead of entering the receipt in the book directly, the system recommends the close button. This is a way of letting the user discover the Todo section of the application naturally; the section where every uncompleted task will be collected. This is a different todo list than the onboarding todo. One can also notice that another task have been completed in the onboarding todo. Finally, the user selects the new item added in the Bokio todo list, and will be guided towards the bookkeeping section.
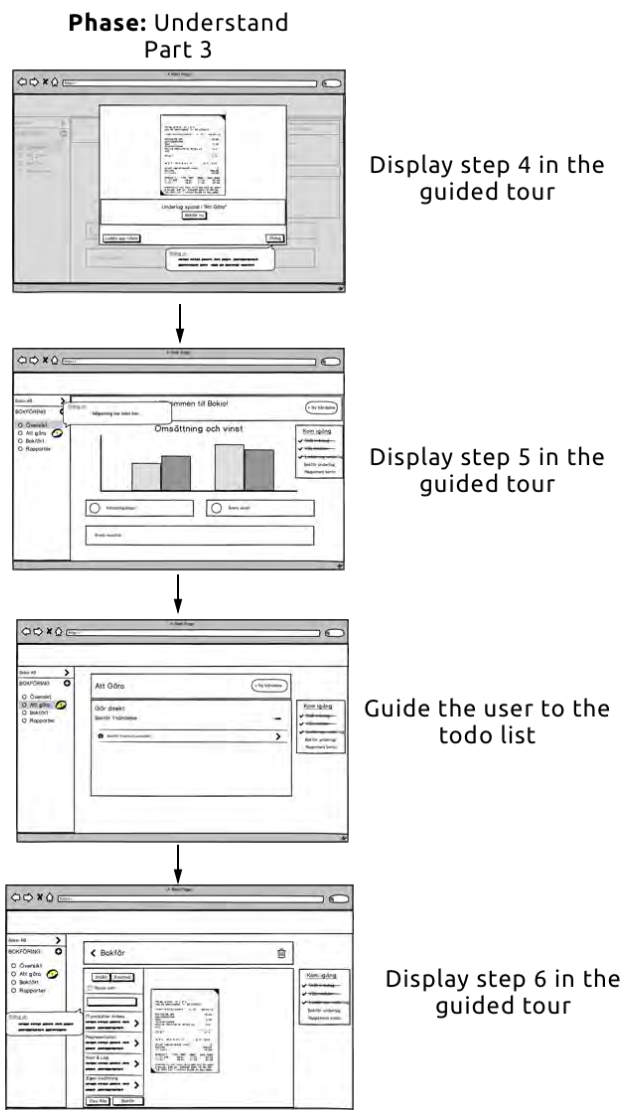
Figure 5.4: A user have uploaded the first receipt, and visits the todo section in the menu (different from the onboarding todo)

What follows in the onboarding flow, is the last actions of the Understand phase. The user will be lead through the automatic bookkeeping section, and when the first receipt is entered in the financial book the system celebrates the user and asks if the user is ready to register an account. This will be the end of the Understand phase, and the motivational peak. The ambition is that the user in this stage have realized that Bokio is an accounting application that they are ready to invest some time in. Figure (5.5) shows these last steps of the Understand phase.
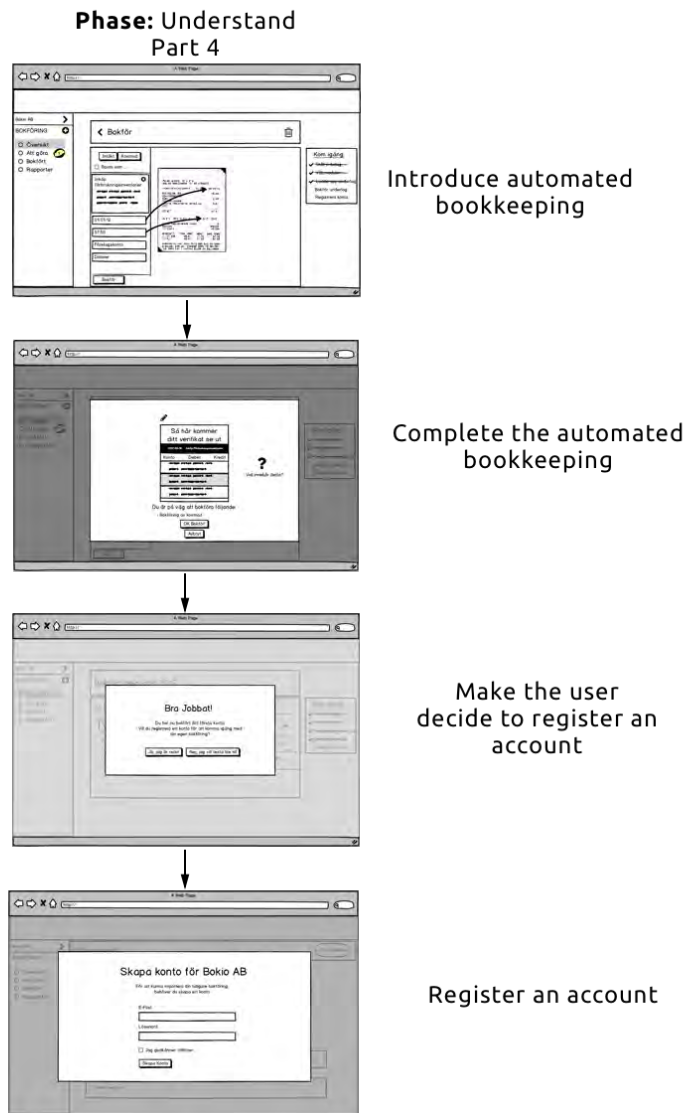
Figure 5.5: The final steps in the Understand phase. The user successfully enters the first receipt in the book.

The Invest phase takes off when the registration flow begins. The registration section is displayed on top of the Bokio application. Furthermore, the endowed progress effect is used here as well, where the registration flow includes tasks to complete in order to be a registered user. The registration flow consists at first of entering e-mail address and password. These credentials have to be confirmed by the users, by entering a four digit long code in a text field. This is a method used currently in the Bokio application, and the onboarding teardown performed at an early stage concluded that it was a decent method of confirming an e-mail address. However, confirmation of e-mail addresses is a common point of distraction and will let the user leave the platform. By entering a code, which is received through an e-mail, users can quickly return. The Invest phase proceeds by letting the users enter the type of company the user has and what kind of bookkeeping method they use. These are settings that are mandatory in the Bokio application in order to start bookkeep,
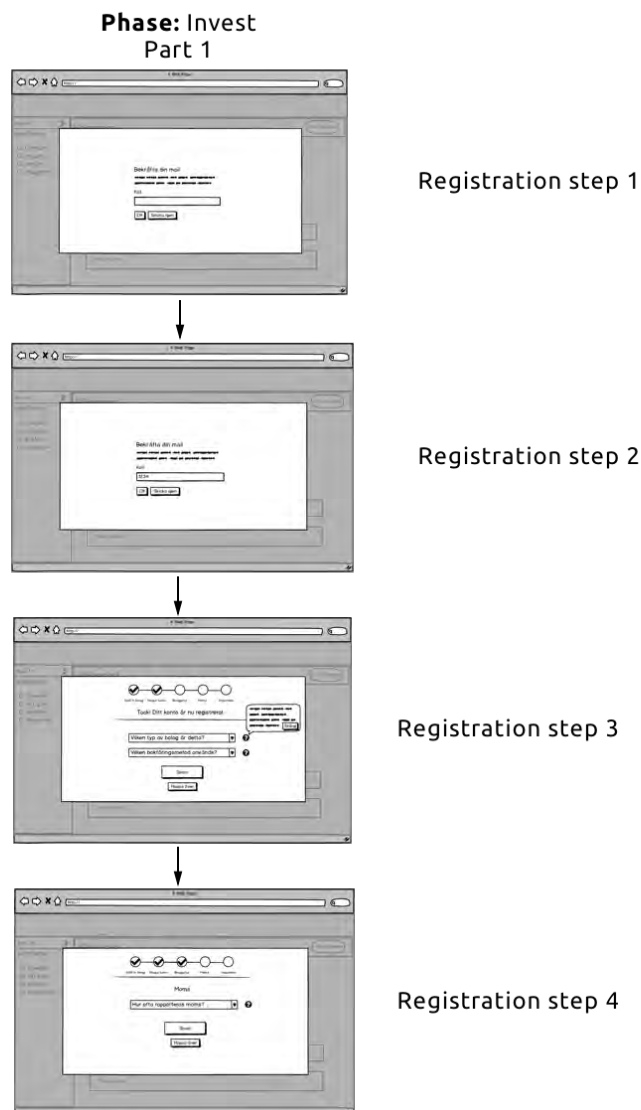
Figure 5.6: The Invest phase consists of an registration flow, where the user also can enter all relevant settings in Bokio.

but they are currently displayed to the user when they are about to enter their first post in the book. Figure (5.6) displays these steps.

Ultimately, the last steps of the onboarding prototype consists of letting the user import previous bookkeeping, if he or she have done any previous accounting labour. There exists different methods in Bokio to import previous work. Either you import files that contains bookkeeping information. Users can also paste bank transaction history into Bokio, which processes it and creates posts in Bokio. Both these methods should be accessible to new users of Bokio at their first session, but it should also be possible to skip. In Figure (5.7) these last steps are displayed.
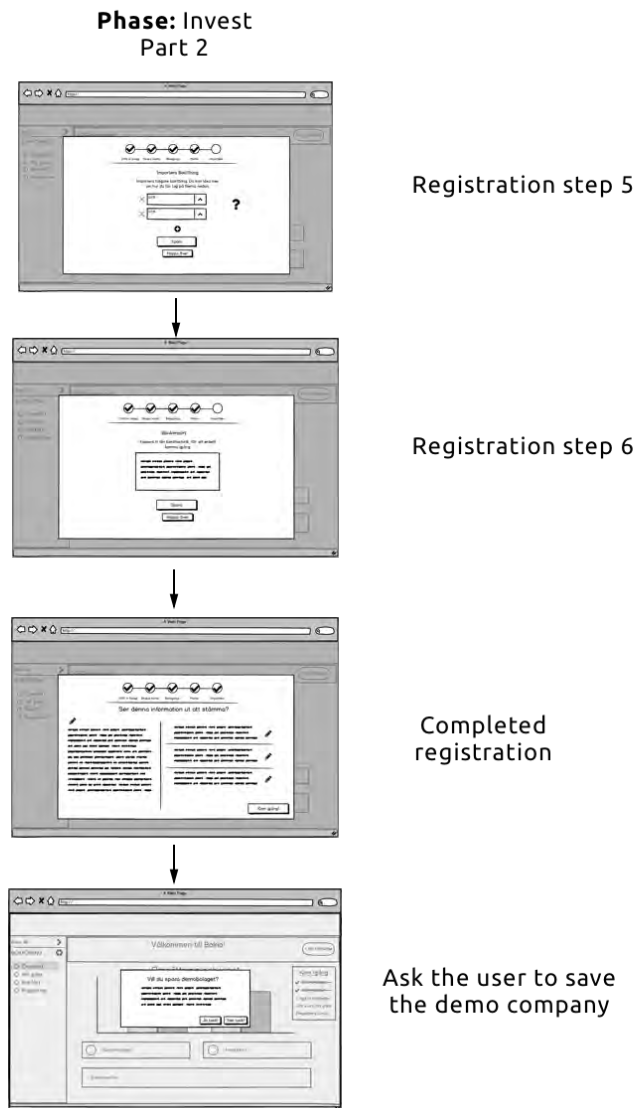
Figure 5.7: The final steps of the Invest phase. The users can import previous labour, and decide if the demo company will be kept or not.

This is the prototype of the onboarding flow, and as can be seen a wide range of different practises have been used in order to be able to onboard users better to the application. A selection of these practises will be implemented and ultimately tested in the real setting, in order to investigate how successful they are.

5.3.3 Onboarding Implementation

In total, three different iterations of onboarding implementations were tested. Due to the time period of this project, it became clear that it wasn't possible to A/B test all of the parts in the onboarding flow prototype. Every part had to be tested independently from each other, to ensure that the tested variable was isolated as much as possible. Therefore, it was decided that the parts put to test would all be leading the users towards the first bookkept receipt. This is the climax of the

Understand phase, and of great interest when investigating how a user can become active. Since a completed Understand phase results in the first bookkept receipt, the idea was that the persistent impression of that experience would decide whether the user returns or not.

The implementation have been realized using Visual Studio as the programming environment. The programming language for the frontend development have been Javascript, and the framework have been AngularJS. Together with Javascript, HTML and CSS have been used for styling and templating. On the backend, C have been used. The framework for gathering data was Google Analytics, and the framework for performing the A/B experiments was Google Optimize.

5.3.3.1 Overview Screen Implementation

The first implementation was a pilot test where the purpose was to investigate weather the A/B testing suite was sufficient enough. The first implementation was also a proper time to test how users would act if the onboarding was scaled down to a level where its only purpose is to direct the user towards the bookkeeping part. This means that the overview screen, which is the first screen the users sees after entering the Bokio application, would consist of as little information as possible. The idea was that the only action possible to the users would be to press the new event button.

The first test included three different variants. The test was executed using an external A/B test platform named Google Optimize. This platform makes it possible to run several different implementation variants in parallel. The users who are eligible to the tests, which in this case were users that hadn't bookkept a receipt previously, would be exposed to one of the three variant implemented. The users would only see that variant one during the time period of the test. Based on the actions of all users that participates in the tests, and their behaviour when it comes to soft and hard activation, the success rate of each variant could be measured. In short, the experiments were performed using real implementations in the real setting. Also, the users were completely unaware that participated in the experiment. More on how the tests was conducted can be read in section 4.4.1.

The three versions tested can be seen in figure (5.8). The difference between Variant 1 and Variant 2, is that the second variant includes the instruction video that Bokio offers to their users. However, Variant 2 only relies on the messages in the video, while Variant 1 contains no instructions at all rather then a simple call-to-action. The call-to-action is a label which tells the user that he or she should create a first event.
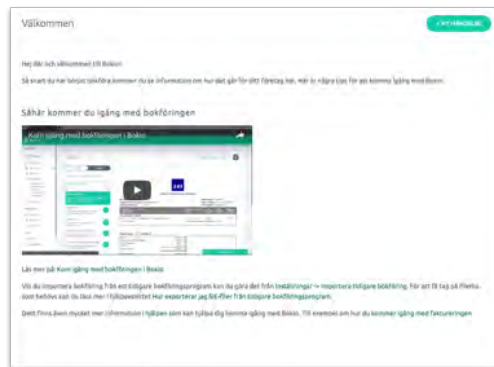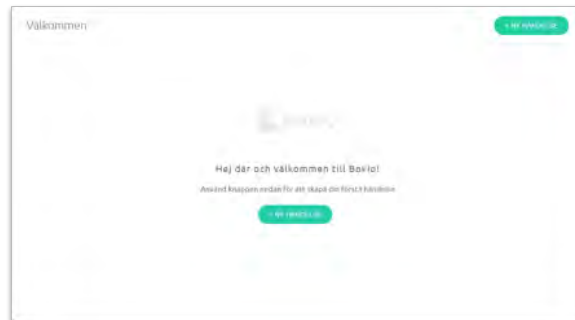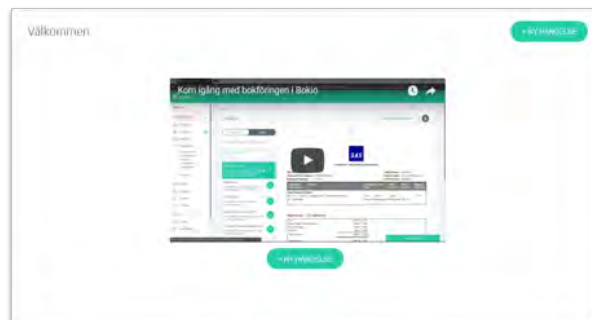
Figure 5.8: The different versions in the first implementation

5.3.3.2 Onboarding Tour Implementation

The second implementation of the onboarding practises was the onboarding tour, which origins from the interactive prototype. The purpose with the onboarding tour was to introduce the key features of Bokio, and as all of the other implementations, the ambition was to lead the user towards the first bookkept receipt. The onboarding tour resulted in five different steps which leads the user from the initial overview screen, through the bookkeeping section and terminates by introducing the help section. Note that the onboarding tour won't conclude in a dialog which asks the user to register an account. The reason is that the new registration flow (the Invest phase) wasn't implemented, and therefore the users already was registered. The Bokio application didn't provided an opportunity for users to explore the application without creating an account.

The onboarding tour dialogues consisted of a heading and a message. There is two ways to close the dialog, the user can press the close button in the dialogues. This will make this step of the dialog to disappear. Also, if the user decides to perform the action that the dialog suggests. For example, if the dialog suggests that the users would press a button and the user also does this - the dialog will disappear. This is because the onboarding tour should proceed.

The onboarding tour can't be turned off, which forces the user to finalize the onboarding tour. However, the user don't have to explore the application according to the path the onboarding tour recommends. The onboarding tour only recommends a path through the application. Therefore, the user can decide to explore it in another fashion if he or she wants to do it. However, since the onboarding tour can't be turned off, the dialogues have to be experienced. Also, the messages inside the onboarding tour dialogues would be friendly and appeal to the emotions of the user. It would behave like a conversation between the system and the user. These three steps can be seen in figure (5.9).

The onboarding tour is presented to the user after he or she have registered an account. The first step will be presented immediately after a completion of the registration process, and this step is displayed in Figure (5.9), and annotated step 1. This is the section a user is directed to after a completed sign-up process and it's the screen that were explored in the first experiment. The dialog in this screen asks the user if he or she is ready to simplify their bookkeeping, and by pressing the new event button they will get started. This takes the user to the screen where the user can select what kind of material they want to upload, which is displayed in Figure (5.9) and annotated as step 2. These two steps are directly after each other, but the third step isn't displayed until the user have uploaded the receipt completely and decided to bookkeep it. This step is displayed in Figure 5.9 and annotated as step 3. Since this is the first post a user will enter in the book, the user have to enter additional information in order to proceed. This is the information that have been moved to the Invest phase in the prototype. However, when the company and accounting settings are completed, the user will get to the bookkeeping section. This is where the third dialog will be displayed.
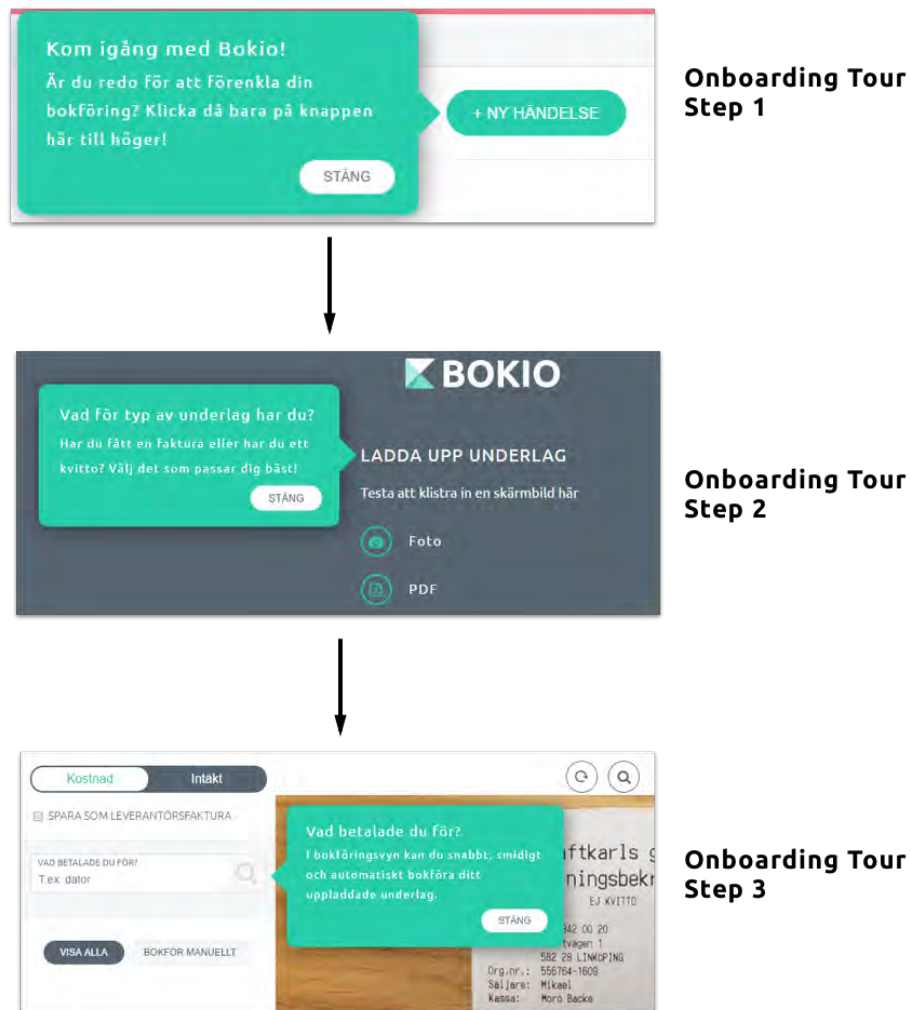
Figure 5.9: The first three steps of the onboarding tour

Since the process to bookkeep a receipt is an incremental flow by itself, and the part that was most appreciated, it was decided that it didn't need any additional supporting onboarding dialogues. Therefore is the next dialog displayed right before the user is about to confirm the first verification. This dialog makes use of positive feedback, and alludes to the emotions of the user. This dialog is the fourth step and can bee seen in Figure (5.10), The heading of the dialog is a clear text which is speaking directly to the user. The message in the center is expressing to the user how easy it is to bookkeep with Bokio. When a user proceeds from this view or presses the close button, the last and fifth dialog shows up, which as well can be seen in Figure (5.10). It presents the help section, where the user can search for additional help information. Figure (5.11) displays a flow chart on how the onboarding tour is designed.
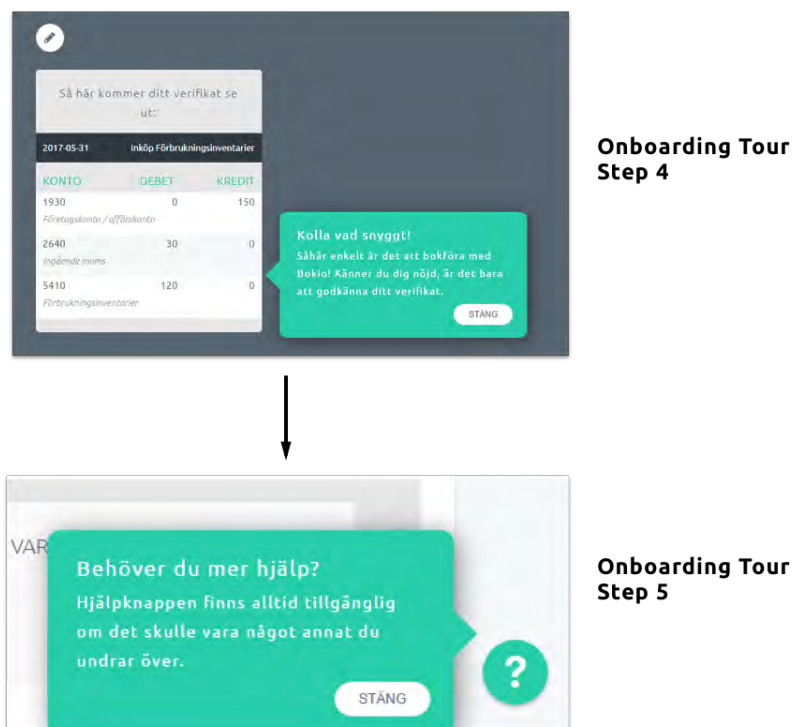
Figure 5.10: The last two steps of the onboarding tour
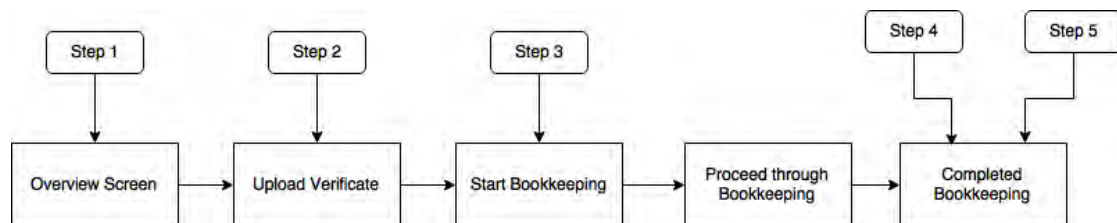
Figure 5.11: The last two steps of the onboarding tour

5.3.3.3 Onboarding Todo Implementation

The third onboarding practise implemented is the onboarding todo list, which can be seen in Figure (5.12). The onboarding todo in it's context can be seen in Figure (5.13). The method offers a more subtle guidance through the application. Rather than forcing a user to take action, by pointing where the next recommended action is, the onboarding todo gives a set of recommended actions that will have the user to explore the application. The idea is that the user will get to explore and understand the application without hesitation, and that the human endeavor towards completion will make the user to do all of tasks. The endowed progress effect is used as well, since the first two tasks in the onboarding todo are already completed. These are tasks that the user have completed without they knowing it. The desired effect is

that users will understand that they are very close to have a complete understanding of the application, and will therefore complete it. By completing the tasks of the onboarding todo, the user will perform the exact same tasks as in the onboarding tour. The onboarding todo will also guide the user to the section where every post entered in the book is accessible. When a user have visited this section, the onboarding todo is completed and the onboarding todo window transforms into an introduction of the help section. After this, the user can press done and the onboarding is completed. This means that the user have successfully entered their first post in the book, checked how it looks when it's competed and been introduced to the help section.
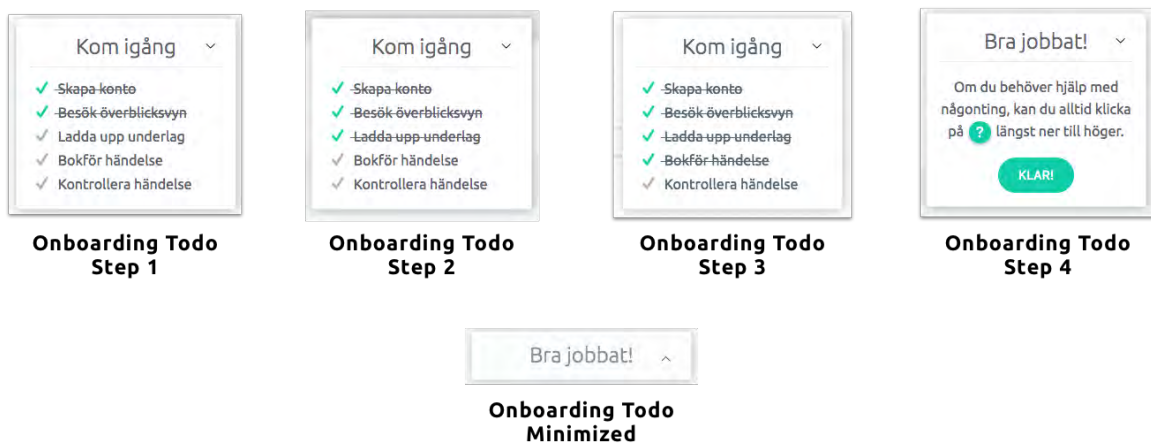
Figure 5.12: The different steps of the onboarding todo.
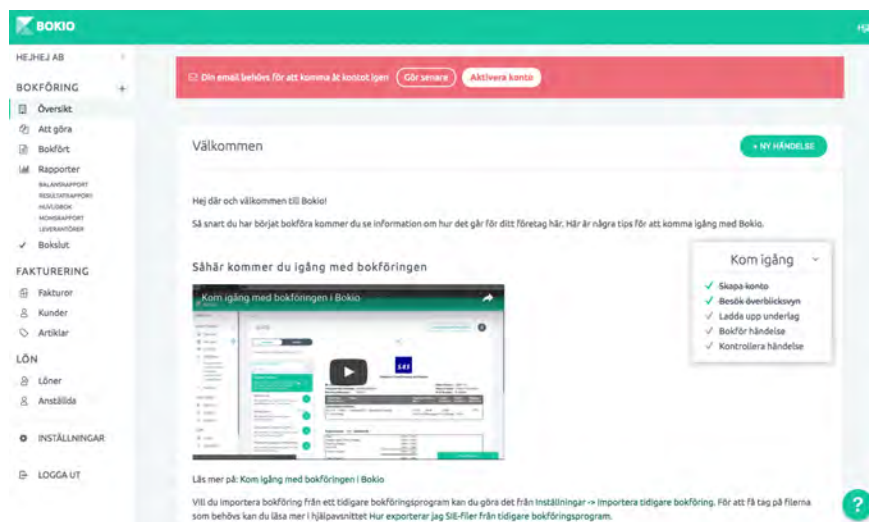
Figure 5.13: The onboarding todo list in its context

5.4 Evaluation

The only evaluation method used in this thesis is A/B testing. A/B testing is quantitative evaluation method, where real users gets the opportunity to test the implementation. The users are unaware that they are being exposed to a test, and the users are divided in equally large groups and each group are being exposed to either one of the test variants or the original implementation. The users shouldn't be able to switch between different versions. However, the solution of A/B testing implemented in this thesis is a prototype solution were the test variant for each user is based on the device they are using. If a user switches desktop device before they are fully onboarded according to the given solution, there is a possibility that they see another solution. However, as mentioned previously, the assumption is that users are being onboarded on one device before spreading their usage on different devices.

5.4.1 A/B Testing

Three tests were performed, and the implementations were the ones described in the Onboarding Implementation section. The tests lasted for different periods of time, but with a minimum of three weeks. This time period wasn't enough to achieve results where one experiment was significantly better than another. Therefore, the experiment got terminated when the result could be observed. An observed result was when the differences between the tested variants seemed to be the same for several days in a row. In these experiments, a confidence interval of 95% have been used to determine significance. This means in practise, that if one can calculate that a variant is better than another with a certainty of 95%, that experiment is significant. Important to understand when presenting the data below, is that the first table in each experiment shows the total number of users that have completed activation goals. Therefore, the users that have been hard activated are also soft activated, since it's a requirement to fulfill the goal.

5.4.1.1 Overview Screen Experiment

Table 5.7: The results of Overview Screen Experiment

Variant	Test Subjects	Soft Activation	Hard Activation
Original	887	247	105
Variant 1	840	239	90
Variant 2	830	203	79

Table 5.8: The conversion rates of the Overview Screen Experiment

Variant	Conversion rate (Register to Soft)	Conversion rate (Soft to Hard)
Original	28%	43%
Variant 1	28%	38%
Variant 2	24%	39%

Table (5.6) and (5.7) show the result of the first experiment, which tested the different variants of the overview screen. The result of the experiment indicated that there was no clear winner either in soft activation or hard activation. The conversion rate from registered users to soft activation was the same between the original and the first variant. However, the original variant was the best in the conversion of users from soft activation to hard activation.

5.4.1.2 Onboarding Tour Experiment

Table 5.9: The results of Onboarding Tour Experiment

Variant	Test Subjects	Soft Activation	Hard Activation
Original	896	210	74
Onboarding Tour	940	237	88

Table 5.10: The conversion rates of the Onboarding Tour Experiment

Variant	Conversion rate (Register to Soft)	Conversion rate (Soft to Hard)
Original	23%	35%
Onboarding Tour	25%	37%

The second experiment indicated that an onboarding tour would be better than not having one at all, but the difference between the two variants isn't significant.

5.4.1.3 Onboarding Todo Experiment

Table 5.11: The results of Onboarding Todo Experiment

Variant	Test Subjects	Soft Activation	Hard Activation
Original	1042	272	102
Onboarding Todo	1039	251	96

Table 5.12: The conversion rates of the Onboarding Todo Experiment

Variant	Conversion rate (Register to Soft)	Conversion rate (Soft to Hard)
Original	26%	38%
Onboarding Todo	24%	38%

The third experiment didn't turned out in a result that is significant either. The result also ended up in a tie in converting soft activated users to becoming hard activated.

6

Discussion

This chapter will consist of reflections and analysis regarding the labour and outcome of this thesis. This in order to analyze the fundamental questions regarding the research question.

6.1 Experiments

The outcome of the experiments was that is hard to draw any conclusion. Since none of the experiments resulted in significance, one can not statistically determine whether a solution was better than another. The experiments would have benefited from being active for a longer time period, since the differences between the different solutions is very small. The time a test was active couldn't be longer, since it would be difficult to launch several experiments. It was decided not to launch two experiments in parallel, since the tested variables wouldn't be isolated sufficiently. However, despite the lack of significance with a certainty of 95%, the different implementations can be discussed.

6.1.1 Overview Screen Experiment

Looking at the first experiment, where the three different variants of the overview screen were tested against each other, the final result is somewhat ambiguous. Looking at the conversion rates from registration to soft activation, the original variant and the first variant had equal conversion rates. However, the second was the worst with its conversion rate of 24 percent. The version consisting of only a video and a call-to-action button hadn't an outcome comparable to the other variants. Why this variant differed this much is hard to tell, but a theory could be that the look-and-feel of this variant wasn't as inviting as the others.

The look-and-feel of the different implementations haven't been taken into consideration in this thesis. Graphic design is a different topic than UX and interaction design, which is discussed in a blog post [Hauser, 2014]. Where graphic design is more about colours, typography and print design, interaction design is an extension focusing more on how technology communicates with the actual users. Interaction design is also a subset of the area of UX, as stated in a article [Foundation, 2016]. UX focuses more on the overall experience a user has with the product. Both interaction and UX design relies extensively on user research in order to tailor the

product to the needs of the user, and to give them the best possible experience as possible. One can say that graphic, interaction and UX design in combination is necessary to get the of the design.

Since this thesis have went through an extensive research phase, as well as a long implementation phase, the graphic design have been neglected. Therefore, the aesthetics of the implementation have fell behind. The look-and-feel have been inspired by the graphical framework developed by Bokio, but new components have been developed. They was designed with inspiration from the graphical framework. The priority of the look-and-feel wasn't as high as the actual implementation, which can have affected the result. Even if one onboarding practise is superior, the execution of its look-and-feel might have impacted the end result.

The lack of graphic design is important to keep in mind when analyzing the results from the first experiment. The variant that didn't formed as well behind, was the variant that didn't make use of standard layouting. An analysis is that the variant didn't look as inviting as the other ones, and therefore didn't perform as well. The overview screen is the first impression of the Bokio application, since it's the first screen a user encounters after a completed registration. However, the lack of qualitative evaluation methods makes it impossible to draw any of these conclusions.

The two variants using components and layouts from the graphical framework, the original variant and the call-to-action variant, performed better than the second variant. However, according to the hard activation metric, the original version was better with five points of percentage. Even if the difference isn't that striking, one analysis could be that users of an accounting software wants to take their time in understanding the application, before taking action. The first impression of the original version might be overwhelming with lots of information, but a thorough understanding of the key concepts in a slow pace seems to be beneficial. Forcing a user to take action in a system that will manage your finances can therefore be counterproductive. Therefore, the next experiment was therefore about exploring how an unforced tour through the key concepts would be.

6.1.2   Onboarding Tour Experiment

The second experiment turned out similar as the overview screen experiment, and no significant difference between the variants occured. The differences in conversion from registered account to soft activation differed with two point of percentages in favour of the onboarding tour variant. Also, in conversion from soft activation to hard activation, the difference was two points of percentage in favour to the onboarding tour variant as well.

The indication is that leading the user through the vital steps of the Bokio application results is better, but since the difference is small the results isn't statistically significant. This experiment would therefore have benefited from at least one ad-

ditional iteration, where alternative implementations of the tour could have been explored. Previously, a discussion about the value of look-and-feel have been performed, and in the second experiment the execution of the graphical design can be questioned as well. Also, since this is a more complex implementation than the variants in the first experiments, the interaction and UX design aspect of it would have benefited from shorter iterations. Shorter iteration would have contributed in exploring different design solutions without spending as much time, and therefore discard some solutions before putting them to test.

The onboarding tour elements implemented can at this date be varied in several different ways. Both the positioning, the text elements, the order and the quantity can be adjusted to suit the onboarding tour. This gives almost unlimited possibilities to tailor the tour, and to get it right during the first experiment is impossible. Therefore, at least one additional iteration of the onboarding tour should have performed. This would have lead to a result that might have varied a bit more, and therefore would have been closer to the truth. Since the second experiment only tested one implementation of the onboarding tour, and the result of the test didn't show any major difference, it's hard to conclude anything.

6.1.3   Onboarding Todo Experiment

The third and final experiment ended up in a tie between the different variants in converting soft activated users. Therefore the onboarding todo list would perform equally good as not using it at all, according to these experiments. In converting registered users to soft activated users, which means that they have bookkept their first receipt, the original variant was the best with a lead in two points of percentages.

The onboarding todo developed from the idea of creating an onboarding process which uses a less aggressive method to lead users through the key concepts of the application. The onboarding todo uses the psychology that Susan Weinchenk presents, where people want to make progress and complete things [Weinschenk, 2011]. The onboarding todo made use of the endowed progress effect, which is described in the book "The Elements of User Onboarding" [Hulick, 2014]. A hypothesis of an implementation based on the combination of these two practises, would be that users want to finalize the suggested steps, and therefore become activated.

As mentioned, the outcome of the third experiment showed that the implementation of the onboarding todo didn't differ in conversion from the original variant. The reason for this can be manifolded; the look-and-feel and the positioning could have been executed differently. This could also have resulted in better rates of conversions, but the lack of qualitative evaluation methods makes it hard to analyze this. Also, the onboarding todo list didn't isolate the different methods to a sufficient extent. It's difficult to understand if the endowed progress effect had any effect in order to activate users. A better way to test the endowed progress effect would be to have several variants of the onboarding todo, where one would include the en-

dowed progress effect and another wouldn't. This would have isolated the different methods, and contributed to give better understanding of the different methods used.

6.1.4 Summary

The three experiments showed no unisonal result, and it's therefore hard to make any major conclusions of them. What can be said is that users seem to be more activated if one lead them through a series of tasks, but the difference compared to an individual exploration is small. The experiments would have benefited from additional iterations on each onboarding method, in order to refine them and to achieve results with better distinction.

6.2 Requirements

In this thesis, several requirements were developed in order to understand where the different onboarding practices should be applied. These requirements were latter prioritized in order to put the focus on the most relevant ones. Out of all the requirements, 15 of them got the highest level of priority. The purpose of prioritizing the requirements, was to understand where to put the focus in this thesis. Every implementation of the onboarding practises should address these requirements, since they have been developed by talking to users and therefore addresses their needs. Neglecting the user when implementing the different onboarding practises would be to leave out the user perspective completely.

The developed prototype displays the intended onboarding flow including the different practises used. It was developed with the different requirements in mind. Therefore, a complete flow would address all of the different requirements. Recall the different sections of the onboarding flow in this thesis, the developed prototype didn't focus on all of these steps. The Convince phase and the Invest phase were left out, and the Understand phase, the Educate phase and the Activate Phase were the phases in focus. Therefore, the requirements in these groups got a higher priority.

One can look at the requirements developed in this thesis from two perspectives. The first perspective is to see the requirements as statements on how the product will perform. This is also the ordinary role requirements has. However, the other perspective is to see the requirements as a summary of the research phase - a perspective that have been used widely in this thesis. The reason for seeing the requirements as a summary is natural. The research phase consists of several methods in order to widen the design space. In order to compile the knowledge, several different methods were used in order to collect, sort and rephrase the information. Ultimately, requirements were formulated. Therefore, these requirements is a summary of all the information gathered.

In retrospect, this thesis would have benefited from formulating and organizing the requirements in a more structured way. This became clear, since it was difficult to

know how to approach some of them in the prototypes developed. That in turn made it difficult to approach them in the implementations that later on were put to test. The phrasings of the requirements differed a lot, where some is easy to follow up on, since the only concern a certain action. One example of this is the requirement from the Understand phase: "The Bokio application should force new users to test modern bookkeeping". This is a requirement that is easy to follow up on, in comparison to the more vague requirement formulation from the Understand phase: "Users of the Bokio application should be surprised by how simple and easy Bokio is".

How can one design an onboarding process that gets users to be surprised by the simplicity? In the book "Beyond Human Computer Interaction", the authors describes what requirements are, and specifies that a requirements should be as "specific, unambiguous and clear as possible" [Preece et al., 2001]. Requirements formulated in a similar manner as "Users of the Bokio application should be surprised by how simple and easy Bokio is" should therefore be elaborated further in order to understand how this behaviour can be achieved.

The requirements became a mix of hands-on and vague formulations. The purpose was to use the requirements to understand how and where to focus the onboarding, since they would be a concentrate of the all the information gathered during the inspiration phase. Therefore, it's difficult to decide weather they have been fulfilled with the different implementations.

7
Methodology Discussion

The methodology used in this thesis was an iterative design process with elements from both Human-Centered Design and Goal-Directed Design. During the initial literature review, it became clear that the design process had to focus on both the behaviour of the people that uses Bokio and their goals had to be taken into consideration. However, in retrospect the tailored design process should have been different, in order to achieve a better end result.

7.1   Inspiration

The performed process consisted of too many activities before starting with the prototyping phase. The ambition was to capture as much information as possible from different sources, but the thesis would have benefited from a more structured and focused research phase. The overall idea was to understand what users enjoyed the most with Bokio, and make use of that when building new onboarding features and test them. Unfortunately, many of the activities in the research phase didn't answer to that question. Therefore, lots of time were spent in research that wasn't necessary to solve the given problem.

In retrospect, more interviews should have been conducted. Also, usage of contextual inquiries would have helped in understanding the users and their relation to the Bokio application. The intention was to interview users with experience in accounting in their natural setting, but due to time issues it wasn't performed. Only one activity involving ethnographic studies with users and Bokio was performed, but it turned out to be an Ad-Hoc interview since it wasn't planned in advance.

Four interviews were performed, and all of the users were active and satisfied with the service. This gave a ambiguous image of the advantages and weaknesses with Bokio. Even if time were spent in finding inactive users, none was interest in taking part. The survey suffered from the same issue, since only active users responded to it and therefore did the result become biased. A recommendation for further work would be to spend even more time in understanding why users didn't return to Bokio. These factors would be highly interesting.

The reason for the lack of inactive users was partly due to the time spent on other research related activities, and partly due to the difficulty in reaching this user group. Especially the usage data analysis and the onboarding teardown took far

too much time to perform, and the findings of these activities wasn't as valuable as the activities that involved real users. Talking to users was the best method in understanding the factors in Bokio that makes users return. One of the central topics when designing an onboarding flow, is to understand how and why users end up with the service. This is something that is mentioned by Intercom [2016]. Also, finding the so called "switching moment" is of great interest, and one of the methods to find it is to talk to lots of users.

7.2 Ideation

The activities in the ideation phase, knowledge compilation, personas and journey mapping, was necessary in order to compile all of the research findings and transform them into requirements. However, time were spent on developing personas and in retrospect they wasn't necessary for the continuation of the project. Personas is a widely debated topic in the field of UX, and the article "Are personas past their prime?" [Travis] argues that personas became popular in development teams that never have met users. Therefore, personas became a magic method in making development teams becoming user centered, since their strength lies in communicating user needs externally. Also, one can see personas as a reminder in order to remember where to focus the design work. Since the researcher and the developer in this thesis is the same person, the awareness of the people using the Bokio application existed throughout the whole project. Therefore, it wasn't necessary to develop as detailed personas as in this project.There existed no communication of the user needs outside of the project. However, since personas can act as a reminder towards the user group, they were useful but the level of detail could have been scaled down.

The journey maps developed in this thesis focused on how the personas becomes active with the onboarding flow that Bokio offers their users currently. The reason for this was to identify the factors that users with different experiences would meet during their first encountering with Bokio. Afterwards, the focus should have lied in developing one journey maps that would affect all of the personas. This would have lead to a better usage of the journey maps.

The development of requirements consisted of several moments. The process itself was inspired from the Human-Centered design process developed from IDEO, and it consisted of the three steps of finding themes throughout affinity diagram, developing insight statements and rephrasing them into questions that prelude with "how might we" [IDEO, 2015]. By answering these, the requirements were developed . One can question if all of these steps were necessary in order to formulate the requirements. The requirement formulation process also resulted in a large quantity of requirements, which made it difficult to focus on the most important tasks. A priority list of the different requirements made it easier to focus on the correct tasks. Also, the requirements became more or less clear, and some of them are hard to decide if they are met or not. In retrospect, a better method to formulate requirements would have been chosen. A method that was more oriented towards formulating specific requirements that were more straight to the point.

7.3 Implementation

The implementation phase should have started earlier, since the real iterative labour started in this phase. Even if the two current design phases, inspiration and ideation, was necessary, a faster pace towards the implementation phase would have benefited the project. It would implied in in more structured iterations between the different design phases. Since the two preluding design phases took more time than expected, the project became a bit stressed in the implementation phase and one could not perform supplementary research and rephrasing of requirements to the extent that was pre-planned. However, the different implementations discovered several aspects of how onboarding could be performed in Bokio and concluded in interesting results. Though, the project would have benefited in better planning in order to perform more structured iterations.

In order to measure the outcome of the different experience, the different metrics had to be implemented. It was decided early on to use activation as the metrics of choice, but it didn't exist any suitable method of collecting this data. Therefore one had to build a system for the gathering of activation data. This was a time consuming task, since it had to be built to last for a long time. Also, during the implementation of the user activation system, several different problems appeared which had to be taken into consideration. Also, the user activation system had to be tested properly in order to know that it was functional. However, this was an activity that was crucial for project. Without it, one can't properly have an outcome of the different experiments.

The implementation ended up in three different onboarding practises that were used in the different experiments. Initially, the plan was to test a complete new onboarding flow to the current flow through an A/B experiment. It became clear that it wasn't possible to research, prototype, implement and test this within the time frame of the project. Therefore it was chosen to select a set of isolated onboarding practises and evaluate their effect towards an original variant. This would also give the possibility of iterating the different implementations. The different practises would be experimented with in the interactive prototype, and later implemented. When it was decided to go with this approach, the intended plan was to implement four different onboarding practises. This would also be possible, an implementation where the user could test the Bokio application using demo data was completed, but unfortunately it couldn't be put to test since it relied on parts of the application that one couldn't affect.

The implementation only affected the parts of the Understand phase. Initially, a new registration flow was planned to implement and it would be interesting to analyze how the length of the registration flow would affect the activation data. This test would have been an interesting experiment of the IKEA factor, the effect where users becomes more emotionally attached with services that they invest time with [Norton et al., 2012].

7.4 Evaluation

The only evaluation method used in this thesis was A/B testing. In retrospect, the project would have benefitted from having other evaluation methods in order to capture even more data from the tests. After the prototyping step, where an interactive prototype were developed, no evaluation method were used between it and the implementation of onboarding practises. Afterwards, it would be better if a short user test had been performed in order to do a quick iteration before starting with programming. The consequence of the lack of user tests after prototyping, would be too long iterations. Also, a Human-Centered design process depends heavily on involving users in the design process. One could argue that the involvement of users always was active, since all of the chosen design solution were exposed for long tests where a large quantity were exposed. However, their thoughts and feelings wasn't captured during these A/B tests. Only their behaviour in relation to their tendency of becoming active users.

7.4.1 A/B Testing

As briefly mentioned in the section on the results of the experiments, the experiments could have benefited from being active for a longer time period. Also, the outcome of the hard activation metric could have been measured for a period of time after the experiment got terminated. This could have lead to a results where one variant would be significantly better than the others. The problem is that the time it takes to achieve significance is hard to estimate, since it depends on the amount of participating users and their behaviour. Also, one of the metrics used to determine whether a variant was better than another was hard activation, a metric that isn't fulfilled immediately. The minimum time to fulfill this goal is 24 hours, but there is no maximum time limit. Users can be hard activated whenever they want. If one would wait until an experiment resulted in a variant being significantly better, the implementation iterations could have grown.

In retrospect, this thesis should have used different methods to evaluate the different results. The success rate of an onboarding process can be determined by observing numbers, but the understanding on why a certain practise is better won't be captured. This since you will lose the understanding of the person behind the actions. During this thesis, there have been lots of discussion about building motivation and keeping momentum, and if these assumptions turned out to be true or not is hard to know. The assumptions that were made, that a onboarding tour would lead the user until the peak of motivation and that an onboarding todo would play with the human endeavor to achieve completion, wasn't evaluated properly. Only qualitative evaluation methods would have helped to give this understanding.

Therefore, it became clear during this thesis that A/B testing isn't suitable for a project of this kind. In order to build an onboarding process, you have to understand why certain onboarding methods contributes in making users love and return to an application. The cynical numbers stating the different activation metrics gives

a hint on how a large quantity of users would act, but not why they acted like they did. The information on why users behave in a certain way when exposed to an experiment is lost, and it's therefore hard to conclude if a usability, UX and behaviour practice have helped in supporting the increase of user activation.

On the other hand, this thesis focuses on the investigation on which different onboarding that could be considered to be successful in terms of user activation. In order to measure the user activation, the only method to determine if it have increased or decreased is a quantitative analysis. By looking at the number on how users behave, and if they return to application or not, one can see if different interface or implementation changes are superior another.

7.4.2 Metrics

One can discuss how valuable activation data is when designing an onboarding process. One way to put it, the level of activation data determines the overall rate of success, but it doesn't have to be the onboarding that lead to activation. Over this thesis, it have been said that the variable of A/B testing have to be isolated sufficiently. This in order to actually measure the impact a certain implementation will have. The A/B experiments performed will show how two or more different versions will perform in relation to activation, but since the differences between the implementations didn't differ a lot, it hard to conclude anything from it. The result might be just random, since there exists no additional data to prove weather users actually have used the onboarding implemented for the test - it's difficult to follow up on it.

A better method to measure the effects of the onboarding methods, apart from performing qualitative evaluation methods, would be to develop metrics that showed the behaviour of users until they become activated. Recall the onboarding tour, where the user would be lead through a series of actions in order to bookkeep their first receipt. In this case a set of metrics could be used in order to determine whether a user actually performed each of these recommended actions. One could also develop metrics that would track the time it took for a user to get started. The list of metrics that would have given additional information regarding the user behaviour can be long, but all of them would have contributed to the final result.

The hard activation metric used to ultimately determine the effect of an onboarding implementation, took far too long to collect. This was confirmed by the increasing numbers of hard activated users during the first experiment. Even if the experiment was ended, the data on hard activated users continued to get collected. By using a set of metrics that is faster to collect, one could determine the success rate of an experiment much faster. Also, if one had made assumptions that didn't correspond to the actual usage, the experiment could have been terminated earlier. This would also have contributed to faster iterations.

7.4.3   Alternative evaluation method

During this project, thoughts about how an alternative evaluation method would be shaped have appeared. Quantitative analysis isn't enough to capture all information regarding a current onboarding practise, and since the time it takes to complete an experiment the iterations will be long. Long iterations will result in long time periods to find the best solution to a given problem. This have lead to discussion on how to execute a project of this kind in the best possible way.

The optimal solution would be to perform rapid iterations of the intended design, and later conduct an A/B experiment with several elaborated solutions. Performing experiments with several solutions in parallel, would have explored how different varieties of the solution would perform. It would also shorten the amount of A/B test iterations. These experiments would be conducted with a great range of different metrics, in order to analyze the exact behaviour of the users. This differs from the method used, where the different prototypes wasn't exposed for tests until they were fully implemented. Also, more data should have been gathered on how the users actually behaved while using the service. Example of this kind of data is discussed in section 6.4.

The blog post "How Netflix Enhances Their User Experience" discusses this topic, and it says that Netflix never relies on data only [IYM, 2016]. The vice president of Netflix, Todd Yellin, says that "A/B testing doesn't tell you the 'why'; it only tells you the 'what'". The essence of this statement, is that you need to talk to users and not only rely on behaviour data. It's suggested that one should talk to users all the time, even when conducting A/B tests. However, the questions shouldn't focus on the direct change. Rather it should focus on how satisfied the customers are. By comparing the satisfaction level of the different variants, analysis and decisions can be made. However, Netflix doesn't only relies on the customer satisfaction when making decisions. They uses standard metrics, but they recommend using as few metrics as possible. Also, they states that the most important metric is the user retention.

Using the Netflix method of performing A/B test would have benefited this project. The focus on asking about the customer satisfaction gives a combination of quantitative and qualitative data. Using a combination of these methods is called mixed methods and have gained popularity over the past years because it gives a better understanding of research questions[Creswell, 2009]. A mixed method study can be performed in different ways. Either it can be conducted using a concurrent strategy, which makes the qualitative and the quantitative research methods being performed in parallel. It can also be conducted using a sequential manner, where one of the methods is performed before the other. Also, one should weight the different research methods in order to understand which data that matters the most. One example of how this could be done in Bokio, would be to survey users if they thought it was easy to get started with the service. This data would have contributed in understanding if a given solution would outperform another.

7.5   Final Words on Methodology

As mentioned, no user tests were performed throughout the whole project. Due to the formulation of research question, which focused on the investigation of which onboarding practices that could be considered to be successful, qualitative evaluation methods doesn't have to be necessary. The different practises is collected from different theoretical frameworks such as behaviour science user experience. The idea of the thesis is to investigate if these will lead to a better user activation. Involving users when developing the different onboarding methods would therefore clash with the research question, since one way to look at the research question is keep users absent until the very last moment - where the quantitative testing data would be gathered. The different onboarding practises is chosen without involving users, but their rate of success depends on users.

Is this way of working really Human-Centered? Maguire says that the HCD framework must involve the intended users in the process [Maguire, 2001]. In this thesis, the user perspective have been very present, since the research phase consisted of understanding the users and methods such as interviews and surveys were used to capture their opinions. Also, the ideation phase consisted of activities with the user in mind - personas and journey maps were developed. These are design methods that will help in keeping the user present throughout the complete project. It's only during the implementation phase that the user involvement wasn't narrow.

The user was therefore present in investigating how their relation with the application was and what the factors was when they decided to use Bokio. The opinions of the users were important when formulating requirements, and the common personal traits of the users were transformed into a set of personas. Finally, real users got to test the different implementations. However, the tests were performed without users knowing that they were being exposed. And therefore couldn't their opinions be used in the next iteration.

8

Conclusion

The research question of this thesis was:

"What usability, UX and behavioral practices can be considered to be successful when supporting an online accounting application to increase its number of activated customers?".

In order to investigate this, a literature study have been conducted in order to understand what behaviour that makes users want to stay at a certain service. Also, an investigation of the current landscape of onboarding practises and theories have been performed. Subsequently, an design process have been performed, consisting of a combination of elements from Human-Centered Design and Goal-Directed Design. This resulted in a design process consisting of four phases, starting out with a research phase with the purpose to understand the Bokio application and its users. It was followed by an ideation phase, where the findings would be transformed into requirements which summarized and concertized the different findings from the inspiration phase. Also, personas and journey maps were developed in this case, in order to constantly keep the end users present. This lead to the implementation phase, where a key paths and interactive prototypes were developed, in order to explore different onboarding practises. A selection of these were later implemented, and exposed from A/B testing during the evaluation phase where their rate of success could be observed.

However, it is difficult to answer the research question . Due to the choice of evaluation methods and how it was carried out, the measured results didn't showed any statistically significant difference between different onboarding methods. Therefore, no conclusion can be made on which onboarding practice that outperform another. The weakness of A/B testing is the long time periods needed in order for it to get a result. Since a design process is performed by working iterative, several iterations will lead to long cycles. Also, the lack of qualitative data is a shortcoming in A/B testing.

The project would have benefited from using more qualitative evaluation methods together with rapid prototyping, in order to get a better understanding of the different practises, and which one of them that is most successful. A recommendation would be to develop several variants of one onboarding practise, where different variables should be varied. Examples of variations could be different phrasings of the text elements as well as different positioning. This would have lead to a better

isolation of the tested variables. Also, the A/B experiments would have included additional metrics, in order to gather more information of the users and how they acts during their sessions. Ultimately, the experiments should survey the users of their satisfaction.

Despite this fact, the different experiments indicated that the Bokio application would benefit from including an onboarding method where the user would be guided through a series of tasks. The purpose of this guide, would be to show the user the most important features of the application. The results of the experiments showed that users would be more likely to return to the application if a method of this kind were present.

One aspect that haven't been brought up during this thesis, is that the suggested onboarding flows didn't work in this setting. No studies have been conducted in order to analyze if they actually will have an effect in getting users up to speed with the application. As discussed thoroughly, the usage of qualitative evaluation methods would have helped out in understanding this as well. Also, the impact UX and usability have on the onboarding haven't been analyzed. How useful and how easy it is to be introduced to the Bokio application might not be the reason that users return. It could depend on the amount of relevant information that users access during the first visits. A suggestion for further work would be an investigation on what users expects when using an application for the first time.

After all, it's the users and their experiences that actually matter when creating design. Even if numbers and metrics would give a good hint on how groups of users would act when exposed to a certain interface, numbers and metrics won't give any information on their opinions. This thesis have been performed by putting the user in the focus, and during the first phases - the user was present. Interviews and surveys were performed, and the answers were used to formulate requirements and developing personas. However, when everything came to the crunch, the opinions of the users were neglected. A mistake that made it difficult to understand what onboarding practises that is successful and what isn't.

However, the period of time of this thesis was restrained, which made it impossible to explore all aspects of user onboarding. In order to achieve better results of the A/B tests, a variant would be to focus on on one onboarding practise and iterate that variant extensively. This could have lead to results that indicated that this only variant was significantly better in all aspects. The problem with the chosen method is that the result became too unclear didn't point towards one result. By focusing on one variant, the understanding on how interaction design and user experience contributes when converting new users to active users would be better and the effects could have been analyzed further.

Bibliography

Hubspot Academy. How to a/b test landing pages. `https://knowledge.hubspot.com/landing-page-user-guide-v2/how-to-ab-test-landing-pages`, june 2017. online; accessed 2017-06-27.

Kathy Baxter and Catherine Courage. *Understanding Your Users: A Practical Guide to User Requirements Methods, Tools, and Techniques (Interactive Technologies)*. Interactive Technologies. Morgan Kaufmann, first edition, jan 2005.

Angela Chang, James Gouldstone, Jamie Zigelbaum, and Hiroshi Ishii. Simplicity in interaction design. In *Proceedings of the 1st International Conference on Tangible and Embedded Interaction*, TEI '07, pages 135–138, New York, NY, USA, 2007. ACM. ISBN 978-1-59593-619-6. doi: 10.1145/1226969.1226997. URL `http://doi.acm.org/10.1145/1226969.1226997`.

C.N. Chapman and R. P Milham. The persona's new clothes: methodological and practical arguments against a popular method. *Proceedings of the Human Factors and Ergonomics Society*, 50:634 –636, 2006.

Alan Cooper, David Cronin, and Christopher Noessel. *About Face: The Essentials of Interaction Design, 4th Edition*. Wiley, sep 2014.

John Creswell, W. *RESEARCH DESIGN Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publicatíons, Inc, London, United Kingdom, 2009. ISBN 978-1-4129-6556-9.

Edward L. Deci and Richard M. Ryan. Self-determination theory: A macrotheory of human motivation, development, and health. In Canadian Psychological Association, editor, *Canadian Psychology*, volume 49 of *3*, pages 182–185, 2008.

M. Amy Do, A. Alexander Rupert, and George Wolford. Evaluations of pleasurable experiences: the peak– end rule. *Psychonomic Bulletin & Review*, 15(1):96–98, 2008.

Charles Duhigg. Habits: Why we do what we do. `https://hbr.org/2012/06/habits-why-we-do-what-we-do`. Transcription Online; accessed 2017-01-30.

Charles Duhigg. The power of habit: Charles duhigg at tedxteacherscollege. `https://www.youtube.com/watch?v=OMbsGBlpP30`, aug 2013. Video Online; watched 2017-01-30.

Nir Eyal. *Hooked - How to Build Habit-Forming Products*. Penguin Group, Penguin Books Ltd, 80 Strand, London WC2R 0RL, England, first edition, 2014.

BJ Fogg. A behavior model for persuasive design. In *Proceedings of the 4th International Conference on Persuasive Technology*, Persuasive '09, pages 40:1–40:7, New York, NY, USA, 2009. ACM. ISBN 978-1-60558-376-1. doi: 10.1145/1541948. 1541999. URL `http://doi.acm.org/10.1145/1541948.1541999`.

Interaction Design Foundation. What is the difference between interaction design and ux design? `https://www.interaction-design.org/literature/article/what-is-the-difference-between-interaction-design-and-ux-design`, aug 2016. online; accessed 2017-07-31.

Ruari Galavan. Onboarding never stops. `https://medium.com/intercom-inside/onboarding-never-stops-a9ccfd782ffd#.ifnm3rjh8`, sep 2016. Online; accessed 2017-01-25.

William Gaver. What should we expect from research through design? In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, CHI '12, pages 937–946, New York, NY, USA, 2012. ACM. ISBN 978-1-4503-1015-4. doi: 10.1145/2207676.2208538. URL `http://doi.acm.org/10.1145/2207676.2208538`.

Martin Goodson. Most winning a/b tests results are illusory. `http://www.qubit.com/sites/default/files/pdf/mostwinningabtestresultsareillusory_0.pdf`, 2014. online; accessed 2017-02-09.

Google. Features. `https://www.google.com/analytics/analytics/features/`, jan 2017. online; accessed 2017-02-07.

T. John Gourville. Eager sellers and stony buyers: Understanding the psychology of new-product adoption. `https://goo.gl/jFzVf6`, jun 2006. Online; accessed 2017-01-30.

Megan Grocky. How to create a customer journey map. `http://uxmastery.com/how-to-create-a-customer-journey-map/`, sep 2014. online; accessed 2017-02-08.

Tori Hauser. The difference between graphic design and interactive design. `https://www.zionandzion.com/difference-between-graphic-and-interactive-design/`, dec 2014. online; accessed 2017-07-31.

Samuel Hulick, a.

Samuel Hulick, b.

Samuel Hulick. s your onboarding experience turning away good users? `https://www.useronboard.com/training/`, sep 2011. Online; accessed 2017-01-12.

Samuel Hulick. *The Elements of User Onboarding*, volume 1. Useronboard.com, 2014.

IDEO. *The Field Guide to Human-Centered Design.* ideo.org, first edition, 2015.

Christensen Institute. Jobs to be done. `http://www.christenseninstitute.org/key-concepts/jobs-to-be-done/`. Online; accessed 2017-01-25.

Intercom. *Intercom on Onboarding.* Intercom, 2016.

ISO. Iso 9241-210:2010 ergonomics of human-system interaction – part 210: Human-centred design for interactive systems. `http://www.iso.org/iso/catalogue_detail.htm?csnumber=52075`, mar 2010. online; accessed 2017-02-09.

IYM. How netflix enhances the customer experience. `http://www.immersiveyouthmarketing.com/blog/how-netflix-enhances-the-customer-experience`, aug 2016. online; accessed 2017-07-31.

Simons A. Janet, Irwin B. Donald, and Drinnen A. Beverly. *Maslow's Hiearchy of Needs. Psychology - The Search for Understanding.* West Publishing Company, New York, first edition, 1987.

Kate Kaplan. When and how to create customer journey maps. `https://www.nngroup.com/articles/customer-journey-mapping/`, jul 2016. online; accessed 2017-02-08.

Chris Lamothe. Switching and jobs-to-be-done: Discovering why people really hire products. `https://cantina.co/switching-and-jobs-to-be-done-discovering-why-people-really-hire-products/`, oct 2014. Online; accessed 2017-01-25.

T. Mark Littlewood. Engineering your marketing outcomes. `https://goo.gl/oCNCvP`, mar 2012. Video Online; accessed 2017-02-01.

Chao Liu, Ryen W. White, and Susan Dumais. Understanding web browsing behaviors through weibull analysis of dwell time. In *Proceedings of the 33rd International ACM SIGIR Conference on Research and Development in Information Retrieval*, SIGIR '10, pages 379–386, New York, NY, USA, 2010. ACM. ISBN 978-1-4503-0153-4. doi: 10.1145/1835449.1835513. URL `http://doi.acm.org/10.1145/1835449.1835513`.

Martin Maguire. Methods to support human-centred design. *Int. J. Hum.-Comput. Stud.*, 55(4):587–634, October 2001. ISSN 1071-5819. doi: 10.1006/ijhc.2001.0503. URL `http://dx.doi.org/10.1006/ijhc.2001.0503`.

Kevin McSpadden. You now have a shorter attention span than a goldfish. `http://time.com/3858309/attention-spans-goldfish/`, may 2015. Online; accessed 2017-02-10.

Jakob Nielsen. Why you only need to test with 5 users. `https://www.nngroup.com/articles/why-you-only-need-to-test-with-5-users/`, mar 2000. online; accessed 2017-02-09.

Jakob Nielsen. How long do users stay on web pages? `https://www.nngroup.com/articles/how-long-do-users-stay-on-web-pages/`, sep 2011. Online; accessed 2017-02-10.

Jakob Nielsen. Introduction to usability. `https://www.nngroup.com/articles/usability-101-introduction-to-usability/`, jan 2012. online; accessed 2017-02-03.

Donald Norman. *Emotional Design: Why We Love (or Hate) Everyday Things.* Basic Books, first edition, sep 2005a.

Donald Norman. Hcd considered harmful? a clarification. `http://www.jnd.org/dn.mss/hcd_harmful_a_clari.html`, may 2005b. online; accessed 2017-02-07.

Donald A. Norman. Simplicity is highly overrated. *interactions*, 14(2):40–41, March 2007. ISSN 1072-5520. doi: 10.1145/1229863.1229885. URL `http://doi.acm.org/10.1145/1229863.1229885`.

Michael I. Norton, Daniel Mochon, and Dan Ariel. The ikea effect: When labor leads to love. *JOURNAL OF CONSUMER PSYCHOLOGY*, 22(3):453–460, jul 2012.

Joseph Nunes and Xavier Dreze. The endowed progress effect: How artificial advancement increases effort. *Journal of Consumer Research*, 32, 2006.

Optemizely. A/b testing. `https://www.optimizely.com/ab-testing/`, jan 2017. online; accessed 2017-02-09.

Alexander Osterwalder and Yves Pigneur. Modeling value propositions in e-business. In *Proceedings of the 5th International Conference on Electronic Commerce*, ICEC '03, pages 429–436, New York, NY, USA, 2003. ACM. ISBN 1-58113-788-5. doi: 10.1145/948005.948061. URL `http://doi.acm.org/10.1145/948005.948061`.

Jenny Preece, Yvonne Rogers, and Helen Sharp. *Beyond Interaction Design: Beyond Human-Computer Interaction.* John Wiley & Sons, Inc., New York, NY, USA, 2001. ISBN 0471402494.

John Pruitt and Jonathan Grudin. Personas: Practice and theory. In *Proceedings of the 2003 Conference on Designing for User Experiences*, DUX '03, pages 1–15, New York, NY, USA, 2003. ACM. ISBN 1-58113-728-1. doi: 10.1145/997078.997089. URL `http://doi.acm.org/10.1145/997078.997089`.

Jan Renz, Thomas Staubitz, Jaqueline Pollack, and Christoph Meinel. Improving the onboarding user experience in moocs. 6th International Conference on Education and New Learning Technologies., jul 2014.

David Travis. Are personas past their prime? `http://www.userfocus.co.uk/articles/are-personas-past-their-prime.html`.

Aarron Walter. *Designing for Emotion*, volume 1. Jeffrey Zeldman, A Book Apart, New York, New York, 2011.

Susan Weinschenk. *100 Things Every Designer Needs to Know About People (Voices That Matter)*, volume 1 of *Voices That Matter*. New Riders, apr 2011.

Ashley Williams. User-centered design, activity-centered design, and goal-directed design: A review of three methods for designing web applications. In *Proceedings of the 27th ACM International Conference on Design of Communication*, SIGDOC '09, pages 1–8, New York, NY, USA, 2009. ACM. ISBN 978-1-60558-559-8. doi: 10.1145/1621995.1621997. URL `http://doi.acm.org/10.1145/1621995.1621997`.

Julie Zhue. Design the beginning. `https://medium.com/the-year-of-the-looking-glass/design-the-beginning-b8e61081ce42#.xqcfmkkin`, sep 2015. Online; accessed 2017-01-24.

A
Interview Transcripts

Vad heter du?
Edvard Gadderus
Hur gammal är du?
29 år
Var bor du?
Göteborg
Vad jobbar du med
IT-konsult. Egenföretagare

Vad är din erfarenhet av ekonomiskt arbete
Jag hade läst lite kurser och så tidigare på dataekonomilinjen i Borås. Sen hade jag startat upp ett företag, och använde Visma. Fick då googla och så, men det fungerade efter ett tag. Det är min erfarenhet. Lite kurser och sånt.
Du har helt enkelt pluggat lite tidigare?
Ja, det stämmer.
Du är alltså egen på bolaget?
Ja, precis.
Du kommer vi in på Bokio-frågorna, som är intressant på oss. Hur länge har du använt Bokio?
Hur länge är det nu. Ehh, 4-5 månader. Jag kan säga exakt här, jag vet när jag blev medlem. Nä, faktiskt mindre än så. Sen i december
Hur fick du kontakt med Bokio?
Jag blev trött på Visma, det var dyrt och inte så användarvänligt. Det är svårt att använda mobilen med deras app och sådär. Jag googlade, skrev "alternativ till Visma" och så.
Inga tips från personer och så?
Nä, det var Google.
Vad var den enskilda orsaken till att du lämnade Visma?
Användarvänligheten, och att kunna använda det på mobilen. Kunna använda ett mer utökat system på mobilen. Sen också att jag ville ha något mer simpelt. Jag tryckte det var för krångligt med verifikationerna och så.
Vad var krångligt?
En bra fråga. I början gjorde jag lite fel med verifikationerna, och då skulle jag rätta till det. Men då fanns det inget, det var svårt att mäta det för det var för maffigt. Bokio är mer lätt. Enklare att hitta, mer lättöverskådligt. Det var det jag letade efter. Visma var för krångligt. Allmänt krångligt. Men mest med verifikationerna och så.
När var det primärt du insåg att du måste byta från Visma?
Jag höll på med några verifikationer, och höll på att maila fram och tillbaka. Chatta med Visma fram och tillbaka. Jag tänker, jag börjar om med ett helt nytt system lixom, bara för att få det från början. Jag kom ihåg att jag började om i Visma också, fast med en ny användare. Behöver jag börja om på nytt, fast behålla min gamla användare. Då behövde jag betala för en extra, och började leta efter ett gratisalternativ.
Det började alltså krångla med Visma, med verifierat och du kände att du behövde börja om från början?

Exakt, så var det.

Bokio då, vad var det som fick dig att känna att "det här måste jag testa".

Att det var gratis, så det gick att testa utan att betala. Inga säljare som måste ringa bara för att det är gratis och sådär. Mer frihet helt enkelt. Också att interfacet såg intuitivt ut. Snyggt gjort, ganska enkelt och simplicity lixom.

Vad var det som såg enkelt ut och enkelt att förstå?

När man loggade in, när man skapade en användare, det såg enkelt ut. Det gick fort lixom, det var lätt att fixa. Och när jag kom in så var det, wow. Det var enkelt att förstå.

Var det helt naturligt vad du skulle göra första gången du använde Bokio?

Ja, ja. Precis, det var den stora knappen till höger "Bokför" med ett plus. Det var ganska lätt att förstå vad man skulle göra första gången.

Vad exakt med knappen? Var det väldigt intuitivt tycker du?

Ja, det är ganska lätt att förstå sig på systemet. Jag arbetar som business analyst, jag kan ju det här med hur ett system ska vara uppbyggt för att användarna ska förstå. Jag tyckte det första gången jag använde det. Att det var väldigt enkelt att förstå, det står allt man ska göra. Man kunde testa det i början, skapa ett konto.

Den här testsessionen du, när du startade första gången. Tyckte du den var väldigt enkel att förstå första gången?

Ja, absolut. Det var inga konstigheter. Jag tycker alltså helt ärligt att ni har det bästa bokföringssystemet just nu. Alltså så som är lätt att förstå, okej som att man inte kan göra vissa saker som.. bokslut och liknande. Men när det kommer till att bokföra är det väldigt lätt att förstå sig på. Man får väldigt mycket hjälp och så på traven.

Du testar Bokio första gången. Vilken var punkten där du insåg "wow", Bokio är verkligen grejen. Det här är det som kommer att få mig att återvända. Kan du specificera den punkten?

Jag ska försöka. Får se, om jag tänker såhär. När man först loggar in så var det, jag tror det var för mobilen första gången jag gjorde det. Då kände jag att det var mobilanpassat, och då provade jag att lägga till en verifikation och liknande. Och allt gick att göra på mobilen, vilket var väldigt viktigt för mig då jag ofta är på språng. Jag provar att lägga in den här PDFen, och då hittade det rätt. Det mesta gick rätt, och då tänkte jag "det här systemet ska jag fortsätta att använda".

Du använde mobilen, och du skickade in en PDF och den hittade direkt?

Mhh, det var det. Det var ganska smidigt

Är det en funktion som, jämfört med Visma, underlättar väldigt mycket för dig på språng?

Precis. För på Visma var du tvungen att ta en bild på något, och skicka in det i en PDF. Alltså scanna in det typ, alltså en scanner-app och sedan gå in på Visma på datorn och ändra det i verifikationen. Lägga till det. Lägga till den bilden i en verifikation så att säga. Det var mycket jobbigare. Det är en klart fördel att man kan lägga till ett foto och en PDF och sen att den ganska bra förstår vilket datum det är. Det funkar till 50%.

När det väl funkar, då är det en funktion och då underlättar det?

Då underlättar det absolut.

Använder du den funktionen första gången du testade Bokio?

Mhh, precis. Fast med PDF-grejen då. Jag har en android, så det var smidigt.

Var det bara bokföringsdelen du använder av Bokio?

Jag använder alla delar. Ah, just det när du säger det. Det här med lönemodulen fick mig att stanna också. Den kostar i Visma, och då var det per faktura och så. Då såg jag att ni på Bokio erbjöd det gratis och sen också att det var lätt att använda. Man lägger till en användare så är det bara att köra. Och den hittar bra vad man ska betala i skatt och liknande. Så den och den smarta bokföringsdelen. Där man laddar upp.

Om du jämför med Visma, vad tycker du Bokio löser för problem som inte Visma löser?

Krångligheten. Jag kan göra fler saker på kortare tid. Även det här med löner. Att jag inte hade den med Visma, då var jag tvungen att göra det manuellt.

Är det så att du får mer tid för annat?

Ja, precis. Mer överskådlighet också.

Konkret, vilka delar är det du älskar med Bokio?

Den här wizarden, från plusset med bokföringen. Och lönemodulen ska jag säga. De två, om jag ska säga vilka jag gillar mest så är det dem.

Vad gör de delarna som inte andra delar gör? Varför sticker de ut?

För jag använder dem ganska ofta lixom. Jag brukar lägga in en del nya inköp och lägga in bokföring, så kan jag markera via pdf eller ta en bild väldigt snabbt. Jag får det gjort på väldigt kort tid.

Varför använder du just dom två delarna väldigt ofta?

Asså, det är ju för att jag behöver lägga in verifikationer och löner?

Hur ofta använder du Bokio?

Jag brukar gå in 2-3 gånger per vecka.

Varför loggar du in?

För att säkerställa och kolla hur det går och så.

Om vi vänder på det, vad gör dig galen med Bokio? Vad gör dig frustrerad?

Det jag inte gillar är översikten, välkommen och så vidare. Omsättning och vinst. Den kunde vara mer, tabellen, kunde vara mer UX-vänlig så att säga. Man skulle kunna klicka på november och få lite mer fakta. Visma har något liknande, och då kan man få lite mer information. Det är inget stort, men det är just det.

Varje gång du loggar in på Bokio, vad är det första du gör?

Jag brukar kolla årets skatt och kontotillgångarna. Om jag behöver bokföra någonting, så gör jag det då. Kollar rapporter och liknande, så att stämmer överens.

Vad saknar du med Bokio?

Årsredovisning. Jag tror många skulle uppskatta en sådan modul?

Något ni vill tillägga?

Ni gör det grymt bra! Hoppas ni kör på, och att det fortsätter vara gratis. Kör er egen stil!

Namn:
Bo Nordlin
Ålder:
54 år
Bor:
Stockholm
Jobbar med
Driver https://inkopsradet.se. Driver konferenser på området
Är det bolaget du har på Bokio?
Ja.
Hur många anställda
3 stycken
Hur länge har du använt Bokio?
I samband med senaste bokslutet i september förra året. Har tittat på det tidigare, registrerade mig under förra våren. Började använda i samband med bokslutet.
Har du använt ett annat program tidigare?
Ja, Reco
Reco?
Ja, det är ett windowsprogram.
Hur mycket erfarenhet har du av ekonomiskt arbete tidigare?
Inte jättemycket. Jag har varit anställd i tio år, innan dess drev jag en firma och gjorde lite bokföring. Så visst, lite erfarenhet har jag.
Använde du Reko tidigare då?
Nä, tror jag hade spcs tidigare.
Du använde Reko tidigare, varför slutade du använda det?
Det var ett Windowsprogram, och jag ville ha ett program online.
Du ville ha ett mer molnbaserat?
Ja, inte behöva ha en windowsdator.
Var det den viktigaste faktorn, att du helt enkelt ville gå åt webhållet?
Ja, det kan man nog säga. Jag hade skapat egna mallar i excel, där jag förberedde mina bokföringstransaktioner. Jag hade olika blad i excel, jag var nybörjare, men då hade jag läst på hur man skulle bokföra olika löneutbetalning. Så jag knappade in och så konterades då det i excel, så att säga.
När insåg du att du skulle kika runt efter andra alternativ?
Nää, det var det inte. Jag tänkte att det var bra att göra det i samband med bokslutet. En sak som också var viktig för mig var att kunna spara de fakturor och räkningar man får via mail. De ska ju egentligen sparas i originalformatet, men det gjorde inte jag. Jag skrev ut dem, och sparade dem. Jag kunde inte koppla dessa digitala formaten till bokföringen på något smidigt sätt. Då ville jag slippa skriva ut massa papper också. Det var en anledning kan man säga.
Du ville helt enkelt behålla det digitala formatet ...
In i bokföringen, ja.

Vad är viktigt för dig med bokföringsprogram liknande Bokio?

Det ska vara smidigt och enkelt. Jag är inte intresserad av Bokföring och kontoplaner, utan att det ska vara lätt för mig att bokföra helt enkelt.

Hur fick du kontakt med Bokio?

Jag följde Dooer, och de utlovade något liknande men det blev ju inget. Jag är intresserad av startups och utveckling av digitala tjänster. Jag vet sedan tidigare att bokföring är en skyddad sektor. Det finns massa svenska bolag, men det finns ingen internationell konkurrens. Min bild var att programmen generellt sätt var ganska dåliga, användarvänlighetsmässigt. Dooer utlovade att lösa detta, läsa av fakturor och bokföra dem automatiskt på något vis. Då tittade jag närmare, och såg att ni fanns också. Eftersom att deras produkt aldrig blev något, blev det er. Jag läste nog om er på Breakit eller liknande. Kanske var momsens.se, de hade nog testat er.

Minns du första gången du testade Bokio?

Jo, det tror jag väl att jag gjorde. Jag provade förra våren, och lekte runt lite. Jag loggade in och bokförde inte skarpt första gången. Jag minns när jag testa första gången, att jag bokförde parallellt. Om Bokio inte fungerade, så skulle jag kunna gå tillbaka till det gamla systemet.

Vad var det som fick dig att vilja testa på Bokio?

Ni utlovade den smarta avläsningen av fakturor och så. Automatiskt, smart och smidigt. En häftig finess var att jag knappade in mitt organisationsnummer så plockade de ner mina adressuppgifter. Det blev jag lite imponerad av.

Det var alltså ditt första intryck av tjänsten?

Ah, när man ska registrera sitt bolag, exakt.

Skapade du testsession då första gången?

Ah, absolut. jag hade ett testbolag kan man säga.

Knappade du in ditt riktiga bolag då?

Ahh, det gjorde jag nog. Jag läste nog inte in någon bokföring och sådär. Angav bara organisationsnumret och knappade lite och sådär.

När du använde det första gången, var det självklart var du skulle börja?

Ahhh, det är min bild. Jag började med att testa den där automattolkningen av fakturor. Det var det jag var mest nyfiken och intresserad av. Men det är min bild. Sen när jag började arbeta skarpt, var jag mest orolig hur smidig övergången skulle vara. Men det var enklare än jag trodde. Det är därför jag väntade till bokslutet för att börja från noll, men den där importen gick så smidigt.

Använde du då importfunktionen?

Ah precis.

Det var den som gjorde att du upplevde det som smidigt?

Ah, jag fick ju över allt, det kanske inte är så revolutionerande, men jag fick över allt via importen och då förstod jag att jag kunde få över allt rätt smidigt. En sak jag tänkte på, jag hade en del specialkonton som jag hade lagt upp. Jag får betalning via paypal t.ex och då hade jag skapat ett sånt konto i bokföringsplanen. Det var jag orolig över hur det skulle gå, då ni skriver att det inte går att ändra kontoplanen. Men det fungerade utmärkt.

De farhågorna du hade på förhand överensstämde inte med produkten?

Ah, eller importen fungerade inte första gången, men jag skrev ett meddelande och fick svar ganska snabbt. Farhågorna besannades inte alls. Jag trodde att det skulle vara mycket svårare än vad det var.

När kände du att Bokio, det här kör jag vidare på.

Ja, när jag såg att jag fick även bokföringen enkelt. Det var en stor grej för mig. Att den hittade paypal-kontot jag skapade i gamla bokföringen. Jag behövde ju redovisa det någonstans. När jag såg att det skulle funka, då såg jag att det kommer att gå att använda.

Fungerade faktura/kvittoimporten som du tänkt?

Jaa, både och. Det är ju väldigt smidigt att spara alla fakturor hos er. Det är bekvämt och smart, men tolkningen är inte supermycket till hjälp. Lite grann till hjälp är det ju.

Vilka delar av Bokio använder du?

Jag använder alla delar, fakturor. Ja fakturor använder jag väldigt lite. Jag har skickat några egna fakturor, men jag gör egentligen inte det längre av olika skäl. Inkommande fakturor tar jag, jag har lagt upp leverantörer. Men, jag arrangerar en konferens där man anmäler sig på en sajt. Då fångar jag upp faktureringsuppgifter där och då kan jag inte på något sätt föra över det till er. Jag får det som en excelfil, med alla företagsnamn och adress och belopp och osv. Det vill jag inte knappa in på nytt i Bokio. Det korta svaret, jag använder bokföringen, leverantörsfakturorna och lönerna. Jag har testat på egna fakturor, men jag gör inte det inte alls.

Vad använder du mest frekvent?

Det är bokföringen.

Hur ofta använder du den?

Det är nästan dagligdags. Man får in någon verifikation, och då mailar jag in den och fixar till det, så jag inte har så stor bokföringskö.

Gäller det också fysiska kvitton från butik?

Ja, alltså vanliga papperskvitton från restaurang och fakturor i pappersform skjuter jag in.

Använder du då kvittoskanningsfunktionen, eller knappar du in manuellt?

Nä, jag scannar in det som en PDF och sen skickar upp till er. Jag gör väldigt lite från telefonen, jag gör det mesta från datorn.

Om vi tänker tidigare ekonomisystem du använt, hur skiljer sig användandet av Bokio gentemot tidigare erfarenheter? Rutiner och sådant?
Ja, alltså digitala kvitton är väldigt smidigt. Det höll jag inte på med senast, utan då skrev jag ut och la i en pärm, vilket man ska göra enligt bokföringslagen tror jag. Det skiljer mycket. Sen, när man kan göra modern bokföring. Det är väldigt smart och smidigt. Det gillar jag. Det är inte alltid man kan det dock, men det gillar jag. Då skiljer det sig från hur jag jobbade förut. Det programmet hade inte den funktionen.

Det här att den helt enkelt bokför automatiskt med konton?
Ah, man kunde skapa egna mallar på något sätt. Men då var man tvungen att skapa egna mallar, men det var för komplicerat.

När du använder Bokio, vad är det första du gör?
Nästan alltid är det att jag ska ladda upp något, eller beta av inkorgen. Jag laddar upp saker, och bearbetar saker.

Varför är det exakt de grejer som är de första du gör?
Eh, det är det jag använder Bokio till mest. Jag fakturerar ju inte där ifrån. Ibland gör jag löner, men det är ju en gång i månaden. Moms en gång i kvartalet.

Vilka problem löser Bokio med ditt ekonomiska arbete?
Ja, det är ju. Det hjälper mig med bokföringen helt klart. Bättre koll på alla mina inkommande fakturor, de lagras av er så att säga. Jag får hjälp vid momsdeklarationen och när jag ska få hjälp.

Vilka delar "älskar" du med Bokio?
Jag kanske tjatar, men att de lagrar fakturorna åt mig. När ni kan kontera automatiskt åt mig, när det finns automatisk bokföring för något jag vill göra. Jag älskar lönehanteringen, när ni skriver ut snygga lönespecar och hela hanteringen kring det.

Vad gör dig galen?
Det gör mig inte galen, för jag gillar produkten väldigt mycket, men när man måste göra manuell bokföring. Den delen är inte speciellt snygg eller användarvänlig den delen. Man får ingen hjälp, det automatiserar inte helt och hållet. Man måste skriva in på dubbla rader, andra automatiserar det. En annan grej, det är alltid två datum man måste sätta på allting.

Är det någonting du saknar?
Jag skulle vilja kunna sköta fakturering helt och hållet från Bokio. Jag har många kunder som vill ha e-faktura. Mitt idealsystem är att jag läser in en csv-fil från mitt system till Bokio som den senare hanterar.

Vad heter du?
David Hagetoft
Hur gammal är du?
42
Var bor du?
Göteborg
Vad jobbar du med?
Egen firma i konsultbranchen
Är det det bolaget du har på Bokio?
Ja
Hur många anställda?
Egen firma, så ensam anställd
Hur länge har du använt Bokio?
Sedan jag drog igång min firma, vilket var i oktober förra året.
Hur är din erfarenhet av ekonomiskt arbete?
Ingen alls. Första gången.
Har du använt något annat program liknande Bokio?
Nej, på grund av att det är första gången med egna firman
Vad är viktigt med ett ekonomiprogram?
Det ska vara enkelt. Jag vill inte hålla på med bokföring, utan att det ska gå snabbt och smidigt. Vara enkelt helt enkelt.
Hur fick du kontakt med Bokio?
Jag läste om det på någon hemsida. Jag har koll på startups och sådana saker i Göteborg. Så jag läste nog om det någonstans, kan ha varit Breakit eller DI Digital.
Minns du första gången du använde Bokio?
Jaa, det gör jag nog. Jag skapade ett sånt där testkonto. Minns att det var väldigt smidigt. Allt fungerade direkt. Jag testade runt en del.
Vad fick dig att testa Bokio?
Det var ju att det var gratis, och att ni utlovade att det skulle vara enkelt. Jag vill inte lägga onödig tid på bokföring, som jag sa tidigare.
Hur var ditt första intryck av Bokio?
Det var bra, vill jag minnas. Det var enkelt att komma igång.
Det var inga konstigheter för min del.

Var Bokio självklart från en början?

Jaa, det var det nog. Det tycker jag. Jag hade dock två bolag från början, ett testbolag, där jag testade saker så att det inte gick fel. Sen la jag in det i mitt riktiga bolag. Eftersom att jag inte har så bra koll på bokföring, är jag rädd för att göra fel. Så därför testade jag lite på ett bolag, bytte över och la in det riktiga sen.

När insåg du att Bokio var "the thing"

Hmmm, jag vet inte om det var ett specifikt ögonblick. Men det var enkelt och lätt och jag behöver inte lägga tid på saker som jag inte vill lägga tid på.

Vilken del av Bokio använder du vanligtvis?

Det är bokföringen. Den moderna bokföringen.

Hur ofta använder du Bokio?

Varje gång jag får ett verifikat. Jag skickar in det i Bokio direkt, antingen fotar jag och bokför direkt eller så mailar jag in via inkorgen. Så det är ofta.

Vad är det första du gör när du använder Bokio?

Jag skjuter ju in på telefonen när jag får någonting viktigt, så det är oftast så jag gör det. Annars är det väl attgöra listan, om det är någon faktura eller så som jag har skickat in. Det är modern bokföring jag försöker använda.

Vilka delar älskar du med Bokio?

Men det är att det är så enkelt och smidigt att använda. Jag behöver inte lägga till på tråkiga saker. För mig är bokföring bara ett nödvändigt ont som jag egentligen inte vill syssla med.

Vad gör dig galen?

Jag vill veta om jag har gjort rätt. Ibland är det så simpelt, att jag känner att jag tappar kontrollen lite. Jag har anställt en person vid sidan av som kollar igenom min bokföring, så att jag inte gör någonting fel. Det hade jag egentligen inte velat göra. Så det är väl det då. Sedan är väl fakturadelen inte lika utvecklad som de andra. Jag saknar friheten ibland, att kunna lägga till rader på platser som jag vill.

Är det någonting du saknar med Bokio

Jag vill att ni ska kunna kolla om bokföringen ser bra ut. Jag hade kunnat betala extra för det. Sedan är det givetvis en del småfunktioner som kan bli bättre och läggas till.

Intervjun hölls under en lunch, och därför tog den uttryck av en konversation. Anteckningar gjordes, som har sammanställts i detta dokument.

Vad heter du?

Thomas Brunzell

Hur gammal är du?

37

Var bor du?

Hudiksvall

Vad jobbar du med?

Försäljning. Eget konsultbolag inom försäljning

Är det det bolaget du har på Bokio?

Ja

Hur många anställda?

Ja

Hur länge har du använt Bokio?

Årsskiftet. Jag tittade på det i november och december, och började vid nytt bokföringsår.

Hur är din erfarenhet av ekonomiskt arbete?

Ja.

Har du använt något annat program liknande Bokio?

BL administration and Step one.

Varför slutade du använda det?

En del av mitt konsultarbete. Jag hjälper dem med enklare redovisning. Då har vi kollat på system åt dem. Bokio är bra. Så jag är användare och hjälper dem.

När insåg du att du ville byta?

Dels var enkelheten. Använda mobilkameran. AI-gränssnittet - gör det väldigt enkelt.

Vad är viktigt med ett ekonomiprogram?

Det är några saker jag saknar i Bokio. Kunna lägga upp fler försäljningskonton. Enklare lagerhantering. Köpa 10 burkar så vore det ypperligt att ha dem inlagda. Automatisera detta. Automatiskt dra från lagerhantering. Språk. Valutahantering. Två språk. Olika på olika artiklar. Inte dubbla.

Hur fick du kontakt med Bokio?

Oj. Jag läste om er, kanske veckans affärer. Det måste det ha varit. Det var där jag läste. Ni hade skrivit ett avtal med en redovisningsbyrå. Det skulle börja. Då fick jag in på hemsidan och läste om det. Signade som användare. Testkonto,

Minns du första gången du använde Bokio?

Ja. Det gör jag.

Vad fick dig att testa Bokio?

Framförallt mobilkameran. Man kan ta kort på kvittot och den räknar ut direkt. Den har AI. Det sparar enormt med tid. Knäpper kort, bokar och skriver ut verifikatet. Ja. Jag läste om den och ville testa.

Var det självklart var du skulle börja?

Ja. Det fanns inga krångligheter alls. Kanske lättare om man har lite kunskaper innan.

Var Bokio självklart från en början?

Ja. Det var väldigt enkelt.

Vilka grejer testade du att använda första gången?

Ja. Jag gjorde en provfaktura. Se hur det funkar. Sedan makulerade jag den. Jag tog nog kort på ett kvitto och kollade om det funkade.
Ja. det funkade på en gång.

När insåg du att Bokio var "the thing"

Det kände jag nog direkt. Jag vill spara tid. När jag såg att det fungerade. Framförallt den läser kvitto och jag kunde ändra. Om det blir fel, så kan jag ändra direkt. När det fungerade, då fattade jag att det var grejen. Då kan jag köpa en kabel och bokföra direkt.
Jag föredrar att bokföra på en gång. Sedan går jag in och skriver ut dem, och.

Vilken del av Bokio använder du vanligtvis?

Bokföring och fakturering.

Hur ofta använder du Bokio?

Jag har inte så mycket verifikat. 6-10 gånger i månaden. En samlingsfaktura på månadsslut. Sedan lite inköp. Lite busskort ibland. En dator. Ibland blir det mycket.

Hur skiljer sig användandet från tidigare erfarenhet?

Att jag gör det på en gång?

Varför?

Man kan knäppa kort, bokföra och det är klart. Med andra måste jag göra flera steg på datorn. Annars blir det en kvittohög.

Vilka problem löser Bokio?

Ehh. De löser framförallt tid. Frigör tid.

Vilka delar älskar du med Bokio?

Ehh. Kamerainläsningen.

Vad gör dig galen?

Att det inte finns något offline-läge.

Är det någonting du saknar med Bokio
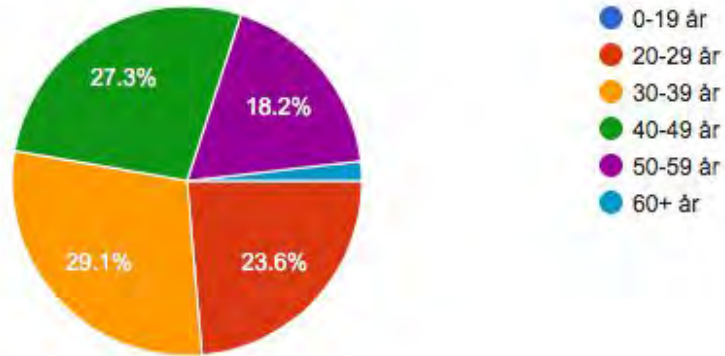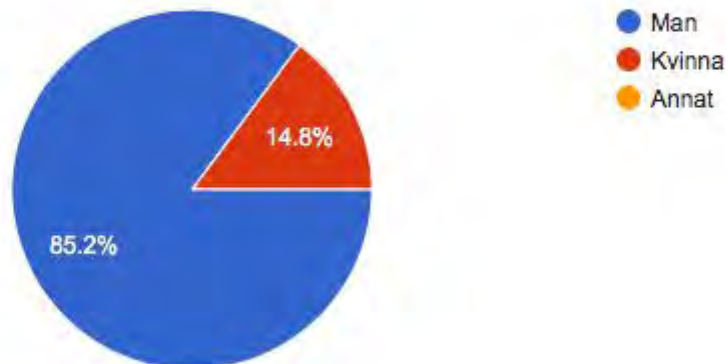
Offline-läge.

B
Survey

Hur gammal är du?

55 responses

- 0-19 år
- 20-29 år
- 30-39 år
- 40-49 år
- 50-59 år
- 60+ år

27.3%
18.2%
29.1%
23.6%

Vilket är ditt kön?

54 responses

- Man
- Kvinna
- Annat

14.8%
85.2%

Var bor du någonstans?

55 responses
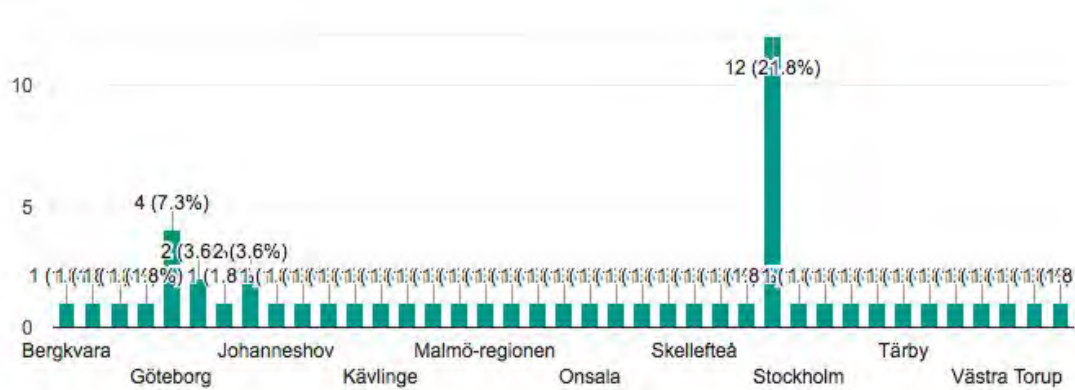
Stockholm (13)	Nynäshamn
Göteborg (6)	Luleå
Höganäs (2)	Mölnlycke
Kalmar	Norrköping
Varberg	Kumla
Sverige	Skellefteå
Malmö	Tärby
Västernorrland	Onsala
Bergkvara	Mölndal
Gustavsberg	Ängelholm
Härnösand	Sundsvall
Segeltorp	Falkenberg
Lund	Karlstad
Kävlinge	Skattkärr
Umeå	Johanneshov
Västra Torup	Malmö-regionen
	Södra Sverige
	Skåne

Inom vilken bransch jobbar du?

55 responses
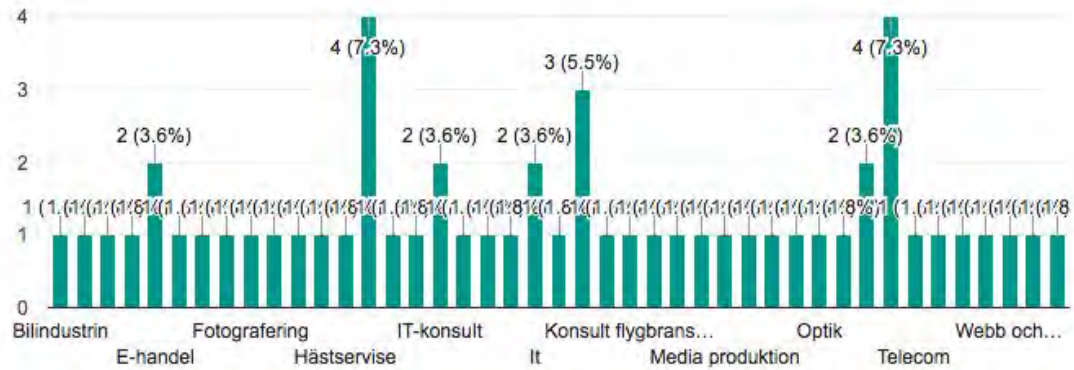
IT (7)	Reklam
IT-konsult (5)	Ideell förening
Konsult (4)	Uthyrning
Taxi (2)	Hälso
Fotograf (2)	Optik
E-handel (2)	Telecom
Skönhetsvård	Färg
Författare, lektör, korrekturläsare etc.	Webb & Design
Trading/Börs	Datorspel & IT-konsult
Multimedia	Konsulttjänster & interimchef
IT & Sportfiske	Import/försäljning
Byggkonsult	Media
Konsult flygbranschen	Måleri
Bilindustrin	Data/IT, Bryggeri, Restaurang, Lantbruk
Musikarrangör	Media Produktion
Hästservice	Webbutveckling
Marknadsföring, konsult, event	Utbildning

Hur mycket erfarenhet har du inom redovisningsarbete?

55 responses
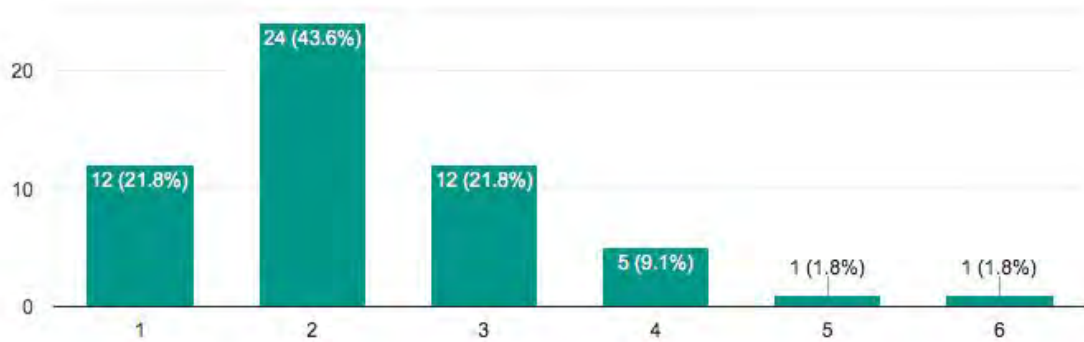
Hur hittade du Bokio?

55 responses
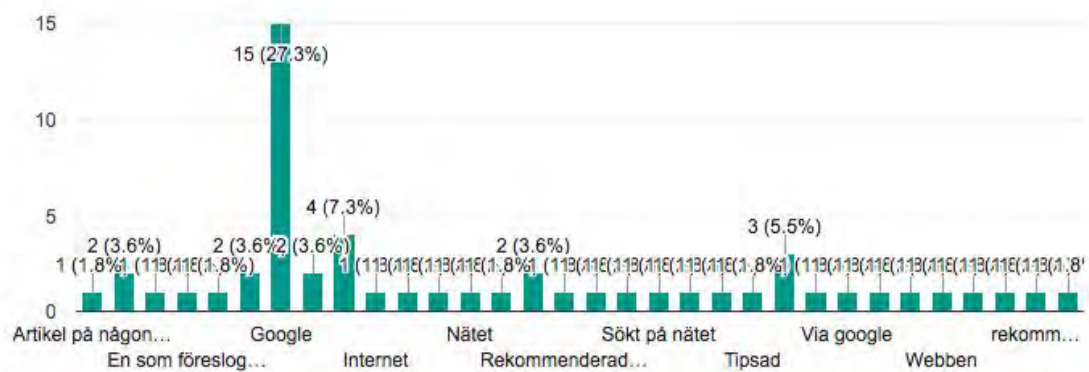
Hur länge har du använt Bokio?

55 responses

- Kortare tid än en månad
- 1-3 månader
- 4-6 månader
- Längre tid än 6 månader

20%

16.4%

36.4%

27.3%
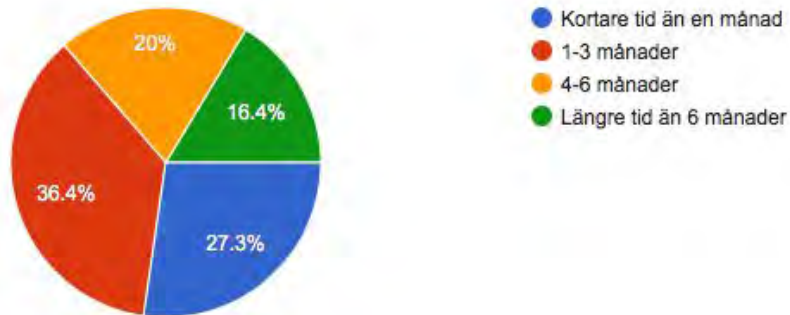
- Google (23)
- Internet (6)
- Blev rekommenderad (5)
- Sökte på nätet (3)
- Nätet (2)
- Web (2)
- En som föreslog
- Någon tipsade på Facebook

- En kompis
- Desperat sökande.
- Bekant
- Uber rekommenderade Bokio
- Artikel på webbplats
- Minns ej
- Tipsad
- Momsen.se
- Rekommendation på forum

Hur många anställda har ditt bolag på Bokio?

54 responses

- 1 anställd
- 2-5 anställda
- 6-10 anställda
- Fler än 10 anställda

22.2%

77.8%
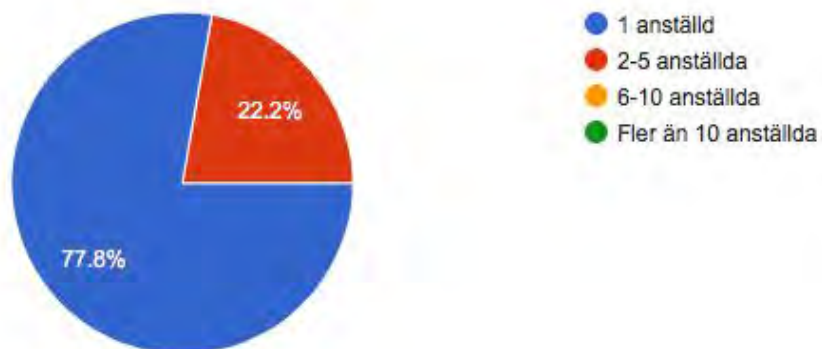
Hur ofta använder du Bokio?

55 responses

- Varje dag
- Flera gånger i veckan
- En gång i veckan
- Flera gånger i månaden
- En gång i månaden
- Mer sällan än en gång i månaden

20%
9.1%
25.5%
36.4%
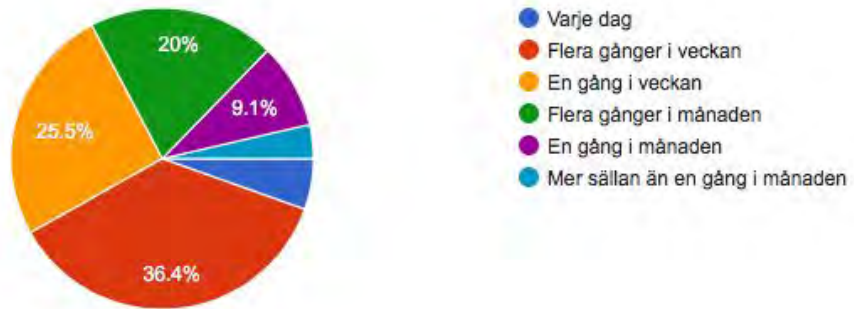
Har du tidigare använt något annat program liknande Bokio?

55 responses

- Ja
- Nej

58.2%
41.8%
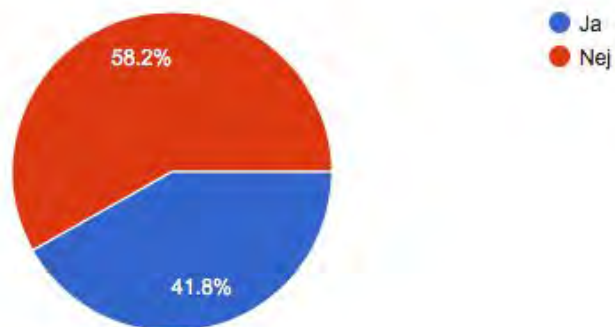
Vilka delar i Bokio använder du?

53 responses

Bokföring	53 (100%)
Fakturering	35 (66%)
Lön	21 (39.6%)
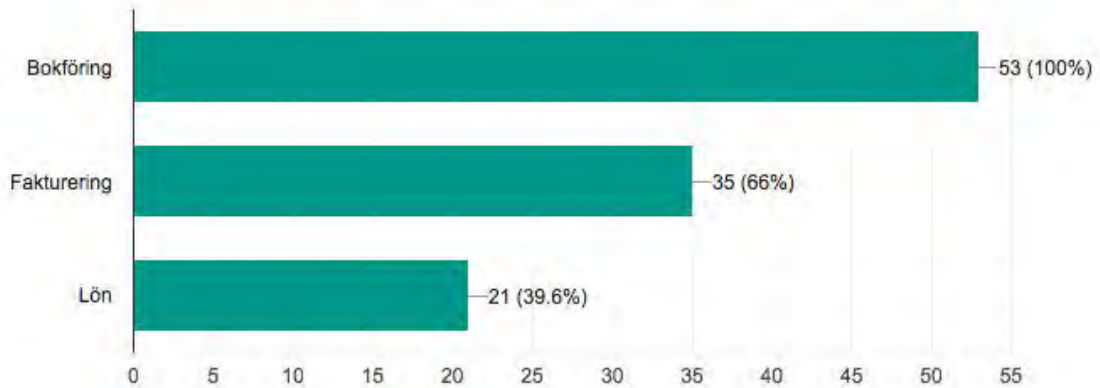
Vilket/Vilka program har du tidigare använt?

23 responses
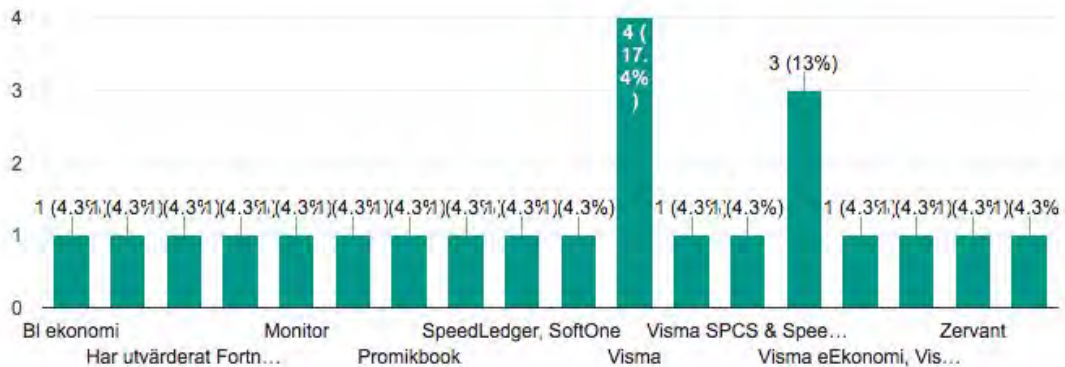
- Visma (6)
- Promikbook (2)
- BI ekonomi
- Har utvärderat Fortnox & Speedledger
- Visma SPCS & Speedledger
- Monitor

- Speedledger
- Speedledger & Softone
- Olika program
- Diverse
- Zervant
- SAP B1, Visma, BI
- Minns inte, var några år sedan, inte användarvänligt

Varför slutade du använda de/dem?

23 responses

- För lite automatisering (3)
- Krångligt
- Försämringar
- Testade Bokio och det verkade smidigt
- Bokio är gratis och jag kände att jag hade tillräckligt med koll för att ge det en chans. Vi är ett litet företag med små marginaler än så länge.
- Hann aldrig börja. Bokio tycks uppfylla mina behov
- Krångliga
- För krångligt gränssnitt, extra kostnad för lönemodul

- Jag hittade Bokio
- Slutade på det jobbet
- Olika anledningar
- För dyrt. Hittade Bokio.
- Onödiga & Omständiga
- Kostnaden
- Bokio verkade mer lovande
- Dyrt & Krångligt
- Uppfyllde inte mina krav.
- Dyrt resp. Gammaldags
- Brutna verifikationsserier som gav mig ångest.
- Bokio verkar automatisera mer och priset :)
- Bookio ka vara böttre (framförallt dokumenthantering - flöde)

Hur var ditt första intryck av Bokio?

55 responses
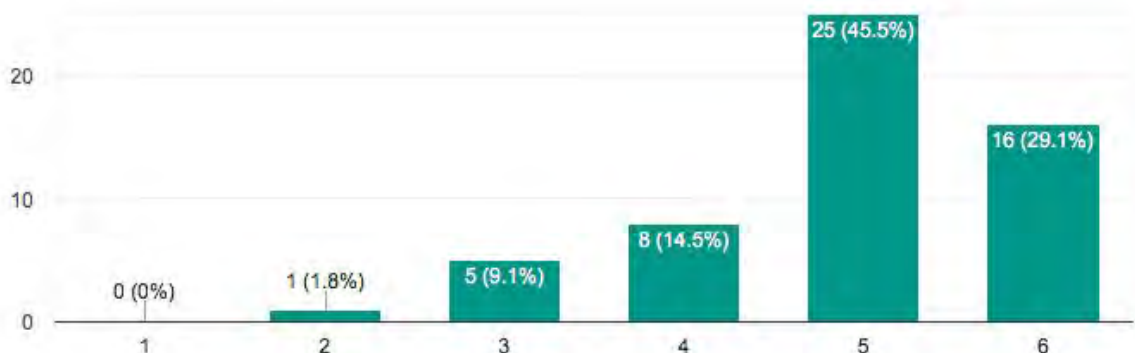
Vad fick dig att testa Bokio?

41 responses

- Gratis (4)
- Rekomemdation (3)
- Gav intryck av att vara enkelt
- Det lär bra, enkelt och smidigt, utan krångel
- Gratis, positiva recensioner
- Blev rekommenderad
- Ett tips på fb
- Enkelhet, allt i ett paket, gratis
- Nytänk
- Sökte något snyggt och enkelt
- Rekommendation och behov av redovisningsprogram
- Rekomendation, i början bra och snabb personlig service. Snygg outline på hemsida
- desperation
- Ett komplett gratisalternativ utan restriktioner.
- Tips på nätet
- Ålderdomligt bokföring i Visma
- Gratis och bokslut möjlighet samt utvecklingspotential
- Såg enkelt ut. Och gratis!
- bekant
- Fick ett bra intryck av sidan och ambitionsnivån
- Gratis och enkelt att använda. Kunde prova utan betala. Har bokföring lön och faktura i ett program.
- Att det var gratis
- Verkade enkelt. Gratis att börja använda.
- Gratis lockade enormt
- Den automatiska tolkningen av fakturor och kvitton
- Verkade enkelt
- Verkade spännande
- Gratis, verkade enkelt att använda
- Gratis och såg modernt ut
- Gratis, web
- Grattis så klart!
- Zervant var kasst. Ni är gratis.
- Perfekt för ensamföretagaren
- Det var moderns och lätt att använda. Och såklart gratis för ett litet företag!
- Behövde ett bokföringsprogram utan kostnader
- Foruminlägg

Hur enkelt var det att komma igång med Bokio?

55 responses
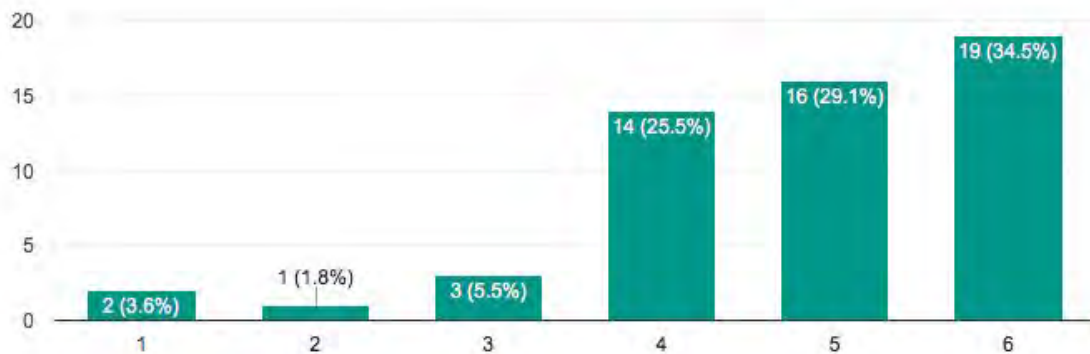
När insåg du att Bokio var någonting för dig?

51 responses

- Direkt (7)
- När jag fick höra talas om det (3)
- När jag gjort min första bokföring (2)
- Omedelbart (2)
- Nästan direkt (2)
- vet inte ännu, svårt att hitta svar på frågor när man är ny på Bokio
- Tyckte det kändes enkelt
- När jag upptäckte enkelheten
- Efter testet
- Inom ett par månader
- Direkt, men har inte lyckats komma igång pga problem med importen. Kör fortfarande visma.
- Fortfarande under utvärdering mycket som inte funkar helt som fakturering med många produkter, försäljning utanför EU dvs utan moms helt klart stökigt just nu.
- Gillade användargränssnittet
- Plötsligt kunde jag bokföra. Har inte haft tillräckliga kunskaper tidigare. Nu är det enkelt.
- När jag såg hur välgjort allt var samt vilka moduler som fanns på plats.
- Direkt när jag såg er video och själv testade hur enkelt det var
- Efter några gånger
- när jag upptäckte att min inkompetenta redovisningsbyrå fuckat till bokföringen på mina intäkter.
- Efter några timmar. Men sedan fick tänka om och börja från början igen.
- Efter att ha provat det och jämfört med andra system
- Efter några veckor

- Samma dag
- När jag la in mitt första kvitto.
- Eftersom jag inte kan/kunde bokföring så var det utmärkt verktyg att prova sig fram i först innan man körde på riktigt. Vill inte börja med 10 felaktiga verifikationer med 10 rättningar...
- Då det kändes enkelt, men vissa frågor hade jag gärna fått svar på innan
- gratis och det mesta görs automatiskt
- Vi letade efter ett program där man skulle slippa betala en avgift varje månad eller år. Vi har dock inte kommit igång riktigt i Bokio ännu.
- Redan efter att ha testat ett par bokföringar.
- När allting va så enkelt att förstå
- Med en gång
- När jag bekantat mig med sidan
- Efter att ha använt programmet till några verifikationer
- Är fortfarande lite osäker
- Inte bestämt mig ännu, finns ganska stora brister som jag inte vet om jag kan leva med.
- Första fakturan
- När både faktura och bokföring på samma ställe!
- Bra bokföringsfunktioner.
- Väldigt snabbt!
- Fortfarande inte säker
- inom en timme

Vad älskar du med Bokio?

51 responses

- Modern bokföring (3)
- Enkelheten (3)
- Snabb bokföring (2)
- Smidigt och gratis
- Att allt är så enkelt strukturerat och användar vänligt
- Säkert lätt när man väl är igång med det
- Att det mesta är automatiskt.
- Pris och modern bokföring.
- Allt på samma plats
- Den generella tidsvinsten.
- Enkelheten att kunna bokföra från vilken enhet som helst och import alternativen.
- Användargränssnittet.
- Enkelheten.
- Snabbheten och gränssnittet
- Förenklat men ändå kontrollerat. Det är lätt att få hjälp med det man inte förstår.
- Att det är gratis
- Att man inte behöver kunna redovisning för grundläggande bokföring
- Att det är lätt att förstå och gratis
- enkelheten, översikten
- Enkelheten att fixa allt via en browser.
- Enkelheten och det trevliga gränssnittet som ger stegen i rätt ordning
- AI kontering
- Koppling fakturering och bokföring.

- Det är smart!
- Förenklad och snyggt upplagt
- enkelheten och att ni lyssnar på vad som behövs
- Enkelheten. Förslagen när man ska bokföra.
- Gratis
- Enkelheten, lön, faktura och bokföring i ett paket, priset,
- Enkelt att hitta runt
- mycket räknas ut och redovisar sigsjälv. automatiska skapningar av fakturor. Så mycket automatiseras (och redovsigning kan öven göras manuellt)
- Det verkar rätt lättarbetat om man väl fått ordning på det. Det är gratis.
- Enkelheten. Lätt att logga in. Bra att det är webbaserat.
- Kostnadsfritt, användarvänligt
- Enkelt att använda
- Sökfunktionen, typ "egen insättning ". Boom.
- Inläsning av pdf fakturor
- Enkelt att bokföra de vanligare transaktionerna
- Hyffsat enkelt och bra översikt, gratis
- Ganska lätt, räknar ut saker åt mig!
- Enkel bokföring
- Fakturascanningen
- Enkelt och snyggt.
- Tillgängligheten
- Dokumenthantering

Vad i Bokio gör dig galen?

48 responses

- Inget (4)
- Lön och skatt sitter ihop. Vill bokföra lön när lönen betalas och skatterna för sig. Inscannade underlag i vyn bokföra visar bara sidan 1 (3)
- Momsen (2)
- Långa svarstider när man mailar
- Svårt i början utan bra förklaringar
- Kan inte sortera som jag vill i rapporter, saknar funktioner för deklarationshjälp
- Att det inte går att individanpassa med olika mallar på fakturor tex.
- Tekniska buggar. Skulle uppskatta snabbare support när det gäller buggar, även om man inte har priority support. För bokförings- och användarhjälp är det okej med längre väntetid utan tilläggstjänst jag, men bugghantering borde gå snabbare, även om man inte kan lösa det direkt.
- Fakturering och lön
- Att det inte går att lägga till egna bokföringsförslag/att AI't inte lär sig själv.
- Faktura mallen funkar inte med många artiklar i den samt inget enkelt sätt att ta bort moms om man säljer utanför EU
- Att jag nye lyckas importera mer än tio banktransaktioner trots att excelfilen innehåller drygt 100.

- Att fakturorna ser röriga ut med 100 typsnitt, färger och storlekar. Att jag gång på gång får ange samma info för kunderna dvs hur de ska faktureras (metod, valuta etc)
- Årsredovisning och en del buggar (känns lite beta på sina håll)
- Där verkar vara lite buggar här och där vilket gör mig orolig över att det finns fel i bokslutet
- Sökhjälp
- Supporten
- Vissa funktioner som strular. Inte kunna skapa personliga mallar för bokföring
- långa supporttider (även när man betalar för det) :P
- Få förvalda konto gör att jag behöver bokföra mycket manuellt.
- Lite oflexibelt ibland...
- Hitta rätt konto
- Startsidan borde kunna användas bättre. T.ex. Se resultat från tidigare år. Välja själv vad som ska presenteras. Mer som ett rapportverktyg.
- att kvitton måste vara PDF, svårt att ändra felaktiga poster
- När jag hade betalt ut lön och Bokio la upp en snygg löne-skatt-deklaration grej och jag måste vänta på att genomföra tills skattedatumet (helt ok), så försvann den från "att göra" sidan utan jag klickat på att den skulle genomföras. Det gick att hitta den under gamla månadens lön, men blev rädd att den försvunnit. Den

borde ligga kvar under "att göra" tills den gjorts...

- Svårt att få koll på översikten, Fakturor står bara med nummer och inte företagsnamn tex.
- jag har ett teknisk problem som jag skickade till eran support, och tydligen (egenligt andra) kan det ta 2-3 veckor att få svar. tills dess får det vara fel i bokföringen i bokio för att skatteverket väntar inte
- 1) Vid initial import gick något fel så att åren inte kom in som att det gjorts bokslut på dem, trots att de är klara. Troligen tog vi fel på vilket år som skulle markeras eftersom vi har brutet räkenskapsår. Sådana saker måste vara solklara, så att det inte blir fel, annars behöver man kunna ångra allt och starta om. 2) Verifikationsnumren från SIE-filen har byggts ihop med serienumren, oklart om det är en bugg, men de blir så långa att de inte kan visas i Bokios gränssnitt. 3) Egen skattesats för lön fastnar inte, åtminstone inte med en gång utan återgår till 0. Ev. fastnade den efter att vi registrerat första lönen.
- Att jag inte kan visa kontotillgångar eftersom jag använder privatkonto i min enskilda firma. Alltid skönt att kunna stämma av att allt stämmer, så det stör jag mig på.
- Galen och galen...svårt att veta vad som är mina egna brister i kunskap ang redovisning och vad man ska kräva av Bokio. Teknisk support borde inte kosta och ska återkopplas inom 24 timmar, skilj

på detta och support för redovisning. I det senare är det motiverat med en avgift men för att rätta till buggar eller att bygga ut systemet för bättre funktionalitet så borde det varken kosta eller ta veckor för svar.

- Fakturans utseende, inget OCR-nummer
- Små detaljer, finslipningen
- Endast min egen okunskap
- Fakturornas utseende. Inga kommentarer.
- Dåliga utskriftsfunktioner
- Att "modern bokföring" nästan aldrig passar vad jag behöver göra
- Svårt att anpassa
- När en funktion inte finns jag behöver!
- Funktioner som andra bokföringsprogram har. Och att ni är helt värdelösa på support om man inte betalar. Dessutom får man inte betala månadsvis. Ni är extremt otydliga med att man ska betala supportavgiften årsvis. Jag är enskild firma, behöver er hjälp kring Bokio ibland.
- Att även teknisk support om buggar eller andra problem tar lång tid att få svar på även om jag inte betalar för prio-support.

Vad saknar du i Bokio?
53 responses

-
- Automatisk betalning via bankkoppling (3)
- Mer info o sökfunktion. (2)

- Ännu smidigare förslag och lösningar
- Går det att koppla till sitt bankkonto? Som sagt är ny, men det skulle kunna vara något annars.
- Manual, Bra FAQ
- Deklarationshjälp
- Att det är mer anpassningsbart för olika branscher. Att inte hela kontoplanen är med när du bokför automatiskt.
- Möjlighet att ändra verifikation den sista manuellt även om man har använt modern bokföring. Ibland gör modern bokföring något konstigt.
- Fler val i fakturerings- (tex rabatt) och lönesystemet (alla jobbar inte med fast timlön /månadslön) .
- Bokslutsrapport till skatteverket.
- Export för Skatteverket vid deklaration
- Fler videotutorials. Fler och bättre hjälptexter i anslutning till de moment som används. Bättre hantering av traktamenten och leasingbilar/avskrivningar.
- Översikt bakåt i tiden. Och sen begrep jag inte bokslutet. Det fick revisorn klicka i.
- Möjlighet att göra årsredovisning
- En chatt som i Visma SPCS och Speedledger. Gör inget om den kostar.
- Frågor och svar
- Möjligheten för egna bokföringsmallar och egna idéer till "enkel bokföring"

- Bättre integration med skatteverket, momsrapport, deklarera kontrolluppgifter etc och snabbare support även om man ej har det som tillläggstjänst
- I rörelseresultat skulle jag vilja ha en sammanställning av totala kostnaderna "rörelsens utgifter" precis ovanför "rörelseresultat" raden, som det är nu måste man räkna ihop allt själv (varukostnader, lokalkostnader med mera) det brukar vara praxis med en sammanställning av de sammanlagda kostnaderna innan man ser rörelseresultat. Jag saknar att man inte kan ladda upp mer än en PDF för varje certifikat, jag kan ladda upp mer än en sida på ett verifikat men bara om det är JPG, man kan bara ladda upp en PDF. Jag saknar köp inom eu 12% och 6%. jag saknar kontoöverföring från plusgiro till företagskonto, som det är nu måste jag alltså antingen göra manuell bokföring eller överföra plusgiro till sparkonto, sparkonto till företagskonto. Jag saknar en sammanställd NE blanket som går att skriva ut eller exportera till deklarationen. sen finns det säkert några mer saker :)
- Egna konton.
- RUT
- Kvittoinkorg för foton, schemalagda bokföringar (te.x när man skapat en framtida betalning på sin internetbank).

- Exportering moms, deklaration och NE. Koppling bankonto och e-fakturor som kan bokföras mer automatiskt. Skapa fakturamal och inkl. moms summor på fakturan.
- Utskriftsmöjligheter i vissa fall. Möjlighet att fritt söka på konto/nr vid smart bokföring av kostnader.
- Fler betalalternativ i samma faktura
- Kontolista
- bättre automatisk hantering av semester dagar och rapportering av det
- Bankkopplingar. Programvaran som analyserar kvitton läser ibland fel. Bygg den smartare. Om jag säger att jag köpt in en dator, så bör inte programvaran som söker igenom kvittot kunna föreslå att momsen är 0 kr. Kanske kan användaren hjälpa till med att klicka på den plats på bilden bokio borde sökt på?
- bättre matchning av konton vid bokföring
- 1. Koppling till min bank. Har sett andra program kan överföra transaktioner från banken. 2. Skriver ofta in Verifikationer manuellt, tex vid en kreditkortsbetalning så tycker jag det är lättare att trycka in alla 10 betalningar i en verifikation så att man ser att det stämmer i slutsumman. Skulle önska att den manuella inmatning blev lite enklare. Jag vet inte hur, men kanske går att göra bättre?
- Tydligare översikt och lättare kontakt med er. Jag köpte hjälp för en specifik sak och det har nu gått över 24 timmar. Det är frustrerande.
- Bokföringen av utbetalning av löner när den betalades, och bokföra skatter när dom betalades, istället för att behöva göra båda i ett. kunna mer exakt ändra deklarationsunderlaget. Automatisering av bokföringar är jättebra. men hade varit bra att kunna lägga in egna förinställda
- En bättre startupprutin för de allra första och viktiga stegen, så att man får in sin gamla bokföring utan problem. Nu har vi hamnat litet i limbo.
- Att switcha mellan Manuel och automatisk bokföring. Om man kör automatisk för att bokföra något men vill göra små ändringar i verifikationen vore det guld om man kunde switcha till manuellt mode och inte behöva börja om från början.
- Pop-up info med råd och tips på hur man kan göra och vad man ska tänka på. Skulle vara beredd att betala extra för sådant.
- Ovan
- Bättre fakturering (import av underlag för fakturering}, fler mallar (modern bokföring)
- Bättre stöd för återbetalning av utlägg/milersättning i samband med lön. Dvs fler val/konton i lönmodulen.
- Att kunna modifiera fakturornas utseende. Skicka offerter som sedan omvandlas till fakturor.

Kanske en liten bokföringsskola för nybörjare.

- Rapporter för bokslut med utskriftsmöjligheter, koppling mot skatteverkets deklarationer
- Stöd för Rot, deklarationsstöd,
- Mängder med saker som jag inte orkar skriva här med mobilen, men det största är möjlighet att skapa egna bokföringsmallar samt stöd för deklaration.
- Fler bokföringsfunktioner
- Mer val hur saker ska se ut! Faktura mallar! Någon smart bokförings vägledning så man kommer lättare i gång!
- Förenklade årsredovisningen. Hoppas ni åtminstone hjälper till med deklarationen.
- Möjlighet att skriva text på enskilda rader i verifikat. PDF för huvudbok. Möjlighet att bokföra löneutbetalning innan skatten är betald. Bättre hantering av kreditkort, nu har jag skapat ett eget betalkonto 2890 för kreditkortsbetalningar och använder "Utlägg utbetalning" men skulle vilja använda 2490 eller liknande men det finns ingen kostnadstyp för det.
- Teknisk support.
- Bättre möjlighet att exportera olika delar av bokföringen till t.ex. PDF.
- Möjligheten att konfigurera egna kompletterande bokföringskonton, Att kunna skapa egna standardmallar för vanliga verifikationer (modell Inköp Drivmedel) t.ex insättning från kontokorts-tjänster till företagskontot.
- Flera kostnadskonton på varje verifikation. Man kan ha flera olika utgifter och olika momssatser på samma faktura. 1 faktura = 1 verifikation

C
Personas

Sara | 29 y/o
Hair Stylist

- Norrköping, Sweden
- High School
- Single

Concerns
- Failing with her business
- Feeling lonely
- Being made fun of.

Interests
Music   Partying
Travelling

Goals
- Meet a partner
- Keep a good relation with family and friends
- Show people that she can run her own business

Traits
Lazy   Messy
Caring

Saras Hair Studio

- 1 Employee
- Existed for 2 months

After 10 years as an employee at a hair studio, Sara felt like it was time to start her own business. Sara had no experience at all with managing her own business, but she thought it would be worth to try it out. If she succeeded, she would be in control of her own life. Sara have saved money for a couple of years, and when a good place for her studio became available, she decided to take the chance.

Since Sara just have started her business, she haven't managed to get any profit yet. The customers are starting to discover the hair studio.

Bookkeeping
- Knowledge:
- Confidence:
- Help needed:

- Sara thinks bookkeeping is very boring, but realizes that she have to do it by herself. Currently, there is no financial room to hire an accounting firm.

- Sara puts all of her receipts in an old ice cream box. At the end of every month, she take a day to organize everything. Usually her mother, who has some experience with bookkeeping, helps her.

Technology
- Knowledge:
- Confidence:
- Help needed:

Devices
Asus 13"
iPhone 6

Likes/Influences
NETFLIX

Ruben | 35 y/o
Freelance Writer

Malmö, Sweden

Courses in History, Religion & Political Science

Boyfriend

Goals
- Get a stable and regular income
- Write his first book
- Watch his favorite football team Juventus live

Concerns
- Paper work
- When Juventus loses
- Being forced to borrow money from his parents

Traits
Comfortable Funny
Unorganized

Interests
Reading Comics
Comics

Rubens Writing
Sole Proprietorship freelancing writer.

1 Employee

Existed for 2 years

Ruben have been a freelance writer during the past 10 years. He is a columnist in one of the biggest newspapers in Sweden, and also runs a blog. Previously, Ruben has been using a self employment company to manage his salary, but since he heard that he misses out some benefits using it - he decided to start his own firm. Now, Ruben have had his firm for two years.

	2016	2015
Revenue:	275 000	293 000
Profit:	-40 000	-25 000

Bookkeeping

Knowledge:

Confidence:

Help needed:

Ruben hates bookkeeping. Ruben have been fined by the tax office several times, due to his habit of constantly forget to hand in declarations and tax reports. He almost sees the fines as a reminder to begin to bookkeep. Every time he starts, Ruben regrets his decision to start his own company.

Ruben has no routines what so ever. When an invoice is sent to him, he pays it and puts it somewhere in his apartment. The same with receipts - Ruben just puts it in his wallet. Therefore, his bookkeeping process starts of by collecting everything. Luckily, his boyfriend can help him during these processes.

Technology

Knowledge:

Confidence:

Help needed:

Devices

Macbook Air 13"   iPhone 5s   iPad 2

Likes/Influences
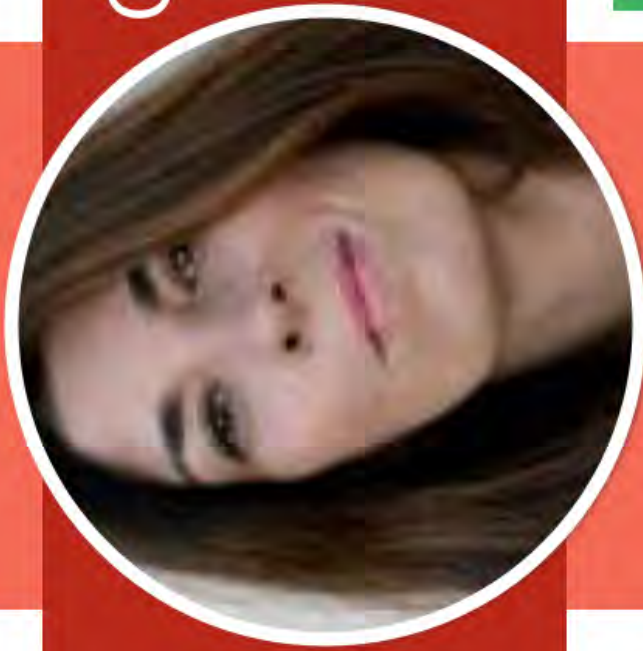
Christina | 56 y/o
CEO

- Östersund, Sweden
- M.Sc Economy
- Husband & 3 adult kids
  1 grandson, 2 cats

Goals
- Buy a house in the Swiss Alps.
- Watching her children succeed
- Doing voluntary work in a foreign country.

Concerns
- Lack of spare time.
- Losing control
- When softwares change appearance and functionality

Traits
Stressed Controlled
Perfectionist

Interests
Skiing Wine
Gardening

ChriLog AB | Logistics

- 8 Employees
- Existed for 12 years

ChriLog was founded 12 years ago, when Christina and her friend John decided to start their own company. Christina had experience from sales and financial work, and John had experience from logistics and engineering. They believed their competences were a perfect match, and that there existed a need for that kind of business.

	2016	2015	2014	2013
Revenue:	24 000 000	21 000 000	23 000 000	19 000 000
Profit:	1 300 000	600 000	750 000	300 000

Bookkeeping
Knowledge:
Confidence:
Help needed:

Christina has a very long experience with accounting, and feels very confident working with it. For her, bookkeeping is a natural part of the daily work.

Since Christina is responsible for finances of her company, she works with it on a daily basis. Every invoice and receipt is treated immediately, and organized in folders as well as a computer program. Christina have total control over the finances.

Technology
Knowledge:
Confidence:
Help needed:

Devices
Lenovo 13"
iPhone 7

Likes/Influences
The Economist
svt
LinkedIn
Facebook

Daniel | 43 y/o
IT Consultant

- Stockholm, Sweden
- B.Sc in Informatics
- Wife & 2 children. girl 12 y/o, boy 9 y/o

Goals
- Spend more time with his beloved family.
- Run the New York City marathon
- Participate in the Swedish Masterchef

Concerns
- Unnecessary complexity.
- Unquantifiable results.
- Being absent during the growth of his children

Traits
Organized Verbal
Competitive

Interests
Running Cooking
Movies

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dITCon AB | IT-support

- 1 Employee
- Existed for 4 years

Daniel started his own business a couple of years ago, when he still was employed by a larger firm. Daniel felt like it was a good idea to have his own company, which he could use to take some small jobs on his spare time. After a couple of years, Daniel realized that he wanted to spend more time on his own business, and he quit his regular job.

	2016	2015	2014	2013
Revenue:	903 000	818 000	52 000	9 000
Profit:	45 000	-50 000	5 000	-4000

Bookkeeping

Knowledge:
Confidence:
Help needed:

Daniel understands that bookkeeping is necessary in order to run a company. That doesn't implies that he enjoys it though. For Daniel, bookkeeping is a dull task that occupies too much time. Time he rather would like to spend on something else.

Daniel have developed a very strict system in order to spend as little time as possible on bookkeeping. He prints every invoice and receipt, and puts it in a folder. The folder is labeled according to each day. At the end of every month, Daniel spends one day to put into his bookkeeping software on the computer.

Technology

Knowledge:
Confidence:
Help needed:

Devices
Samsung Galaxy s5
HP ZBook 15"

Likes/Influences

THE VERGE

D
Journey Maps

Touch Points	Evaluate	Intvestigate	Start Trial	Import	Explore	Bookkeep	Return	Explore	Bookkeep	Decide	Register
Goals	I am very happy with how things work	I want to check out what I got recommended	I want to have my believes disproved	I want to know if I can start right away	I want to know if I can do the same things as I usually do	I want to understand how flexible it is	I want to give it a second chance	I want to know if I understood everything	I want to try bookkeeping again	I have to decide if I'm going to continue evaluate Bokio	Is it worth to create an account?
Thoughts	"I have experience with finances, so why should I change stuff?"	"So, my friend told me about Bokio. It's fire, so I have to check it out"	"It looks too simple. It can never be a complete solution"	"If it manages to get my complete history imported, I will give it a shot"	"Let's see if I can find my usual tools in this software"	"Okey, it seems very convinient, but do I manage to keep the control?"	"I forgot about Bokio. Let's get back there and try it again"	"So, did I find the tools that I were looking for last time?"	"Is this better than my own method?"	"Is it really worth to change software? Everything works totally fine at the moment"	"I decide not to continue. Of what I saw, it might not fit my purposes"
Emotional Experience	"I am confident"	"I am suspicious"	"Is it too good to be true?"	"I am putting demands on this software"	"I am sceptical that I can do everything here"	"I am surprised by the simplicity"	"I am curious about this service"	"I really want this to fit my needs"	"I am doubtful"	"I am afraid that it won't be better than my existing solution"	"Sadly, I will give up these attempts"

Daniel
42 y/o
IT Consultant

- Stockholm, Sweden
- B.Sc in Informatics
- Wife & 2 children. girl 12 y/o, boy 9 y/o

Goals
- Spend more time with his beloved family.
- Run the New York City marathon
- Participate in the Swedish Masterchef

Concerns
- Unnecessary complexity.
- Unquantifiable results.
- Being absent during the growth of his children

Touch Points	Evaluate	Research	Investigate	Start Trial	Import	Support	Bookkeep	Decide	Register	Explore	Return
Goals	I don't want to spend unneccessary time on accounting and bookkeeping	I have to find alternatives to my current situation	I want to know weather this will fit my needs.	I want to understand how much time I will save	I want to start off where I left	I want to get my imported files to work properly	I want to know if the modern bookkeeping part actually will work	I have to decide if it's better than my current solution	I want to do a proper registration	I want to feel confident with Bokio	I want to try Bokio for a long period of time
Thoughts	"I spend too much time on managing my finances. There must be a better way to do it"	"I don't care about price, I want it to be simple"	"Bokio promises that their service will be automized and simple."	"The import feature of my company information gives me very high expectations"	"The import feature of old files can give me a fresh start, but it seems to result in errors"	"I have to start a support ticket"	"This modern bookkeeping part is great. I realize how much time I will save"	"There is no question about it. I will register my account"	"I have already tried to import my files?"	"Ok, let's see what else I can do with Bokio. Let's play around"	"Using the phone to bookkeep is great. I save so much time"

Emotional Experience
- "Every time I bookkeep, I get frustrated"
- "I feel motivated to find a better choice"
- "It is worth to try it out"
- "Bokio can be really good for me"
- "I want this to work"
- "I hope I'll get an answer soon"
- "I love modern bookkeeping"
- "Bokio can save me enormous amounts of time"
- "I'm frustrated..."
- "It's easy but maybe I lose control?"
- "Bokio is my cup of tea!"

Ruben

35 y/o — Freelance Writer

- 📍 Malmö, Sweden
- 📖 Courses in History, Religion & Political Science
- 💕 Boyfriend

Goals
- Get a stable and regular income
- Write his first book
- Watch his favorite football team Juventus live

Concerns
- Paper work
- When Juventus loses
- Being forced to borrow money from his parents

Touch Points	Evaluate	Research	Investigate	Start Trial	Explore	Bookkeep	Support	Decide	Import	Explore	Return
Goals	I need to be more responsible for my finances	I need a free bookkeeping service	I just want to now if it's completely free	I hope it's not boring	I just want to know where to start	I just want to get over with this	I want to know if I did it correct	I have to decide if I can manage my finances by myself	I want to start from zero	I want to feel confident	I want to develop routines
Thoughts	"My current financial situation is bad. I have to be more responsible"	"I want something free. I can't afford paying for services"	"I hope Bokio won't charge me for anything extra"	"It looks kind of fun, actually"	"I have no idea what to do next?"	"This part was very easy, and it also was fun"	"Did I do it correctly? Better ask someone."	"Well, it can't be worse than how I have worked previously"	"No, I don't want to import. It's not for me"	"I hope that I can use this software by myself"	"My routines should be to add stuff when I get them. How can I remind myself?"

Emotional Experience

- "I feel anxiety."
- "I am desperate"
- "I am hopeful but worried"
- "I am very motivated now"
- "I feel like I lost control?"
- "Wow, this was fun and I am very proud"
- "I'm worried that I did something wrong?"
- "I believe that this can fit my needs perfectly"
- "I hope that it's ok to start from scratch"
- "Am I good enough to manage my own finances?"
- "I am motivated to change my behaviour"

Sara

29 y/o
Hair Stylist

- Norrköping, Sweden
- High School
- Single

Concerns
- Failing with her business
- Feeling lonely
- Being made fun of.

Goals
- Meet a partner
- Keep a good relation with family and friends
- Show people that she can run her own business

Touch Points	Evaluate	Research	Investigate	Start Trial	Decision	Register	Import	Bookkeep	Explore	Return	Share
Goals	I want to take control of my finances	I want to find a software that I can use by myself	I want to understand if Bokio fits my purposes	I want to get started with Bokio	I have to decide if I am going to continue with Bokio	I want to register an account.	I want to have my previous work in Bokio	I want to bookkeep my first receipt	I want to explore the application	I want to bookkeep another receipt	I have to recommend this service
Thoughts	"Now, when I have my own company, I have to manage my finances"	"Hmm. There's lots of options here.. Lets try the free one"	"It looks great by the images and the text!"	"Really easy to get started, but I don't really understand what to do next"	"Bokio was easy to start with, and it's free."	"I have decided to register an account."	"I don't really know what this import step really means"	"I have some lack in knowledge, but I felt like I could do this without understanding"	"I don't know what to do next. Am I done now?"	"So, I will just do as I did previously. It was easy and it worked"	"Since I learnt how to bookkeep, without any proper knowledge, I will tell people about this"
Emotional Experience	"I feel motivated to do this"	"I am little concerned by all of these options"	"I feel like Bokio is perfect for my purposes"	"I have am worried that I have to have more knowledge"	"I am hopefull that Bokio will work for me"	"I like how quick this registration flow is"	"I love how simple it is. Even I, with little experience, can do this"	"I feel dumb now"	"I feel stupid"	"I am starting to understand how to bookkeep!"	"Bokio solved my problems!"