

The digitalization impact on accounting firms business models

KATHRINE BYGREN



**KTH Industrial Engineering
and Management**

Master of Science Thesis
Stockholm, Sweden 2016

The digitalization impact on accounting firms business models

Kathrine Bygren

Master of Science Thesis INDEK 2016:19
KTH Industrial Engineering and Management
SE-100 44 STOCKHOLM



KTH Industrial Engineering
and Management

Master of Science Thesis INDEK 2016:19

The digitalization impact on accounting firms business models

Kathrine Bygren

Approved
2016-June-14

Examiner
Kristina Nyström

Supervisor
Terrence Brown

Abstract

Technological revolutions have occurred for markets and industries since the rise of organized communities and societies. In the past few years a technological revolution has been in process with the growth of digitalized markets. This has resulted in a shift of analog business becoming digitalized. Digitization is a structural change for industries and the Swedish economy is affected by it. This put a demand on many industries to adapt digitalized techniques, in order to stay competitive and survive this technical shift. Adapting to a technical revolution puts pressure on the business strategies and requires companies to model new ones. With the digitization, new requirements have arisen for companies to create new business models, value chains and ways of organizing activities, in order to manage the business strategies. Digitization has been seen to change innovation processes and some experts believe it will change whole markets. The accounting industry is one of the industries that has been seen to have a growth in digitalization and is expected to grow even more. The accounting industry is like many other industries are experiencing the need for a change due to digital technologies. Therefore, this study aims to investigate how digital accounting businesses could set up a general business model, in order to be a successfully digitalized business.

This has been conducted through a multiple case study, with the aim to provide generalized findings of business model elements and barriers/facilitators for digitalization affecting the business model. The multiple case studies has been conducted through interviews with different accounting companies, that market themselves as digitalized actors.

The findings of the research indicate that digitalization had a direct affect on how companies should strategically organize a business. Many of the implications on digitalized accounting will have direct impact on strategies, actions and processes. The digitalization will require company cultures, which are digitalization friendly. Some of the found results are: digitization will give accounting companies digital accounting tools, knowledge sharing and communication channels. It will put pressure on employees for having different knowledge than analogue businesses and more expertise skills. Digitalization it is estimated to affect the offerings provided to customers. The digitalization is also most likely to have key partners, targeted customer segment, cost structure and revenue streams specific for being digitalized. Digitalization of the accounting industry is likely to change the market from being a supplier driven to becoming demand driven and new actors with less accounting knowledge could get a opening for entering the market. And there are many barriers and a few facilitators for being a digitalized accounting business. This has been taken in consideration when mapping a general business model for a digital accounting firm in this report.

Key-words: Digitalization, innovation, business models, accounting, business model elements.

Foreword

This master thesis report is written at the department of Industrial Engineering and Management at KTH – the Royal Institute of Technology in Stockholm, Sweden. The research has been conducted during the period: February 2016 - June 2016.

Acknowledgements

First and foremost in this research, I would like to thank FRAKTAL Consulting Group for giving me the opportunity to perform my master thesis at their company; they have been a great source of knowledge. I would also like to thank my supervisor Patrik Unevik for the commitment and support throughout the research journey.

I would also like to give acknowledgement to my supervisor Terrence Brown who has been a source of reflection and support throughout the process, which helped improve the results found in this thesis.

I also have a great appreciation for all case companies who were interviewed. Thank you for sharing the information and contributing to answer the research question.

Furthermore, I would also like to thank Kristina Nyström and my seminar group for giving me reflection, feedback and valuable discussions. Your perspective has been of great support in the research process.

Last, I want to thank my friends and family for the mental support that has been of equal value for making this master thesis possible. I would also like to give a special thank you to my friends that have taken their time to review my writing and providing feedback on my written language.

Thank you for the influence during this experience!

Kathrine Bygern

Index

1 INTRODUCTION	4
1.1 BACKGROUND.....	4
1.2 PROBLEMATIZATION.....	5
1.3 PURPOSE.....	6
1.4 RESEARCH QUESTION.....	6
1.5 DELIMITATION	6
1.6 STUDY'S EXPECTED CONTRIBUTION	6
1.7 SUSTAINABILITY	6
1.8 OUTLINE OF THE REPORT.....	7
2 LITERATURE REVIEW	9
2.1 DIGITALIZATION	9
2.1.1 <i>Digitalisation is a Innovation</i>	10
2.2 DIGITALIZATION AND ACCOUNTING	11
2.3 BUSINESS MODELS.....	12
2.3.1 <i>Concept of business models</i>	13
2.3.2 <i>Creating business models for digital companies</i>	14
2.3.3 <i>Business model elements and different tools for modelling</i>	15
2.4 BARRIERS AND FACILITATORS.....	22
2.5 IDENTIFIED RESEARCH GAP	23
3 METHODOLOGY	25
3.1 RESEARCH APPROACH.....	25
3.1.1 <i>Research design</i>	25
3.1.2 <i>Research process</i>	26
3.2 METHOD FOR LITERATURE REVIEW	28
3.2.1 <i>Validity, reliability and generalizability of literature review</i>	28
3.3 METHOD FOR MULTIPLE CASE STUDIES.....	29
3.3.1 <i>Validity, reliability and generalizability of the multiple case study</i>	30
3.4 METHOD FOR FRAMEWORK.....	31
3.4.1 <i>Validity, reliability and generalizability of framework</i>	32
3.5 METHOD FOR DATA ANALYSIS.....	32
3.5.1 <i>Validity, reliability and generalizability of data analysis</i>	33
3.6 ETHICS OF THE STUDY	33
4 EMPIRICAL FINDINGS AND ANALYSIS	34
4.1 EMPIRICAL RESULTS IN FRAMEWORK USED: THE BUSINESS MODEL CANVAS.....	34
4.1.1 <i>Empirical findings of key partners</i>	34
4.1.2 <i>Empirical findings of key activities</i>	35
4.1.3 <i>Empirical findings of value proposition</i>	37
4.1.4 <i>Empirical findings of customer relationship</i>	39
4.1.5 <i>Empirical findings of customer segment</i>	40
4.1.6 <i>Empirical findings of key resources</i>	41
4.1.7 <i>Empirical findings of distribution channels</i>	42
4.1.8 <i>Empirical findings of cost structure</i>	43
4.1.9 <i>Empirical findings of revenue streams</i>	43
4.2 EMPIRICAL FINDINGS OF BARRIERS AND FACILITATORS	46
5 LITERATURE FINDINGS AND ANALYSIS	49
5.1 LITERATURE RESULTS IN THE FRAMEWORK USED: THE BUSINESS MODEL CANVAS	49
5.1.1 <i>Literature findings of key partners</i>	49
5.1.2 <i>Literature findings of key activities</i>	49

5.1.3 Literature findings of value proposition	50
5.1.4 Literature findings of customer relationship	50
5.1.5 Literature findings of customer segment.....	50
5.1.6 Literature findings of key resources.....	51
5.1.7 Literature findings of distribution channels.....	51
5.1.8 Literature findings of cost structure	52
5.1.9 Literature findings of revenue stream.....	52
5.2 FINDINGS OF BARRIERS AND FACILITATORS	52
6 SUMMARY OF EMPIRICAL AND LITERATURE FINDINGS IN THE BUSINESS MODEL CANVAS	
.....	54
6.1 FINDINGS OF NEEDED INTERNAL INSIGHTS IN A DIGITAL BUSINESS MODEL.....	55
6.2 FINDINGS OF NEEDED VALUE TO DELIVER IN A DIGITAL BUSINESS MODEL.....	55
6.3 FINDINGS OF NEEDED CUSTOMER INSIGHTS IN A DIGITAL BUSINESS MODEL	56
6.4 FINDINGS OF NEEDED FINANCIAL INSIGHTS IN A DIGITAL BUSINESS MODEL.....	57
7 DISCUSSION	58
7.1 DISCUSSION OF RESEARCH RESULT AND ANALYSIS OF THE BUSINESS MODEL CANVAS FINDINGS	58
7.1.1 Discussion of key partners	58
7.1.2 Discussion of key activities	58
7.1.3 Discussion of value proposition.....	59
7.1.4 Discussion of customer relationship.....	59
7.1.5 Discussion of customer segment.....	59
7.1.6 Discussion of key resources	60
7.1.7 Discussion of distribution channels.....	60
7.1.8 Discussion of cost structure.....	61
7.1.9 Discussion of revenue stream	61
7.2 DISCUSSION OF RESEARCH RESULT AND ANALYSIS OF THE BARRIERS AND FACILITATORS	61
7.3 DISCUSSION OF FRAMEWORK USED	63
7.4 DISCUSSION OF GENERALIZABILITY OF THE RESULTS	63
8 CONCLUSIONS, IMPLICATIONS AND FUTURE RESEARCH.....	65
8.1 RESEARCH QUESTIONS.....	65
8.1.1 Research question 1.....	65
8.1.2 Research question 2.....	65
8.1.3 Research question 3.....	66
8.1.4 Research question 4.....	67
8.1.5 Main research question.....	68
8.2 IMPLICATIONS	70
8.2.1 Industrial implications.....	70
8.3 RESEARCH IMPLICATIONS AND FUTURE RESEARCH	71
9 REFERENCE LIST	72
APPENDIX 1.....	75

List of figures

Figure 1. Elements of business model design (Teece, 2010).....16

Figure 2. The Porter’s value chain (Porter, 1985).....17

Figure 3. The business Model Canvas (Osterwalder and Pigneur, 2013) 19

Figure 4. Research process.....27

Figure 5. Business model canvas with area division.....54

Figure 6. Business model canvas findings of internal insights.....55

Figure 7. Business model canvas findings of needed value to deliver.....55

Figure 8. Business model canvas findings of needed customer insights.....56

Figure 9. Business model canvas findings of needed financial insights.....57

1 Introduction

The introduction aims to give an overview of the background to the studied area: how digital accounting firms set up successful business models. It also aims to give an understanding of the theoretical foundation of the research though presenting: the problematization; the purpose of the study; the research question; delimitations and expected contributions.

1.1 Background

Technological revolutions have occurred since the rise of organized communities and are phenomenon's researchers have found interesting in studying closely. Findings from studies that compare different technological shifts state that there is an exponential increase in the pace and development of technological shifts (Rogers, 2003). In the past few years a technological revolution has been in process with the growth of digitalized markets. The shift has resulted in many companies changing business focus from being an analog business towards becoming a digitalized business. It is driven by many reasons but by two primary: customers are changing behavior towards a wish for online services rather than personal service; as well as actors are ready to take the actions needed towards meeting these customer needs (González, 2015). The third most common reason for digitalizing a business could also be seen as reducing costs. This is done through atomization of many processes in the business and gives a lower workforce and quicker actions (Gustafsson, 2015).

Digitalization is a structural change for industries and the main effects of digitalization can be seen as four channels that change: physical goods becomes digital services; digital platforms are simplified and optimized; local services goes global; and digitalization streamlines traditional production. Research by Breman and Felländer (2014) shows that many jobs are at risk of being digitalized within a period of twenty years. This will change the markets drastically and requires companies to integrate innovational solutions and an entrepreneurial mindset in order to adapt. Many companies are trying to use digitalization in their businesses and it is seen to be more companies to follow these actions, but most industries and their market actors are in general not using digitalization to its full potential (Breman and Felländer, 2014).

The accounting industry has been identified as a business where digitalization is expected to grow more. Due to digitalization, a need for change in business strategies and activities becomes evidential. This is because digital technologies e.g. the Internet, e-commerce, electronic data interchange and an electronic meeting affects business communication (Burns and Vaivio, 2001). When searching in libraries, online libraries and academic databases, it is difficult to find previously written academic papers or articles about digitalization's impact on the accounting industry. That makes it an interesting area to research within since many accounting businesses are foreseen to change their focus from being an analog business towards becoming a digitalized business (Southern Cross University, 2016).

The society is gradually growing more and more digitalized and automated, which requires constant renewal of strategic management. Companies have to consider new technical requirements and need to implement them into their businesses value chains, activity planning, strategies, business model etc. Previous studies have shown that digitalization will

put pressure on companies to change innovation processes. Some experts believe it will change whole markets, while others experts believe that it will not be that market changing. Anyhow, with digitalization and digital innovation, socio-technological change follows. Businesses have to learn how to manage what the digital innovation change and also what the indirect technological changes it brings to an organization (Gustafsson, 2015).

Digitalization can be viewed as having dynamic value chains, which will be a big difference from stable traditional value chains and is therefore expected to affect a corporate culture in a different way. This requires digitalized companies to continuously reshape and reflect upon the formability within the company structure that digitalization requires, digitalization is in practice complex (Gustafsson, 2015). Before establishing new leads of strategies the situation needs to be evaluated in order to understand what the needed strategic changes should be and what they will mean for the business (Teece, 2010).

One generally accepted way to state the needed strategies and actions when countered with the phenomena of change is by establishing a business model (Berglund and Sandström, 2013). Business models are a concept equally old as the art of making business, but the stated business models started appearing in the 90's. Not all companies of today have a stated business model, but they perform strategic decisions for business activities. The essence and purpose of the business model is to reflect over these strategic decisions and graphically and written state them (Ovans, 2015).

This report will be focusing on the accounting industry. The accounting industry have many day-to-day processes that are digitalized to a high extent e.g. software programs, online or cloud solutions, but a majority of actors within accounting are still using analog processes to a high extent e.g. having the software offline, analog data collections etc. (Southern Cross University, 2016). Another reason for focusing on the accounting industry is the research by Frey and Osborne (2013) that estimates accounting of having a 98% probability of getting computerized. This makes it an interesting area to research in order to understand how digitalized companies today, work strategically and position themselves using their many business elements.

1.2 Problematization

As mentioned, companies meet changes with digitalization. Digitalization is seen to require a need for other business strategies than an analogue company's (Gustafsson, 2015). Of today there is no general business model for how digital companies should position themselves with their business elements to simplify the choices of strategic positioning towards meeting digitalization.

Changes could come in different stages of the business processes as challenges in the form of barriers, but also as facilitators. Barriers could make some of the actions more difficult to manage and facilitators could make other steps of the process easier, that is why business modeling is important in order to more clearly understand and question the elements of the business and its surrounding stakeholders (Teece, 2010).

As stated, the accounting industry is estimated to have a high probability of becoming automated. It means that companies of the industry need to meet this change and need to understand what it will require of their businesses for survival (Frey and Osborne, 2013).

To restate; even though the need for business modeling seems to be evident for digitalized accounting firms, no general mapping exist to serve as guidelines for the needed elements.

1.3 Purpose

This study will investigate how business models for digitalized accounting firms' look like and will present how a business model generally could be set up, in order to be successfully digital. This will provide an understanding to how digital accounting businesses makes business decisions in order to survive the market changes.

1.4 Research question

The main question for this thesis is:

How could a general business model for digitalized accounting firms on the Swedish market be set up in order to survive the market of today?

The following sub-questions were formulated to make it easier to answer and cover the main question:

RQ1: What is digitalization?

RQ2: What does digitalization mean for accounting businesses?

RQ3: What is a business model and how can it be modeled?

RQ4: What barriers are there from digitalization affecting business models?

1.5 Delimitation

Looking at digitalization for a line of business is a large and complex area. As a result some delimitations has been made.

Due to different needs connected to geographical markets the study will only investigate actors on the Swedish market. This delimitation has also been done due to the accessibility to the Swedish market and is also based on the possibility it gives to look at actors with similar conditions in governmental impacts, law requirements, customer segmentations, etc.

A further delimitation was done to focus on digitalized accounting firms who target small to medium customer companies. This is due to the fact that a majority of companies in Sweden belongs to this group.

1.6 Study's expected contribution

This study will provide an understanding of how digital accounting businesses could set up their business model for success on today's market.

1.7 Sustainability

When viewing the different aspects of sustainability, the United Nations (UN) identified three pillars of sustainability in the "World Summit on Social Development" 2005: economic; social; and environmental. These three pillars will be used in this report to overview its

possible contribution to sustainability. The economic sustainability aim to promote a continued economic prosperity thinking for companies and the social sustainability pillar focus on highlighting the need to strive for political justice, cultural vibrancy and taking societal responsibilities as a company. The third pillar of environmental sustainability promote an environmental justice and the need for companies to provide as light footprint as possible on earth, in order for future survival of the earths ecosystem (United Nations, 2005).

The economic sustainability that digitalization of the accounting business brings, is a need for improvement and staying up to date with digital tools and strategies. Companies need to strive for economic sustainability and find new focuses for sustained income (United Nations, 2005).

Another economic sustainability that digitalization of the accounting practice brings to the industry, is the needed improvement for staying up to date with the customers needs and evolving this services to fit the customer of today that has a mobile life and uses many digital tools daily e.g. Internet, pads, cloud solutions, smart phones tec. The companies need to strive for economic sustainability and find new focuses that incorporate the digital customer for sustained income (United Nations, 2005).

The social sustainability impact digitalization of the accounting business will have is changed role for the accountant, due to the fact that many of an accountants assignments are foreseen to be automated. This will put pressure on the society to modify accounting educations to fit future need for the accountants role. Accounting companies should try to be active in guiding the improvements to fit foreseen future need (United Nations, 2005).

The main environmentally sustainable aspects digitalization bring to the accounting business, is that it is saving material e.g. paper and gives a lower carbon footprint due to less need for document transportation (United Nations, 2005).

1.8 Outline of the report

Chapter 2: Literature review

Here the theoretical framework and base for the analysis method is presented. The aim of this chapter is to provide a structure for the empirical analysis.

Chapter 3: Methodology

In this chapter the methodology for the report is presented, the process, the research type. The literature review, the data collection and the construction of the framework is motivated.

Chapter 4: Empirical findings and analysis

In this chapter the empirical findings from the multiple case studies is analysed based on the framework: the business model canvas.

Chapter 5: Literature findings and analysis

In this chapter the Literature findings from the literature review is analysed based on the framework: the business model canvas.

Chapter 6: Summary of empirical and literature findings in the business model canvas

Here the empirical and literature findings are summarized and presented graphically in the business model canvas for an overview understanding.

Chapter 7: Discussion

Here the empirical and literature findings are discussed and possible solutions are presented.

Chapter 8: Conclusions, implications and future research

In this chapter the findings for every sub-research question as well as the main question of the research are presented. In addition, the implications of the study on an industrial and research level are presented among recommendations of future studies.

Chapter 9: References

The references for the literature review are presented for transparency of the research.

Appendix 1

The interview questions of the study are presented.

2 Literature review

The literature and theory chapter aims to present previous findings, theories and investigations within the subject of digitalization and its interference on business models. This will give the reader an understanding to the area and provide context for the study through secondary sources.

This chapter will define the overall subjects of the report: digitalization, digitalization as an innovation, accounting and business models. It aims to answer the sub-research questions:

RQ1: What is digitalization?

RQ2: What does digitalization mean for accounting businesses

RQ3: What is a business model and how can it be modeled?

RQ4: What barriers are there from digitalization affecting business models?

The first sub-chapters: 2.1 “Digitalization” is set to answer RQ1: *What is digitalization?* The second sub-chapter 2.2 “Digitalization and accounting” is generated to answer RQ2: *What does digitalization mean for accounting businesses?* The third sub-chapters 2.3 “Business models” is supposed to answer RQ3: *What is a business model and how can it be modeled?* And the last sub-chapter 2.4 “Barriers and facilitators of digitalization” is set to answer RQ4: *What barriers are there from digitalization affecting business models?*

Through this structure, the literature review will contribute to answering the main research question: *How could a general business model for digitalized accounting firms on the Swedish market be set up in order to survive the market of today?*

2.1 Digitalization

The meaning of digitalization is a transforming analogue knowledge and information to become a stored digital form of knowledge and information. This provides easier access to knowledge and information in real-time and enables a global exchange between people and plugged in digital appliances. The difference between fully functional mature digital businesses and businesses that are not fully digitalized, is that mature companies use digital tools like cloud, analytic tools, social tools and mobile both internally and externally to the business. Not fully mature companies get stuck in finding solutions for separate business problems with non-standardized digital technologies and by doing so end up with many separate digital systems that are not integrated with each other, this is complicated for the companies' employees and customers to effectively use (Kane et al. 2015).

In general for all industries, fully digitalized companies are seen to have more effective actions, tools, knowledge sharing and communication than other not fully digitalized companies. In order to catch these strategic advantages, companies should have innovation strategies and to be able to quickly disrupt their business through digitalization. The key for successful digitalization often relies on having supportive leaders for innovation and digitalization, as well as committed employees. Companies' leaders need to create and project a clear culture striving for digital innovation/transformation and advantage, as well as finding and keeping talents that have an interest in fulfilling digital strategies. Companies with clear

and coherent digital strategies are seen to be what drives digital maturity according to Kane et al. (2015) researches. Kane et al. (2015) also found that digitally mature companies provide their employees with more skills and knowledge of how to use digital techniques. That creates employees that want to work for digital leaders due to the larger knowledge basis and opportunity employees get from it. If clients and employers get access to digital tools for managing accounting, it will save time through having all the data storage in one place. Having collected data to access immediately and to compare, provide visibility, traceability and enables customized clientele advising. One other improvement that comes with digitalized tools is the distance communication, which enables and makes the work more efficient in approaching and consulting new and existing clients from a distance (Kane et al. 2015).

Kane et al. (2015) promote the need for companies to see to the larger scope digitalization would mean to the companies. Companies should not only get to focus on only a few strategies, operating models, marketing or technology. Accounting companies should develop the end-to-end strategies, models etc. (Kane et al. 2015). Companies have to take risks and make it to a cultural norm, as well as welcoming failure as a necessary presumption for later success. Being innovative means taking a path never walked before and finding the way is the challenge (Kane et al. 2015).

2.1.1 Digitalisation is a innovation

It is important to understand that digitalization is an innovation and that is why it will bring change upon the accounting industry. Digital accounting will provide the industry value creation through new techniques, services and technology in order to satisfy new customer segments and bring new markets to rise (Southern Cross University, 2016).

The definition of innovation is that innovation can be seen to be the process of converting an idea into a product/service and how it creates value for the customer/companies. An innovation creates value through being economically producible and satisfying a need. In other words, innovations strive to bring increased or new value from resources in all processes of the business (Rogers, 2003). Innovations are usually evolutionary or revolutionary. The evolutionary innovations can be seen as marginal improvements in technology and processes. A revolutionary innovation is disruptive and new and is also referred to as discontinuous innovations or disruptive innovation. A revolutionary innovation brings a new market or the need to satisfy a customer segment that has been hard to please before (BusinessDictionary, 2016). Digitalization of the accounting business has seen to be based on new technologies that develop better and new solutions and forces accounting companies to adapt the new technology and change services and products offered (Southern Cross University, 2016). In this way the digitalization of accounting can be seen to be a revolutionary innovation.

Abernathy and Clark (1984) presents disruptive innovations as satisfying new consumer groups or market segments previously not existing and/or being a product/service that is putting old techniques and products as outdated competences (Abernathy and Clark, 1984). Disruptive innovations bring new unexplored markets and opportunities for high return through being first to the market. Disruptive innovations are what bring technology shifts (Christensen, 1992). For example the ongoing digitalization of industries is a disruptive innovation. Conservative innovations, also called incremental innovations can be seen as series of minor improvements to existing products and product lines. It brings continued

increased return and is done in order to maintain or improve the products competitive position. For companies that offer disruptive products or services it usually gives lower gross margins and smaller target markets in the beginning, which might look non-tempting. The entry for disruptive technologies and innovations often occur in the low end demand of the market in a niche customer segment, where simplicity, comfort, handiness, and affordability is valued (I Christensen, 2016). As argued from Christensen (1992), it is hard to make a bigger profit than the traditional technology in the beginning on disruptive innovations, but it is important to invest in them. Otherwise other companies will do and outperform the rest of the market in a few years (Christensen, 1992). Christensen (2016) points out that disruptive innovations are a positive force, they force the rise of new technology and services. Christensen (2016) argues that a balance between sustainable and disruptive innovations entering the market is important, they drive each others improvements and creates new technology suitable for a sustained market existence. That is why digitalization of accounting is a revolutionary and disruptive innovation and needs to be handled as an industrial technology shift.

2.2 Digitalization and accounting

The art of accounting is known to be dated back over 7000 years ago and have since then evolved from the art of bookkeeping to involve a whole concept concerning communicating financial information about a business (I Boundless, 2015). The American Institute of Certified Public Accountants nowadays defines accounting as *"the art of recording, classifying, and summarizing, in a significant manner and in terms of money, transactions and events which are, in part at least, of financial character, and interpreting the results thereof."* It can be translated that accounting is about managing and systemize financial information in order to manage the business and its internal and external parties (I Boundless, 2015). Accounting is "the language of business", and involves reporting financial information internally and externally. Internal accounting is called management accounting and is primarily concerning operating decisions and is communicated to all internal parties, for example managers and business owners (I Boundless, 2015). A few examples of management accounting are providing budgets, financial reports for strategic decisions and judge the companies' financial performance (UNSW, 2016). External accounting is called financial accounting and involves reporting financial information to external parties like banks and/or shareholders (I Boundless, 2015). Financial accounting has to be organized accordingly to general. Examples of rules are the Generally Accepted Accounting Principles (GAAP), International Financial Report Standards (IFRS) and Bokföringsnämnden (BFN) for Swedish accounting (I Boundless, 2015) (BFN, 2016). Some examples of financial accounting are: analyzing legally required financial statements and internationally standardized report writing (UNSW, 2016). Something to add in accounting history from the last years, is that accounting has gone from a traditional view of only managing the economic sustainability of a business, to involve environmental sustainability through using financial resources (UNSW, 2016).

Paper based accounting is the pure form of analog accounting and was the first accounting technique used to manage and store data. Analog accounting also incorporate real life customer meetings and traditional hourly billing. Today, when an accounting company is not fully digitalized, they are likely to use offline software that storage data in different offline systems, divided in different software programs as well as analog storage. This makes the processes of collecting, analyzing and storing data more complex, time demanding and demands parallel data storing. There have not been many transformational shifts in the accounting industry, considering the age of the profession. The first large shift was when the

computers were invented in the 1980's, until then accounting had been done only analogue. Computers made offline software available and made accounting easier to manage more efficient. But still today, analog principles and tools are part of many accounting companies' daily work. The second large technological shift for the accounting industry is the ongoing digitalization. This shift has though digital tools like software programs, online tools, cloud solutions, webinars, digital storage of data etc. given the industry digitalized accounting opportunities. When communicating financial information through the help of digital tools and methods, the processes of accounting can be defined as digitalized and is called digital accounting. For the accounting industry many day-to-day processes have been exchanged with new technology and is today digitalized to a high extent internally in many businesses. Some examples of digitalized tool are: software programs, online or cloud solutions and webinars that makes communication, storage of data. Digitalized tools give the accounting business more flexibility in their day-to-day processes and actions. The digital opportunities are becoming more and more accepted and integrated in the accounting industry but at the same time, the digital technologies keeps developing better and provides other solutions. That forces accounting companies to take a stand in not only if they should adapt to the new technology but also of how to change their services and products with the digitalization changes in order to maintain competitive. The benefits of digitalized accounting are many but can be divided to three categories: Streamlining processes; Access and comparison of data can be done faster and give more flexible working procedures (Southern Cross University, 2016).

A trend occurring with digitalization of the accounting industry is leaving the traditional billing system with hourly billing for client communication. Digitalization and the efficiency it has brought the accounting industry through the benefits mentioned above, makes it possible to take fixed fees and package the company services. Digitalized and computerized online accounting tools will make the business more: automated; more accurate in details and numbers; easier access to data; more reliable data due to the automation; more secure storage through cloud storage; more cost and time efficient; easier overlook of the data and the scalability of the company to grow is less complicated when it comes to documentation (Southern Cross University, 2016).

2.3 Business models

Companies will always be affected by and affects persons internally and/or externally. These can be called internal stakeholders or external stakeholders. These stakeholders support companies' existence and might a legal or influencing interest in the companies' actions. The internal stakeholders work within the companies and are groups or individuals of employees, managers, owners or investors. The external stakeholders are companies or people outside of the company that indirectly affect the business decision-making process. A few examples of external stakeholders are suppliers, society/communities, government, creditors, shareholders, customers and trade unions. The stakeholders usually have different interests, which originate from different core values and wishes (II Boundless 2015). All these stakeholders need to be managed in order for a business to be successful. A business model is one way to present companies' business strategies and their financial architecture. It models and conceptualizes the business qualitative perspectives and stakeholders (e.g. customers, market, competitors, value etc.), in order to be competitive and logical in business decisions and meet stakeholders' needs and create value. This involves mapping of internal and external factors to differentiate and understand the nature of a company and its environment (Teece, 2010).

2.3.1 Concept of business models

Business models are a concept equally old as the art of making business, but the stated business models started appearing in the 90's. Not all companies of today have a stated business model, but they perform strategic decisions for business activities e.g. have a business strategy in order to make money, value propositioning themselves, create customer relationships, channels, targeting customer segments, managing the cost structures, and revenue streams. All companies that want to survive handle their strengths, weaknesses, threats and opportunities strategically. The business model aims to make these strategic wishes graphically and stated for a business (Ovans, 2015). A business model is also more varietal and holistic concept than a business strategy. But companies should have both a stated business strategy and a business model to give triangulation and clarification of how to gain competitive advantage. Today's markets constantly change and challenge companies to stay flexible to new technologies and new law requirements, but still provide a solid business strategies and models (Teece, 2010).

When describing a business model the easiest explanation of its purpose is to identify and guide how to make money. A business model summarizes how inputs are transformed to outputs and create value adding (Betz, 2002). It is important to add that there is no generally accepted definition of business models and its building blocks, but a conscience of the purpose it brings has been stated (Berglund and Sandström, 2013). A good description is given by Timmers (1998) in his article where he concludes the definition of a business model as an architectural framework for flow of products, services and information. A business model also contains descriptions of the market actors, their roles and their possible benefits. It also gives an identification of sources to revenue for the business (Timmers, 1998).

As mentioned before, when facing a large technical change like digitalization a large focus lies on creating new business strategies supporting the change (Kane et al. 2015). When in need for large strategic changes it means large changes to the business model, which is supporting the business strategies (Teece, 2010). Then, business model innovation could be of value. Girotra and Netessine (2014) describe in their article that business model innovation is a way to, create new opportunities for companies through managing their strategies. The companies are able to deliver the same products, with the same or new technologies at the existing market but with a possibility to gain revenue. Since innovative business model solutions seldom can be seen for external actors, it makes the success concepts that are hard to copy, which is a great industry advantage (Girotra and Netessine, 2014). Teece (2010) further explained in his article that Business models and business model innovation would not itself give the industry advantage. The new business models states new incitements and when they are put in practice it will generates possibilities to higher return for example by lowered costs, increased customer value from perhaps a changed production technique (Teece, 2010). Berglund and Sandström (2013) also provide a supported view in their article of business model innovation as an implementation of a new business model or change, in order to create commercial value.

Both Girotra and Netessine (2014) and Teece (2010) debate the need for measured strategic analysis for a systematic process in finding opportunities to commercial success. The common factor in focus they both present is how to make company decisions regarding:

What the company offerings should be.

When decision-making should occur.

Who is going to be the decision maker in every step of processes and level of the company?
Why this decision and process roadmap is established.

(Girotra and Netessine, 2014), (Teece, 2010).

The incentive for drawing up an innovative business model is to understand how to provide value for customers as well as gaining control over the company value. These are the key elements and where issues often occur in companies if not stated and followed in business models (Teece, 2010). Teece (2010) also complements these findings with value adding questions for companies to consider when establishing a provisional business model or renew the existing one. Both Teece (2010) and Girotra and Netessine (2014) states that designing a business model and providing business model innovation is not a linear process and the business model will be needed to be tried and adjustments. Teece (2010) writes that providing a new business model puts pressure on companies to be creative and have business, customer and industry insight. Business models need to follow the technological innovations and market changes (Teece, 2010). The questions to be able to see if the business model is up to date or in need for business model innovation, are according to Teece (2010) report *Business Models, Business Strategy and Innovation* on page 189:

- How will the product/service be used? How is it a solution to the customers' problem (now and in the future)?
- Does competitive offerings exist?
- What might customers be enticed to pay for value delivered?
- Where is the industry in its revolution? Has the dominant design emerged yet?
- What will it cost to deliver value to the customer? Are costs volume sensitive, and if so, how?
- How large is the target segment?
- How should the product be presented as a solution to customers' problem and not merely a novel item/gizmo?
- What is the supplier specific customer value proposition?
- What is the related appropriation mechanism?
- How can imitators be held at bay?

(Teece, 2010)

2.3.2 Creating business models for digital companies

Digital companies have larger digital information and communication infrastructures than analogue companies, which gives an incentive to work in a different way with structure, processes, and technical related problems and challenges (Zimmermann, 2000). In the research of Zimmermann (2000) that is identified to gives a large-scale effect on business models. Business models can be done in many different ways, usually varying on business practice (Zimmermann, 2000). Due to the fact that digitalization changes and shortens the communication paths of consumers, suppliers and other actors, it pressures the industry structure as well as processes to change. The possibility for customers to directly communicate with suppliers, other communities etc. gives a pressure for actors to provide clear focus in its product/service portfolio, in order to have as good products/services as possible which gives incentive for modularization/fragmentation (Zimmermann, 2000). As stated, the industry structure is different for digitalized companies and many authors support that, two examples are Zimmermann (2000) and Selz (1999).

In the article *Understanding the Digital Economy: Challengers for New Business Models* by Zimmermann (2000) three major issues areas are identified as challenges for new business models: processes, infrastructure and products/services. In today's market there are large individual customer needs that had been enabled through online consumer communities, this has been enabled through Internet and web-review-communication. Companies have to work in different ways as digitalized, with value creation processes and how to interact with the market and customers. Intra-organizational processes have to change from the analogue procedures. Infrastructural issues may occur when the platforms needed for digitalization and value-creating processes is not planned for in the business model in order to provide business communities, communication and market services like for example payments, logistics, or certification services (Zimmermann, 2000). Zimmermann (2000) suggest in his research *Understanding the Digital Economy: Challengers for New Business Models* on page 732 four questions within the areas structures, processes, products/services and infrastructures in order to provide companies the basic foundation to create a business model as a digital company:

Structures:

- What is the future structure of a certain industry?

Processes:

- What will the value creation processes look like?

Products:

- What are the basic customers' needs and the respective product/ service elements in order to serve them?

Infrastructure:

- Which services are necessary for a specific marketplace serving for a distinct business community?

(Zimmermann, 2000)

A business model is a theoretical tool that together with stated strategies makes a business structure that expresses the business logic (Osterwalder, Pigneur and Tucci, 2005).

2.3.3 Business model elements and different tools for modelling

Elements of a business model

There are many different tools to use when creating a business model. All provide some difference in focus and will provide good support for various situations needed. But there are also some generally accepted elements that a business model should satisfy. Teece (2010) have in his article explained a business models various components that needs to be set in its design, from the basis of Porter's theory. These elements of business model design can be seen in figure 1 below by Teece (2010) found on page 173.

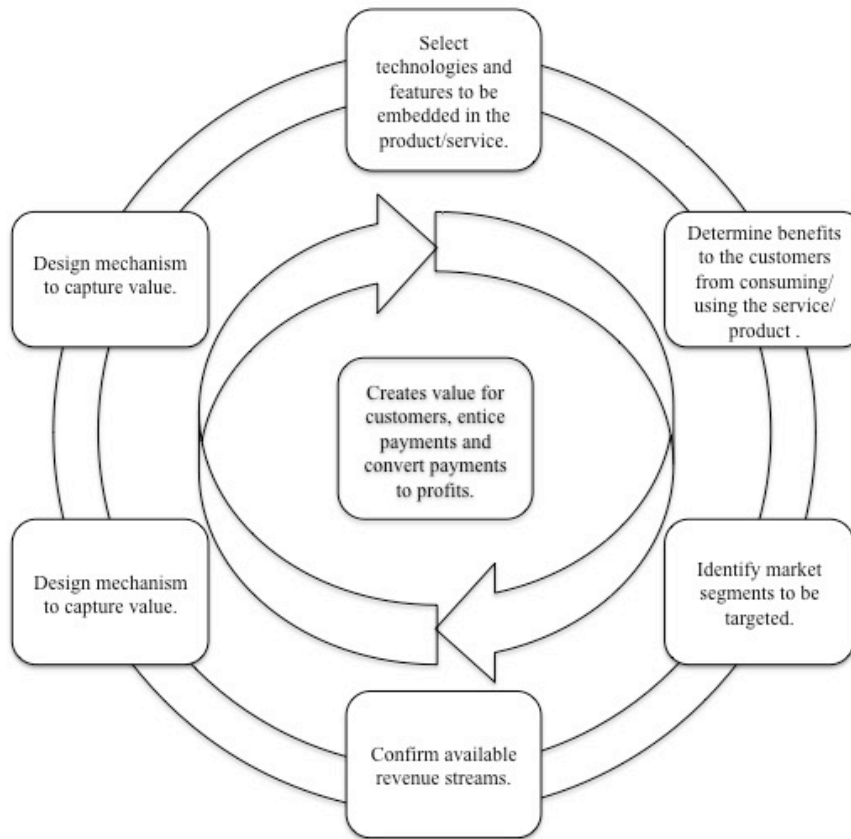


Figure 1. Elements of business model design by Teece (2010), page 173.

Figure 1 shows the elements of business models design that is needed in the process of creating a business model. If a company follow this structure of: starting with selecting technologies and features in the product/service; then determining benefits to the customer from consuming/using the product/service; after that identifying market segments to be targeted; then confirming available revenue streams; after that designing mechanisms to capture value for the company; and finally re-designing the mechanisms to capture the exact value for the company, they will identify how to create value for their customers and how to turn that into a profit for the company (Teece, 2010).

The difficulty when choosing tools that supports the business activities is to find one that supports specialized business functionalities, but do not compromise on the opportunities for creativity. Creativity is important and needed in order to make the business activities into more abstract business strategies (Fritscher and Pigneur, 2009). In this subchapter some of the generally accepted tools and models containing these elements will be presented.

Porter's value chain

The most famous, generally accepted and original version is the Michael Porter "value added" model: Porter's value chain (Betz, 2002). The Porter's value chain can be seen as a tool for structuring and examining companies activities and how they interact, in order to understand the value of companies and can be seen in the figure 2 below by Porter (1985) on page 37.

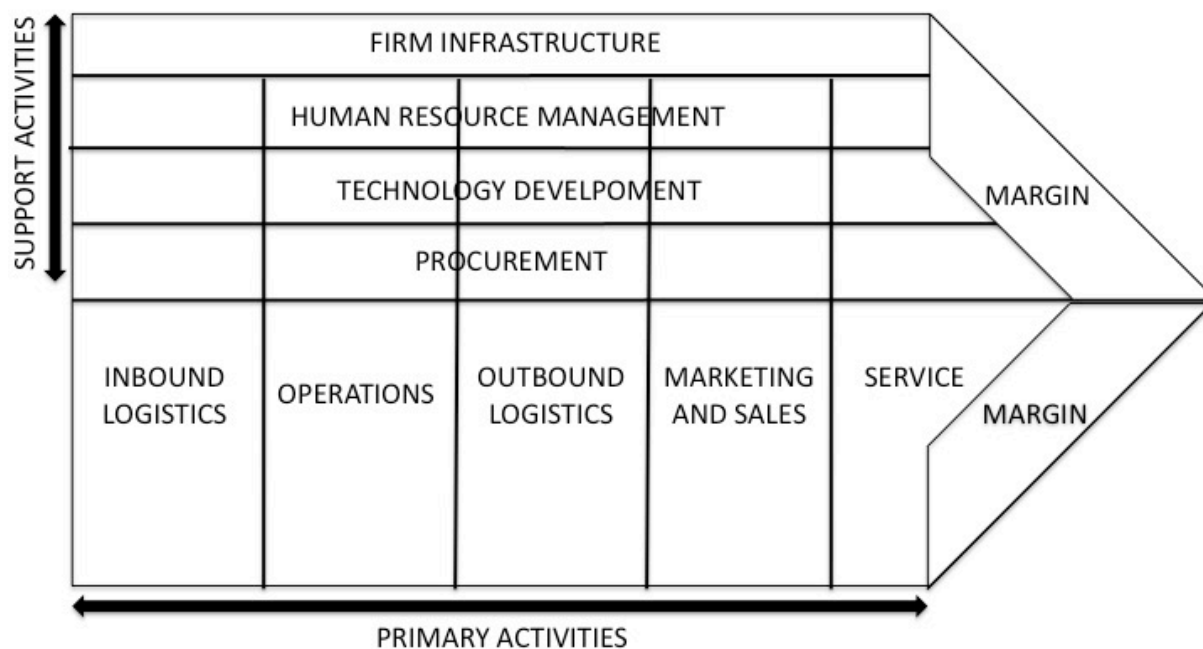


Figure 2. The Porter's value chain by Porter (1985) on page 37.

In Figure 2 it can be seen that the Porter's value chain exist of primary activities and support activities.

The primary activities are activities that are directly creating value to the input resource until it becomes a sold product or service to the customer. The inbound logistics involves activities related to relations to suppliers, like receiving goods, storage and internal distribution. The operations can be seen to be the activities adding value to the product or services that becomes the output and sold to customers. Describing the outbound logistics it involves storage and distribution internally and externally to the company. The marketing and sales activities are the actions that make customers by the company's products/services and not their competitors, for example: gains offered and communication explaining the value of the products/services. The service activities are activities that occur after the product/service is sold in order to maintain its longtime value to the customer (Porter, 1985).

The support activities are there to support all the primary activities throughout the value chain. Procurement is the actions the company performs in order to gain resources in order to function though the value chain, examples are: finding the right suppliers and price negotiation. The second support activity is technology development and it concerns actions maintaining and maintenance of company knowledge and trying to have a technological advantage or keep up with the market. Another supporting activity is the human resource management and the use of human value in order for being competitive. Some examples are recruitment, hiring, training, motivating, rewarding, and retaining employees. The last seen support activity in the Porter's value chain is firm infrastructure (Porter, 1985).

When companies use the Porter's value chain it is first identifying the sub activities for the primary activities followed by the supporting activities. The second step is to find out how they all link together and where there are opportunities for increasing value. However, the Porter's value chain is limiting in business modeling, since it only focus on activities (Porter, 1985).

Expanding theories, for example for strategic management, has later extended the Porter's value chain. Clayton Christensen and Michael Overdorf have in 2000 put a large emphasis on that companies who wish to stay or be successful need to consider resources, processes, and values more the challenge of their foreseen need to change. A business model can as stated, be seen as a stated guideline for how inputs, outputs, processes, and values of the company will be worked with in the future. There has been and exist many different versions on models to use when analyzing and stating strategic guidelines in order to create a business model (Betz, 2002).

The framework by Alt and Zimmermann

Alt and Zimmermann (2001) presents in their research a deeper analysis of business models. That is that many different business models does not always agree on the needed elements of a business model, but Alt and Zimmermann (2001) have established an identification of the factors that are critical to have in a business model. They have found six general elements that can be viewed to be common elements in the majority of business models. They were either implicit or explicit presented through the business models examined. These factors are:

Mission

Mission involves setting the goals and vision for the company. It also means setting a value proposition of promised value to deliver to the customers.

Structure

The structure element is the focus on actors and governance. It is to understand how actors affect the company and how they internally are influenced to be able to governance the company.

Processes

Processes means how the company should act to be customer oriented as well as how they should coordinate their business to follow its strategies.

Revenue

The post revenue means evaluating the source of income and how the business logic for creating earnings is set.

Legal

Evaluating how old and new legal requirements can be an enabler or a constraint for the business.

Technology

Evaluating how existing or emerging technology can be an enabler or a constraint for the business.

Alt and Zimmermann (2001) six elements of a business model is a framework to use when developing a business model. But like many other business models, these guidelines does

only provide a tool for evaluating a business current or future wished state, it does not provide guidelines of how to execute the intended actions (Alt and Zimmermann, 2001).

Business model canvas

As previously stated, many companies use different tools in order to provide business models. A generally known business model tool is the business model canvas created by Alex Osterwalder. It is a graphic tool that enables systematic mapping of business model elements and how to position their value positioning for the company (Osterwalder and Pigneur, 2013). The business model canvas is also a management tool where to describe, challenge and manage companies’ business models. The business model canvas helps create value for businesses (Osterwalder, Pigneur, Bernarda and Smith, 2015).

In the figure 3 you can see the graphic design of a business model canvas and all its categories.

The Business Model Canvas



Figure 3. The business Model Canvas from Osterwalder and Pigneur (2013) page 44.

When looking at the business model canvas in figure 3, it can be seen to have 9 different categories, but if looking closer it could be divided in to four different focus areas. First area is key partners, key activities and key resources. They all contribute to giving internal insights of the company. The second area is concerning what the companies deliver in value e.g. services, products etc. The third will give the user market and customer insights through customer relationships, distribution channels and customer segments. The fourth are for financial insight by looking at the cost structure and the revenue streams (Osterwalder, Pigneur, Bernarda and Smith, 2015). The elements of the business model canvas need to be

questioned from the user of the tool in order to be reflected upon and the business model canvas provides some questions of reflection. Below the elements will both be described and help questions for reflecting upon each will be presented (Osterwalder and Pigneur, 2013).

Key partners

This element presents the suppliers and partners the companies have partnership with, or wishes to establish. Partnerships can help a company develop innovation, gain resources, gain activities beyond their own capability, optimize economy of scale and reduce risks or uncertainties. Partnerships can in that way help companies to optimize their business initiatives and is therefore an important part of business models (Osterwalder and Pigneur, 2010).

There is four types of partnership to establish described by Osterwalder and Pigneur, (2010):

Joint ventures are created when wanting to grow new businesses.

Buyer-supplier partnership is established to secure reliable suppliers.

Strategic alliances with non-competitors are created when wanting to optimize the business initiatives beyond the business own capability.

Co-operations are often competitors that create alliances in order to optimize their business initiatives.

The basic questions that are useful for starting with brainstorming around the key partners and opens up to discussion are:

- Who are the key partners and key suppliers to the company?
- Which key resources are needed from the key partners?
- Which key activities do the key partners have?

(Osterwalder and Pigneur, 2013).

Key Activities

In order for a business model to be set in action, it needs supporting activities to do so. That is why business-modeling needs to set the key activities needed for implementation e.g. platforms, networks, production, services etc. (Osterwalder and Pigneur, 2010).

The fundamental questions for key activities are:

- What key activities does the company value propositions need?
- What are the most important activities for distribution channels, customer relationships and revenue streams?

(Osterwalder and Pigneur, 2013).

Value proposition

These are the products and services that the companies evaluate to be necessary to create value to the chosen customer segment (Osterwalder and Pigneur, 2010).

The most essential questions for value proposition are:

- What core value does the company deliver to its customer?
- Which customer need is the company satisfying?
- Which products and services do we offer to each customer segment?
- What customer problem are we solving with our offerings?

(Osterwalder and Pigneur, 2013).

Customer relationship

The relationship to the customers segments that the companies are trying to satisfy will be defined in this category. What the companies usually wishes to gain out of the relationship is retention of customers or establishing new ones and added sales. The customer relationships could be personal but also through automatic connections (Osterwalder and Pigneur, 2010).

The most fundamental questions to ask for customer relationship evaluation are:

- What kind of relationship does the target customer expect the company to provide?
- Which relationships have we targeted? How much do they cost us?
- How can the company incorporate that into the business?

(Osterwalder and Pigneur, 2013).

Customer segment

The description of the companies customer segments are set, in order to know what clients to satisfy and reach through the activities (Osterwalder and Pigneur, 2010).

The basic questions that are useful for starting with brainstorming around which the customer segment is wished to be:

- Which customer segments is the company creating values for?
- Who are the company's primary customers?

(Osterwalder and Pigneur, 2013).

Key resources

The key resources are the most necessary resources that are needed for a business model to be set in action. The resources could be financial, knowledge, human or physical resources (Osterwalder and Pigneur, 2010).

For key resource evaluation, the most essential questions are:

- What key resources do the company's valuable offers need?
- What key resources are most important for distribution channels, customer relationships and revenue streams?

(Osterwalder and Pigneur, 2013).

Distribution channels

The distribution channels are the chosen ways for communication, so companies can deliver customer value. The distribution channels communicate company offers, able customer support, make product/service use possible, deliver the service/product and also make the after sales support possible (Osterwalder and Pigneur, 2010).

The most fundamental questions to ask for Distribution channels are:

- Which are the preferred channels of the customer?
- Which channels distribute the communication the best? Which ones are the most cost efficient to use? Could they be integrated into the company and customers' experience?

(Osterwalder and Pigneur, 2013).

Cost structure

The cost structure is all the existing cost in a company e.g. fixed costs and variable costs. A company is either cost-driven or value driven, which usually means that they either strive for having low costs or creating high value (Osterwalder and Pigneur, 2010).

For cost structure evaluation, the most essential questions are:

- Which is the most important cost in the business?
- What key resources and activities for the company are the priciest?

(Osterwalder and Pigneur, 2013).

Revenue streams

The element of revenue streams is how the generated earnings are created. There revenue is either periodic income from continued payments and/or one-time incomes from non-returning customers (Osterwalder and Pigneur, 2010).

For revenue stream evaluation, the most essential questions are:

- What value will the customers of the company pay for? What are they currently paying for?
- What is the current price? How do customers pay? How would customers favor to pay?
- With what and how much do revenue streams contribute to the overall?

(Osterwalder and Pigneur, 2013).

The business model canvas is a tool that provides an open discussion for the user, it also look at internal, external and financial parameters of influence. What can be seen as limiting is that the business model canvas is a great tool for graphically describing a company's business model, but it does not provide any deeper context in information. It's a great tool to start the brainstorming regarding business model but needs to be complemented with analytical tools, for example a SWOT-analysis. The SWOT-analysis takes business strategy strengths, weaknesses, opportunities and threats in consideration. But for finding barriers and facilitator for a business strategy, the business model canvas is sufficient (Osterwalder and Pigneur, 2010).

Other business model tools

There are various business model tools and canvases to use. But many of them possess a more niche structure. A few examples will be mentioned in order to create an understanding for the reader. The first example is the lean canvas that has been constructed from the business model canvas to fit startup companies and entrepreneurs. It also has more of an aim to put the business plan in action in a way the business model canvas do not (Maurya, 2012). Other business model tools directed towards the use of a startup or entrepreneur is the Fitzpatrick's startup toolkit canvas and Blank's worksheet "the four steps to epiphany" which through customer discovery, validation and creation, build the business strategies (Maurya, 2012). If the primary goal is to fulfill a mission, the mission model canvas could be used. This tool is also based on the business model canvas but the parameters creating revenue have been exchanged to achieve a mission (Blank and Osterwalder, 2016).

2.4 Barriers and facilitators

In the findings from I Boundless (2015) and Southern Cross University (2016) of barriers and facilitators, their researches indicates on an identification of the accounting business being

internally driven but digitalization requires progress both internally and externally for finding opportunities. Zimmermann (2000) suggests all companies waiting to be digitally successful to continuously evaluate the company, market, offerings and value creation. If a company wished to be digitally successful and keeping up with market demands, evaluating these areas continuously could be of recommendation in order not to provide barriers for the company (Zimmermann, 2000).

Two other barriers for changing business models is the attitude towards it from employees and leaders as well as having someone leading the business model change. Business model innovation often means organizational changes and then the company's human resources all need to be accepting about it, in order to have an implementing power. The need for an internal leader of the business model changes is essential, in order manage the change, data, and result from it. It can all be concluded in having a positive company culture towards the new business model (Chesbrough, 2010). Resistance to change by employees and leaders is sometimes encountered in companies. One reason for this is seen to be that it takes longer time for employees to relearn than to be intimately taught. This is because feelings of loss, failure and lower aspiration often affects the employees when they feel unsecure of their company value due to the changed work assignments or identity loss within the company when changing position. Change is scary for employees when its not clear what outcome it will mean for them and it can result in resistance of adaption of the new change or technical revolution and could provide a barrier of adaption (Coch and French, 1948).

When business model innovating, the tools mentioned above are great in order to map out what is needed to be done, but they does not provide any of execution plan (Chesbrough, 2010). It is also important to be aware that copying another business models is difficult. This is due to the fact that a business model involves many parameters of different systems, activities and resources, which are hard to copy. Since a business model does not give detailed instructions on how to be implemented that also possess a difficulty to copy. So when changing a business model, it is important create an individual business model for the business. Even if it takes time and a lot of resources to get it right (Teece, 2010).

A well-known research by Schumpeter (1942) discusses the long-term and short-term consequences for an evolutionary change in an industry. The long-term raise of standards and economy from an evolutionary process is often met in the short time by direct losses and gains from industrial-political reactions. This can be viewed upon that the previously used techniques of the profession was the used way of acting and performing processes and many actors of the market feel comfortable with that. With accepting the evolutionary change a 'rationalist attitude' is needed among capitalism that it will include instability of creative destruction. Looking beyond the instant barriers of unpredictability and direct losses is necessary for success (Schumpeter, 1942).

2.5 Identified research gap

When reviewing existing literature it answered many questions regarding what digitalisation is, what accounting is and how digitalisation affects industries in general. The existing literature also answers what business models are and how to use them to a full extent. What provides the research gap is further investigating what specific affects digitalisation have on the accounting industry as well as applying the effects of digitalisation on the accounting business and doing so with the help of business models as a framework. The chosen type of

business model used is the business model canvas and will be further explained why in the methodology.

3 Methodology

The methodology chapter aims to describe all stages of the report and review how the research will be conducted.

3.1 Research approach

The research question of this report provide an understanding of how digital accounting businesses could set up a business model.

The research strategy is also chosen to suite the research question and has consisted of a multiple case study. This is to gain a broadened perspective of the market and industry of digitalized accounting. It is also to understand what the shift demands for the companies when going digital. By studying companies that have made the digital shift, real life information will provided understanding of what it request of the business models, and then had been complemented with a larger literature review.

Quite few previous researches have been presented within the area of digitalized accounting, which makes this report of an exploratory kind. This concept will be further explained in upcoming subchapter.

The method for collecting empirical material has been chosen to fit an explorative multiple case study in order to bring the most possible value to the research. The source of data has consisted from document gathering from a literature study and semi structured interviews. The document gathering is of quantitative primary sources and secondary from previous reports concerning the subject area. The semi-structured interview has been intended to bring qualitative possibilities of finding unexpected information that the previous literature does not yet cover. The question in the semi-structured interviews has been chosen to investigate the areas interesting for the research that was found through the literature research. The semi-structure of the interviews has also gives a possibility for flexibility in the conversation with the interviewed, and lead to unexpected findings relate to the study.

The following subchapters aim to give more depth to the stated research approach above. They will also discuss the validity, reliability and generalizability of the methods used. Validity concerns the extent of measurements the research proceeds and can be seen as how good the results illustrates the studied event (Yin, 2014). Reliability can be seen as the accuracy and repeatability of the research scientific findings. Generalizability is seen as the possibility to generally apply the findings of the study to other contexts (Collis and Hussey, 2014).

3.1.1 Research design

The purpose of this research and report has been to identify the parameters that will facilitate or create barriers and are of value to take into consideration when setting up a business model for being a digital accounting firm. The second step of the research was to apply these findings upon the accounting industry and how they should proceed in updating their business

model as an impact of digitalization. The research goal was to contribute with findings that will provide easier decision-making throughout business transformations for accounting companies when digitalizing. Currently, there exist written material within digitalization of business processes and business models, but little is written within the area of how it should be applied or used on the accounting industry. Hence, the research will be of an investigatory approach.

When conducting a research there are four presented research types by Collis and Hussey (2014): exploratory, descriptive, analytical and predictive. This research is classified as an explorative research due to the fact that the research have the purpose to identify the parameters that will facilitate or create barriers and are of value to take into consideration when setting up a business model for being a digital accounting firm. An explorative research aims to identify key issues and variables. It often is used to test the possibility of a new concept and is often based on a hypothesis that is tested and evaluated. An exploratory research type is broad in focus and seldom provides specific answers to specific investigated problems (Collis and Hussey, 2014).

A choice in this research is to use the method of triangulated data collection. This is defined by using more than one way to collect data and will provide the research with reduced risk, more certain findings at crossing data referencing and higher validity. This method is often used when basing the research upon theory and from that breaking down the problem formulation (Collis and Hussey, 2014). In the first stage of the research, literature has helped defining the elements needed for the framework of investigation. In the second stage of the research it was triangulated through adding a multiple case study, which added to the frameworks structure and its validity was tested through interviews.

The research is also identified to be a qualitative research. Collis and Hussey (2014) describe a qualitative research to collect data through interpretive methods like: interviews, different kinds of observations, focus groups and case studies. A qualitative research is not based on numerical data, rather in the form of word and can thereby be seen as a subjective approach influenced by methods used in the research (Collis and Hussey, 2014).

3.1.2 Research process

The research is viewed to be both inductive as well as deductive but in different stages. Accordingly to Collis and Hussey (2014) an inductive approach is executing a research starting with specific observations and investigating towards more broader and general theory as a result. A deductive approach is the opposite research method, starting with a broader and general theory and identifying specific hypotheses that are tested (Collis and Hussey, 2014). The first stage “conducting a pre-study” can be view as a deductive stage of the research. The pre-study consisted of a literature study, to collect enough data in order to identifying the specific hypothesis about parameters influencing the digitalization process and from that, a framework was built to use in the second stage. The second stage “conducting a case-study” has been more of an inductive research approach. The specific identified parameters influencing the digitalization process will be tested in the case study to see if any generalized theory, other parameters of influence, etc. was found as a result. The outcome of the study could thereby be seen as more open-ended and exploratory. The third stage consisted of analyzing the data collected and provided an outcome of the study.

To get a better understanding of the research process a graphic design of the process layout can be viewed in figure 4. It consists of three stages in total of five steps, all providing a wholeness to the research process.

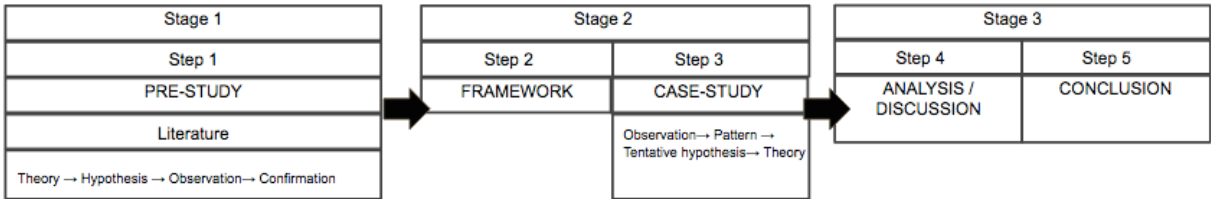


Figure 4. Research process

Stage 1 - Pre-study

The pre-study aimed to give an initial understanding of the digitalization of accounting, how it is performed and its effect upon the industry. This was done through literature studies of quantitative sources to bring a solid reliance to the reports academic significance. By using existing theory a hypothesis of the report was created. Based on observations in previous studies a confirmation of the reports importance was done. Also where the need for filling gaps to existing industry and academic knowledge was found though the pre-study and has be the base of the reports presentations, of complementing findings from the second stage of the report.

Stage 2 - Framework and multiple case studies

The second stage started up with step 2 and built up a framework for analyzing the case study in step 3 in correlation to the pre-study. The framework was carefully chosen in order to analyze multiple aspects of dimensions. The academic tool in the framework consisted of using the business model canvas that presents business model initiatives for a digitalized accounting firm. This made it more manageable to understand how digital accounting businesses could set up a business models.

The multiple case studies, which is step 3, consisted of four different case studies conducted. The were all undertaken at four different companies, all targeting small to medium-small companies as customers and consisting of offering digitalized accounting to their customers. At each company a interview was held in person of approximately 45 minutes, with the CEO of the company for two of the cases, one the business manager of the digitalized accounting department and a business area manager for delivery. As mentioned above the interviews were semi structured with open questions and the possibility for follow-up questions. The open questions asked were all the same for the cases, but the follow-up questions were founded on site to fit the individual conversations and the findings. The interviews were all recorded and later transcript as well as summarized for best possible documentation and easy access to information. A review of each company's annual report and website information was done, in order to reduce the risk of limiting the companies representation. Which might occur when conducting single interviews for company representation. Choosing to hold the interviews in person was based on the possibilities it gives in reading in the body language of the interviewed in combination to the given answer. This gave a second dimension to the communication, which is lost in phone interviews. The case study aims to give a better understanding of the digitalization of accounting, how it is performed and its effect upon the industry through qualitative methods. By the observations in the interviews, patterns could be found in order to test the hypothesis from the first stage of the report and expanded theoretical findings were found. The used material from each interview was sent to the case company for approval of used material.

Stage 3 - Analysis/discussion and conclusion

At the third stage the material of the first and second stage were compared and analyzed with the focus of understand how a digital accounting businesses could set up their business model for a successful digitalized business. This investigation has put an effort to try to distinguish companies' specific interpretations of information and reflect upon these findings, but focus on presenting the general business model requirements. The deciding of what information is of the more general kind or company specific will be seen through mainly comparison of the different cases, but also through comparing to literature.

3.2 Method for literature review

According to Collis and Hussey (2014) a literature review will not only collect existing data, but also give the researcher input of how to establish the research design and data collection through comparison of how previous researches done. It will also give a critical analysis of the existing findings.

The base of this research has been built upon literature from a theoretical framework consisting of areas of theory with relevance to the report: digitalization, innovation and digitalization, business models and barriers or facilitators of digitalization in the accounting business. The literature found have been selected to be balanced between secondary and primary sources as well as having a focus on providing the report with theoretical information based on quantitative sources in order to make it balanced to the qualitative multiple case study. On this foundation an analysis of the report's findings was conducted.

The scientific articles and books this report is found through libraries and databases, such as: KTH Primo (The Royal Institute of Technology's online library search tool), The Royal Institute of Technology's Main Library, Google Scholar, The Harvard Business Review, JSTOR Web of Science, Wiley and Emerald Insights etc. The choices of sources have been carefully reviewed to have the credibility of scientific relevance in its publications. Also have daily articles from trade magazines been used in order to supplement the width of the literature search.

The literature review has been conducted through two stages. At first a larger quantity of literature was collected and read in order to sort out what the relevant areas of the research. When these areas were established, the second stage was to narrow down the gathered material, complementing with theories and knowledge needed, as well as a sub grouping of literature areas. It was done in order to give depth and clarity of the literatures content and what was needed for the research.

3.2.1 Validity, reliability and generalizability of literature review

In order to provide validity, reliability and generalizability to the literature review a balanced between secondary and primary source was attempted. This gave two dimensions of the gathered material and opportunity to examine if the validity of the different statements complements each other. There has also been a clear focus on finding literature sources based on quantitative data as an attempt to complement the subjectiveness of the rest of the report being a qualitative study. Having quantitative data in the literature sources gave reliability and validity of its result being accurate and general.

In the report, the sources were carefully reviewed to have the credibility of scientific relevance in its publications, in order to give reliability to the research literature study. The literature chosen was also limited to be within an age span of 10 years, unless it's a generally accepted academic theoretical concept to contain validity.

3.3 Method for multiple case studies

The multiple case studies consisted of semi-structured interviews with a total of four different companies. The companies were chosen to represent the industry of digitalized accounting actors as well as fitting the delimitations made for the research. The companies chosen have an integrated digitalization in their business and business model and can thereby be seen as successful digital actors. Prosper for revenue aspects have been taken in light consideration to view if the case company is successful or not. The extent of viewing economic success in this report has been to make sure that the companies are breaking even. The case companies represent small, medium and large actors in the industry and they all target small to medium size customer companies. The case companies chosen all have a geographic segmentation to only act upon the Swedish market, which fits the delimitations.

As mentioned above, the multiple case studies of four different case studies were conducted at four different companies with the same customer base. Each interview was approximately 45 minutes, with the CEOs' for two of the companies and two with the business managers of two different companies. As mentioned above, the interviews were semi structured with open questions and the possibility for follow-up questions. All the interviews were recorded and transcript as well as summarized for best possible documentation. A review of each company's annual report and website information was done, in order to reduce the risk of limiting the company representation though the single company interviews. Holding the interviews in person able reading of body language of the interviewed and gave a second dimension to the communication, which phone interviews or written questionnaires cannot give. The case studies were made in order to give better understanding of the digitalization of accounting through qualitative methods. From findings in the interviews, patterns could be seen and the hypothesis could be tested. The material used in this report from each interview, was sent to the case company for approval of used material.

Here follows a shorter description of the interviewed companies, in order to give a short background description for further understanding of the companies the case study is based on, since it brings impact to the research result.

Interview 1 - Mr Shoebox

Mr shoebox is a company that was founded in 2011 and offers a system that creates conditions for entrepreneurs and accounting firms to quickly, clear and easily communicate with each other to lower costs. The service allows users to manage all aspects of corporate accounting to do in one app. It is a marketplace and a chat channel for reporting. Another thing that distinguishes Mr Shoebox from most competing players is that the company aims to be a platform where entrepreneurs can connect to other services. They are situated in Stockholm and target users that are owner-managed businesses and small companies as well as accounting firms that wish to use their system.

The vision is to "Be the are the marketplace where an entrepreneur can find its accounting firm, and at the same time, be a channel for agencies that want to reach out to new customers."

The goal of Mr Shoebox is to: *“provide a completely new and revolutionary way for entrepreneurs to manage their accounting.”*

Interview 2 - Bquik Redovisning

Bquik Redovisning is situated in Stockholm with mainly customers locally in the Stockholm area. They work with cloud solutions for accounting towards small to medium/small companies. The company works with consulting within accounting.

The vision of Bquik Redovisning is to *“Change the extremely conservative accounting industry and allow business professionals to benefit from the digitalization all the way from the base to the reporting.”*

Their goal is to *“Able entrepreneurial businesses with greater ability to growth and sustainability. They wish to improve the quality of economic management and provide common business opportunity to qualified advice. Last but not least, Bquik Redovisning aims to reduce the industry's environmental impact.”*

Interview 3 - Company X

Company X is longtime actor as a Swedish auditing and consulting firm who works with the audit, accounting, and tax and advisory services. They have multiple offices over Sweden. The division interviewed has worked with online digitalized accounting since 2007 and target small to medium/small companies as customers with their cloud solutions for accounting.

The vision of Company X is to *“be the market leading advisor to privately held businesses and thereby promote a prosperous business community in Sweden.”*

Their business goal is to *“to sell financial services that contribute to a successful business for companies and their owners, while taking economic responsibilities through business ethics, social responsibilities and environmental responsibilities for sustainability.”*

Interview 4 - Company Y

Company Y clearly pitch themselves as an online digitalized accounting firm. The company mainly works with consulting within accounting. The company primarily focuses on customers that are service companies in Sweden with between 3 and 200+ employees in including consulting, IT, recruitment, training, and the media industry. Common for their customers is that they want to grow. The company works exclusively with service companies of small to medium size as clients.

The vision for Company Y is to *“provide entrepreneurs, business leaders and financial managers an opportunity to control the economy, efficiency, and simplified processes and updated basis for decisions.”*

Their goal is to *“help clients to convert sales to profitability. By delivering traceable numbers, real time updated decision support and automated financial processes, we provide our customers the ability to make the right decision.”*

3.3.1 Validity, reliability and generalizability of the multiple case study

The validity of this work is gained by having multiple case studies of companies with great comparability to each other. It gives more parameters of research compared to a single case study. To have in mind, is that an even more expanded multiple case studies will cover the market view even better. But for this report and its limitation the chosen case companies should make up a general picture of their market segment. The readers should take in consideration that the single interview method could limit the company's opinion brought to the research. The repeatability of this research finding has its strength of the standardized interview question the case studies has been using. To keep in mind is that the follow-up questions were without structure, which might have an impact on the findings if different follow-up questions were asked. Another parameter affecting the validity is having interview questions that are not the same as the questions provided in the business model canvas. The reason for this is to give the interviewed a possibility to talk openly surrounding the subject and not get lead by the questions from the business model canvas. The questions in the business model canvas are structured towards closed question structure. Having open questions will provide answers of a more overall coverage i.e. not only about the business model elements but also mapping the companies' values and strategies. It will give a greater understanding of the data collected and in that way provide more validity to the work. A possible effect lowering the validity from this structure of the interview questions is that not having closed and focused questions could provide less in depth answers.

The generalizability of the multiple case studies has been put in focus when analyzing the data and was in that way be taken in consideration throughout the report actively. As previously mentioned a larger multiple case studies with more companies participating would give the generalizability a larger effect. The research has reached out to around the 10-15 businesses found when searching for companies that are involved as either system suppliers for digital accounting or digital accounting firms on the Swedish market. The selection process of finding the companies marketing themselves as digital accountancies, was through searching the channels most common for digital services i.e. marketing towards customers trough web pages and apps. Companies that provide their customers with real time information of their accounting, cloud solutions, collect knowledge and information from the customer only by digital format and use online digital tools, were considered to qualify as being digitalized accounting companies. The response has resulted in four participating, which is approximately a third of Swedish actors that are actively marketing themselves to work with digital accounting and/or digital systems for accounting. On the Swedish market there is today over 5000 accounting firms registered, which makes the digitalized actors a minority on the market. The most common response from the non-participating companies were lack of time due to being in expansion of their business as well as bookkeeping closures taking up their time in spring months. However, the non-participating companies seemed interested in the research and responded that there is a clear need for academic researches within digitalization of their industry. Covering 4 out of 10-15 digital actors can be seen to represent around 27-40 % of all actors within providing either system suppliers for digital accounting or digital accounting firms or both. It can be seen as a good coverage of the market actors.

3.4 Method for framework

The framework for organizing and analyzing the data has been based on area representation from the literature study combined with the interview findings and was then analyzed with a strategic tool.

The area representation for findings was presented through the business model canvas. It was chosen since it is found to be a good framework tool, which is generally accepted to represent companies' business models initiatives. Another reason for using the business model canvas is due to the fact that it enables the user to describe, challenge and manage the current business model. This is needed in order to evaluate if the current strategies used in the accounting industry are sufficient for companies to stay competitive, or if there is a need to elaborate in order to create business model innovation. In this way the barriers and facilitator for digital accounting can be found, through using the questions of reflection for every category in the framework.

The reason for choosing the business model canvas instead of the other presented in this report, is due to the fact that the companies interviewed are striving towards growing as businesses, making revenue is important to them all and are a mix of companies classified as startups and non startups. This makes the lean canvas and the startup toolkit canvas by (Maurya, 2012) as well as the mission model canvas by (Blank and Osterwalder, 2016) irrelevant. The reason for that is that the lean canvas is primary for startup companies to use and the mission model canvas when the companies strive for primary reaching a goal rather than revenue. When it comes to the Porter's value chain by Porter (1985) the primary goal of this tool is for structuring and examining companies' activities and how they interact, but this research wishes to take more elements in consideration than activities. Activities are needed to understand how to create value, but more elements are needed to take in consideration for a business model. The framework by Alt and Zimmermann (2001) does this, but the business model canvas is chosen because of it being higher generally accepted and creates a graphic view that the framework by Alt and Zimmermann (2001) does not. The business model canvas also includes all the elements presented in the framework by Alt and Zimmermann (2001) implicit and explicit, but adds three other elements. The business model canvas is a management tool where to describe, challenge and manage the company business model which is the reason for it being used. It is important to keep in mind that a business model does not describe how the execution of its findings should be done, but that is seen to be out of context for this intended research.

How companies chooses to specify business models can on a few levels be individual to fit company specific needs and on others more general. The goal is to identify how digital accounting businesses could set up a general business model for a digitalized accounting firm by comparing business models for different companies.

3.4.1 Validity, reliability and generalizability of framework

Choosing the tool for the framework was done in order to arrange the findings. This has created clarity of where the data is valuable, what the studied events were and gave the validity and reliability to this report. The reports framework has been based on qualitative and quantitative data. The qualitative data from the interviews has contributed with a more subjective view of the research; it could also have result in the result being influenced from the methods chosen. The quantitatively, which the majority of the literature study is based on, has give a balance in providing more generalizability to the research.

3.5 Method for data analysis

The data has been analyzed through evaluating the data in the framework where literature and interview material was organized for analysis.

The data were analyzed in the framework accordingly to Collis & Hussey (2014) qualitative data analysis consisting of three main elements: reducing the data, restructuring the data, and detextualizing the data visualized. This was done with the help of the structured framework. The data was only analyzed as qualitative data and not quantitative data, because of the knowledge that quantitative data in the literature study had already been reduced, restructures and detextualized by their author. They are used as secondary data in this report and is already refined, the need for executing it once more does not exist.

3.5.1 Validity, reliability and generalizability of data analysis

The choice of using a generally accepted way of data analyzes from Collis & Hussey (2014), has provided the study with repeatability and generalizability of the result. Even the validity has been of good extend when using a well-accepted way of analyzes for illustrating the studied events result. The choice of framework might have influence the result and it needs to be kept in mind for repeatability of the research.

3.6 Ethics of the study

When conducting the empirical research there has been an understanding for the need of an accountant to follow the Ifac code of ethics for accountants in interviews.

The code of ethics for professional accountants is from The Federation of Accountants (IFAC) and exists to guide and provide high quality professional standards. It establishes ethical requirements within fundamental accounting principles, accounting integrity, accounting objectivity, professional competence, accounting confidentiality and professional behavior (Ifac, 2013).

It will help this research in many objectives as getting truthful answers and good ethics from interviewed accountants. But there are two points in the code of conduct that can limit the depth in answers, which are:

“Confidential- To respect the confidentiality of information acquired as a result of professional and business relationships and, therefore, not disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, nor use the information for the personal advantage of the professional accountant or third parties” by Ifac (2015) in section 100.5.d.

-“Professional behaviour- to comply with relevant laws and regulations and avoid any action that discredits the profession” by Ifac (2015) in section 100.5.e.

This should be kept in mind throughout the research and report and will in that way create validity and reliability to the research.

4 Empirical findings and analysis

This chapter will present the findings of the multiple case studies summarized and present as general findings in written conclusions. The text is a mix of concluded findings from the interviews as well as quotes from the interviewed. However, the interviews have been translated and the quotes are thereby not the exact words of the interviewed. The findings has been analysed and is presented under the headlines of the business model canvas categories. The findings and an analysis of the barriers and facilitators for becoming digitally mature will be presented in a subchapter by its own. The barriers and facilitators affect the possibility to benefit from a digital business model and are therefore presented in this report.

The following sub-chapters have been chosen to represent the empirical interview as well as the findings.

The construction of the framework was founded upon the literature and theories presented in the report as well as the empirics. The tool chosen was picked due to the fact that it achieve the desired requirements for this report, but there are more tools existing that could provide the same desired requirements. The frameworks tool used is the business model canvas; this was done in order to clarify the result as much as possible.

4.1 Empirical results in framework used: the business model canvas

4.1.1 Empirical findings of key partners

Who are the company's key partners and key suppliers?

The external factors that makes accounting exist is the governmental need for collecting taxes, as well as other stakeholders want to be able to view the company finances e.g. a bank giving a loan, according to the CEO of Mr Shoebox. The CEO also emphasis that the techniques already exist within the governmental system to keep track on every registered companies incomes and expenditures, so accounting could be rationalized away. He says if the accounting would be rationalized out, the only incentive for using accounting services would be the entrepreneur itself, to keep track in real time of their economy. The CEO of Mr Shoebox also says that other external stakeholders affecting them are legislation. He says that it is happening improvements on this post, but it is going to slow. Since Mr Shoebox primary is a system producer, they also see their key partners as the accountants they connect the customers to.

Externally in the company the CEO of Bquik Redovisning perceive it to be the customers that influence them a lot when it comes to pricing and to an extent the offerings. Another factor influencing the business is the digital system suppliers. The CEO of Bquik Redovisning also sees the governmental accounting standards to regulate them, through law requirements.

The government affect the very much with the rules of what we can do and not do, what we must record and when to record [...]” - CEO of Bquik Redovisning

The CEO of Bquik Redovisinging does not think that laws and rules is affecting their ability to be competitive, but it affects them fundamentally in offerings to customers.

Externally the business manager at Company X perceives it to be the Internet banks that have opened up many doors for clients to find acceptance in doing business and sharing sensitive information online, as well as cooperation with them. He also thinks that the mobility that tablets and smart phones gives a customer, is partly the reason why clients ask for more digitalized accounting options and driving digitalization. Clients are comfortable with the mobility and accessibility digitalized accounting gives. Another factor influencing the business is the digital system suppliers. Influencing factors that are holding back digitalization the business manager at Company X believes to be legislation, government, authority and banks. Legislation has not kept up with this technology shift and there is no coordination between government, authority and banks. That is necessary to be able to provide the standards the accounting industry needs, in order to innovate the industry quicker according to him.

“The industry is driven by legal requirements and framework of how to construct the accounting services. This makes the offerings between competitors very similar.” - Business manager at Company X

Externally the business manager at Company Y explains that they work a lot against banks with banking integrations and they perceive themselves to be limited by the bank's out-dated techniques and tied to the bankID that has made their services easier but also tie them to the banks.

To conclude, since Mr Shoebox primary is a system producer, they see their key partners as the accountants, but also government and banks. The CEO of Bquik Redovisinging and the business manager at Company X, they identify their key partners as the digital system suppliers and customers. The business managers at Company X and Company Y think Internet bank and the bankID is an integrated element in their offering that is making their services easier and is a key supplier.

What motivate for the partnerships that exist or are wished?

According to the interviewed, the digital system and bankID is critical tools in order to have a digitalized service and safe information handling, which is why partnership with banks and supplier is important. If digital system providers were to become future competitors since atomized accounting is enabled through digitalisation and the accountants professional role fades in importance, already established partnership could benefit the accountant firm and for now the beneficial lie in their digital expertise. The motivation to have partnerships with banks, government and shareholders could be seen as an obligation accordingly to the interviews with case companies.

4.1.2 Empirical findings of key activities

What key activities do the company's value propositions need?

The CEO of Mr Shoebox explains that they are primary a system producer, but they are completely dependent on the accounting firms that connects to them, in order to make the service complete. If he compares their company to system producers he thinks that what

makes them unique is that they give the customer a holistic and easy approach to their economy. No other supplier does this today according to the CEO of Mr Shoebox.

“Other actors miss this intuitive approach and the methodological approach that we deliver the client's, we do not only deliver a business system” - CEO of Mr Shoebox

Bquik Redovisning work with electronic flows and processes and only accepts material from customers through digitalized format. The CEO of Bquik Redovisning describes their idea of working digital is to get more effective at work, reduce manual paper management and reduce set times. It's not only bookkeeping material that the company accepts from its clients, its also other material that could sometimes need manual handling.

“The business model is actually built entirely digital and the foundation is perhaps more so than other actors, it is to become more efficient and reduce our prices, which are our goal.” - CEO of Bquik Redovisning

“Our business model is to use digitalization in order to streamline the on-going accounting services and able us to offer more advisory services, [...] this on the other hand demands our consultants to have a pretty high knowledge level.” - CEO of Bquik Redovisning

In the interview with the business manager at Company Y, she explains that Company Y have been offering clients own developed digital system in combination with accounting services since 2010-2011. They offer services e.g. pay registration, work hour recording, bookkeeping, billing and report writing etc. They work totally digitalized in data handling to the extent that laws and governmental requirements allow and provide platforms that can be integrated with other systems, which the customer might already be using. The company works exclusively with service companies of small to medium size as clients. If papers are submitted they send them to a scanning central they have, to be able to data storage the information.

“[...] The consulting we offer is advisory in processes, practices, flows e.g. how customer should work most effectively with their accounting function.” - Business manager at Company Y

The business manager at Company Y explains that having a digital accounting and economic system, where the company can grow and change with consultancy for both technical solutions and regulatory framework (e.g. trend, competition, change management for the economy department and liquidity consultancy). That is what she believes is be extremely important. She says the economy aspect have to be taken in perspective when making strategic decisions in the future, otherwise the way of working with economy will not develop and evolve with the business and might become a stopper for success. She also emphasises on giving the customer an easy access to the services and they try to incorporate gamification in their offering.

To conclude, for Bquik Redovisning the key activities are sales through providing more advisory services to their clients in a more efficient way though digitalization. The business managers at Company Y add to providing consultancy for business decisions and help the client's companies grow. She believe a key activity is to be active in developing their digitalization further and be active on using new technology and follow trends to stay up to date in their digitalization. She also believes that the need for manual check up on digitalized activities is most vital for quality assurance. Key activities according to the CEO at Mr

Shoebox and the business manager at Company Y is to also provide an easy way for customers to access and manage their company economy through a tool like for example an app with gamification that will give the customer interest in their economy and think it is fun to handle. The CEO of Mr Shoebox and the business manager at Company Y are not sure that in the future, the manual check-up will be a key activity.

What are the most important activities for distribution channels, customer relationships, revenue streams etc.?

At Bquik Redovising it was found that providing an easy way for customers to access and manage their company economy is important. The business managers at Company Y they add to providing more advisory services and sales, as well as being able to quickly disrupt the company business model and innovate strategies.

At Company Y internally the employees are a large source of building their offered customer solutions as well as internal solutions, according to the business manager at Company Y. They have regularly workshops for employees to be able to influence the company decisions.

4.1.3 Empirical findings of value proposition

What core value does the company deliver to its customer?

The CEO of Mr Shoebox thinks that what adds value for the client are user friendly systems, quick communication through the app and real time material handling in a language that is easy for the client to understand and relate to, in order for them to understand their own economy. The hygiene services just have to work, without any fuzz according to the CEO of Mr Shoebox. He explains that the app does not only include accounting tools, it also has e.g. email and billing functions integrated so the client should be able to handle everything concerning their business in Mr Shoebox's app. He also believes that accountants will have to find other areas to create value to the customer in the future when digitalization takes over even more manual processes that used to be value adding to the customer. He says that these other areas could be overseeing insurance options, pension's options, sales and buy consultation and other suggestions of how to increase the revenue. The CEO of Mr Shoebox say clients have a large trust in their accountant and that is why adding services and consultation in areas which needs trust, are to consult within.

“Mr Shoebox's app is free to download and provides market space to find administrators, which is the way we market ourselves. We run the sales for the accounting firm's and provide a user friendly economy handling to the client ” - CEO of Mr Shoebox

“Today value adding to the customer is seen as consulting, but I am not that sure that it will be in the future and this is where I differ from existing future reports published.” - CEO of Mr Shoebox

Generalized, he thinks that accountants are not salesmen they are primary administrators. CEO of Mr Shoebox believes it will be a huge challenge for them to have to become of more business development advisors and consultants, which the future market is foreseeing.

“For the new accounting agency it will be implicit that they handle your accounting, but it will not be what they make revenue of. They will be charging the clients for providing services to succeed with entrepreneurship” - CEO of Mr Shoebox

Bquik Redovisnings idea is through more advisory services, broaden their range of offered services and maybe other advanced services as well that can improve their ability to get paid.

“From our side, it is of course a competitive advantage to offer a more efficient and easier accounting.” - CEO of Bquik Redovisning

The business manager at Company X says that a way to stay competitive is through offering more consultancies for business decisions and it helps the client's company grow. The business manager at Company X describes that it will require more of the employees knowledge base, but is necessary when atomization will take over employee services like pay administration and bookkeeping.

Company Y primary makes their income on their expertise and consulting according to the Business Area Manager for delivery, the digital tools is just an enabler for easy accounting handling for the customers. In the future she feels like there is no limits when it comes to what digitalization of the accounting business and that there will be a culture coming, where everything is possible for digital accounting services but for now it is going to slow to enter this era.

“It is extremely important with live updated accounting, in order to create value with digital accounting.” - Business manager at Company Y

“We create value to the customers through having knowledge within accounting, economy and technical solutions for this, which the customer does not possess” - Business manager at Company Y

To conclude, all the interviewed believe that the core value delivered to the customer is quicker real-time information handling that gives the customer easier access to their economy. They also promote that digitalized tools liberalize their time to give more in depth consultancy to the customer. The CEO of Mr Shoebox and the business manager at Company Y ads that good customer support, easy to access material and providing the user with mobility, be quick in making decisions and should not be afraid to change strategy when needed, that is what creates value. The CEO of Mr Shoebox and the business manager at Company Y, they say that transparency of the service is really important to create trust. All interviewed believe accounting services is what brings their customers to them at first.

At Mr Shoebox and Company Y it was also found that they believe there are still large possibilities for developing digital accounting on the customer's side of the service; mainly the digitalization has been to the accountants' benefits internally in many businesses. They also believe if this were to be done, customers would understand that they have a possibility to affect what's offered and it will drive the accounting industry from being supplier/accountant driven, to becoming demand driven. They believe this will change the industry a lot and actors who yet have not should get involved in digitalization and providing a customer driven business. The CEO of Mr shoebox based this on the beliefs that he does not think many of accountants has the skills to manage this shift if it were to happen overnight. He is also concerned that they might not have what requires in the future either, since he

believes a more sales oriented focus is needed which is not a skilled required of accountants today. A value creation is thereby empowering the customers' influence on offerings, which will create greater value possibilities delivered now and for the future.

Which customer is the company satisfying?

The customer that is satisfied is a small to medium sized company owner in all interviews. But Company Y has chosen to delimit this customer segment to service businesses.

4.1.4 Empirical findings of customer relationship

What kind of relationship does the target customer expect the company to provide?

The CEO of Mr Shoebox believes that accountants often tend to use a business language that the client has trouble understanding, which creates an unbalanced power relationship where the accountant has the upper hand. This is something the CEO of Mr Shoebox wants to change; the client is paying for the service and should get support and guidance to understand their own economy though easy, creative and understandable systems. He explains that this is the background that made him look into how the accounting processes actually work and from that created the concept Mr Shoebox. The CEO explains that Mr Shoebox connects clients and accountant firms, in a user-friendly system that is complete and requires no other systems or tools.

“We want our client to do the parts of their accounting that is the most effective for them in whole process and for us and our systems to take over from where we can be the best support to them” - CEO of Mr Shoebox

“We focus on the entrepreneurs, if they want our system it puts pressure on the accounting administrators to provide it to them” - CEO of Mr Shoebox

The CEO of Mr Shoebox says that when many actors in the accounting industry talk about their business being digitalized, it is seldom mainly to the customer perspective. He says it is seldom to the bigger advantage of the customer. Many of the digitalized accounting firms are mature in their internal systems, but they seldom provide easy usage to the clients like apps etc. The digitalization is often to the accountancy advantage and internally integrated to the firm, but not that refined externally towards the user. He believes that either accountancy firms have to atomize and digitalize even more to be user friendly.

“[...] The customer have seldom a substantial difference using many of the proposed digital firms rather than using a traditional accounting firm on the market” - CEO of Mr Shoebox

“If the concept of a digitalized accounting firm is that they do not accept papers, there is still most accounting firms that accepts papers, so the digitalization in that aspect has not gone as fast as it could have.” - CEO of Mr Shoebox

The CEO of Mr Shoebox believes if companies were to provide more digital tools towards making the process easier for the customer and not the accountant like it mostly today, the digitalization of the industry will speed up when customers realize that digitalization could provide easier economy handling for them e.g. no need for scanning, no need for sending in manual papers etc.

“Accounting firms are starting to realize that the digitalization is speeding up around them with the arrival of apps etc. [...] but there is still very few that are digitalized and not that many of them is it the whole way” - CEO of Mr Shoebox

The business managers at Company X and Company Y explains in almost the same wordings that customers expect their relationship with the accounting company to provide them with easier accounting through real-time access to their economy. According to them, the customers also want to know that the accounting services will be at the same cost every month through fixed costs and they want consultancy support. The CEO of Mr Shoebox, the CEO of Bquik Redovisning and the business manager at Company Y implies that they take customer ideas and suggestion in consideration when choosing what to provide as services.

To conclude, the CEO of Bquik Redovisning, the business managers at Company X and Company Y see that customers expect their relationship with the accounting company to provide them with: easier accounting; real-time access to their economy; the security in knowing the accounting services will be at the same cost every month through fixed costs; as well as consultancy support. The CEO of Mr Shoebox agrees to everything except for the month fixed costs; they believe this could be a cost for other parts like advertisers etc. and that the customer relationship towards the user should be cost independent. The CEO of Mr Shoebox and the business manager at Company Y believe that customer expect to get something fun and learning out of the relationship and the handling of their economy i.e. gamification of the service. It can be read as the interviewed believe customers’ want the relationship to be as automated and digitalized as possible, but personal assistance provided.

How can the company incorporate that into the business?

Company Y see the customers as a big influence on their technical solutions and customers are one of the reasons for integrating gamification in their united platform. She believes it should be fun for the customer to use their service.

“Do not build technical solutions that nobody is asking for, just build technical solutions that the clients are asking for” - Business manager at Company Y

All interviewed seems to have a consensus about establishing good customer relationships requires well-functioning digital systems; large employee knowledge and acceptance of digitalization will incorporate the wanted customer relationship into their business. The business manager at Company X points out that the technical transformation is might not the hardest and most costly integration of this; it could be the investments towards the employee education and for the culture changes that it needed to stay mature as digitalized.

4.1.5 Empirical findings of customer segment

Which customer segments is the company creating values for?

In the interview with the CEO of Bquik Redovisning, he describes their company as a digitalized accounting firm. The customer group of Bquik Redovisning is local clients with small to medium size companies. Bquik Redovisning chose to go digital in order to catch a larger consumer group. The CEO of Bquik Redovisning believes that having a competitive price and being market present locally are the most important factors for them to succeed.

Bquik Redovisning does not have large marketing budgets and see their best spread of finding new customer through personal recommendations.

In all interview the consumer class value is created for is the Swedish small to medium sized companies. Company Y has delimited their customer segment further to be small to medium sized service companies only.

Who are the company's primary customers?

All interviewed are in consents of small to medium sized companies are the most important customers. This is due to the fact that they are the largest consumer group in Sweden and poses the biggest possibility for revenue. Also, larger companies tend to have their own accounting department and rarely outsource it.

4.1.6 Empirical findings of key resources

What key resources do the company's valuable offers need?

The CEO of Bquik Redovisning sees their employees, as the most important resource in their business model; the competence of the employees is what adds value to what they offer their clients. He also see their employees as the factor that gives them sales, not the digitalized services, because they see that their clients seems to find the added-value in a possibility for consulting, not the digitalized services.

When talking about needed resources with the business manager at Company X, he believes the employees are the most important aspect to influence for company success.

“This is not so much a question of technology. The technology is manageable so for a large company like us, it is all about a cultural journey.” - Business manager at Company X

The business manager at Company X bases this on the beliefs of employees being their biggest company resource. He says that working with streamlining processes and standardizations is a larger challenge in a big company, but the finances for it exist and enables it to be executed. But getting all employees in line with the changes it requires is the biggest challenge.

“[...] It is a big change in a large organization to digitalize everything, developing the technical solutions can be done, but if they are not used and accepted by employees, it does nothing at all for efficiency and improvement.” - Business manager at Company X

“We are a distinctive knowledge company and it is the staffs that stand for the capital, without them nothing happens.” - Business manager at Company X

Company Y primary makes their income on their expertise and consulting according to the business manager, the digital tools is just an enabler for easy accounting handling for the customers. In the future she feels like there is no limits when it comes to what digitalization of the accounting business and that there will be a culture coming, where everything is possible for digital accounting services but for now it is going to slow to enter this era.

“It is extremely important with live updated accounting, in order to create value with digital accounting.” - Business manager at Company Y

The business manager at Company Y believes that live updated accounting, easy tools use, good customer support, easy to access material and providing the user with mobility is what creates value and makes them a competitive supplier. She also says that an accounting firm should be able to be quick in making decisions and should not be afraid to change strategy when needed, in order to create value. She highlights that the main resource they have is their knowledge in accounting.

To conclude, the interviewed mentioned above see their employees/accountants as their most important resource in their business model; the competence of the employees is what adds value to what they offer their clients. They all see the digitalized accounting as the way that makes them more efficient and creates value to their business, but it is not what creates direct value to the customer. For the customer, they see consultation as the primary value and the digitalized services as an add-on that makes it possible for providing their customer with better consultancy in business decisions regarding accounting. The CEO of Bquik Redovisning and the business manager at Company Y, they point out that also see a need for the digitalized services to be user friendly. But the key resources making it possible for them to provide this is employee knowledge and digitalized tools together. The CEO of Mr Shoebox also believes that being user friendly is a key resource among with quick communication through an app, real time material handling and easy understood economic-language but he also believe that in the future other resources will be the one creating core value. As mentioned, the business manager at Company Y also believes that being quick in making decisions and should not be afraid to change strategy when needed is a key resource. A key resource that is mentioned by the business manager at Company Y is having a flexible company structure, strategies, and actions and is able to keep up with changes.

What key resources are most important for distribution channels, customer relationships, revenue stream etc.?

According to interviews the key resources that are the most important are: employees; user friendly digital accounting tools internally and externally integrated; a flexible company structure, strategies and actions.

4.1.7 Empirical findings of distribution channels

Which are the preferred channels of the customer?

The business manager at Company Y tells that their digital services reach their customers through their website and an app that they recently launched. Everything is accessed through cloud functions, which enables the client to work from a computer, tablet or mobile phone at any time.

At Bquik Redovisning and Company X the channel used to customers is web page based and this is also where the customer uses their service. At Company X they have noticed the consumers' new mobility requirements due to tablets and Smart phones, but still only provide web page access to their services. Mr Shoebox and Company Y has broadened their channels by also providing an app for tablets and smart phones, due to seen consumer wishes.

Which channels distribute the communication the best? What does it cost? Could they be integrated into the company and customers' experience?

According to the interviews easy access and channels that provide the user mobility like web page and app are ones most commonly used.

4.1.8 Empirical findings of cost structure

Which is the largest cost in the business?

The CEO of Mr Shoebox explains that the most cost fully parts of accounting is identifying and collecting lost material, as well as the continuous material handling processes. That is what's the client are manly being charged for in analogue businesses as well as the manual check-ups of material registered by accountancies for the digitalized systems in digital accounting firms, as well as consultancy.

The CEO for Bquik Redovisning points out that they have experienced the acceptance from customers of the digitalization, but that also means that customers understand that digitalized accounting to a large degree is automated. The backside of this makes it difficult to find a fitting price model when the digital systems are a cost for the business that customers does not wish to pay that much for.

The business manager at Company Y lists that a challenge for them is managing staff since the accounting business has peaks and valleys in workload e.g. higher when the book balance for clients is due, higher when closing monthly financial statements. She tells that they are working around this though line shaped processes and divide workload to be able to optimize their staff turnover.

To conclude, the biggest cost identified thought the interviews is employees but also their biggest resource since it's a service industry. The business manager at Company Y says it is a hard cost to balance since of the tops and walleyes in the workload during the year for accounting e.g. larger at book closure and lower the rest of the time. Other large cost is the digital systems that the digitalization requires for web site, app, platform development, information storage, marketing and identifying and collecting lost material.

What key resources and activities for the company are the priciest?

It is identified through the interviews to be the employee's as the largest cost.

4.1.9 Empirical findings of revenue streams

What value will the company's customers pay for?

The CEO of Mr Shoebox explains that the most cost fully parts of accounting in general is identifying and collecting lost material, as well as the continuous material handling processes. That is what's the client are manly being charged by hour for by analogue accounting businesses. He says hourly rates does not give any incentives for the accountant to take

effective measures on their business, they are making money on the fact that accountancy processes are taking time.

“Mr Shoebox is set up to be a communicative platform to eliminate lost material handling and continuous material handling processes, so everything will be collected at one place, no parallel processes, real time data handling and a quicker way of accounting” - CEO of Mr Shoebox

The CEO of Mr Shoebox believes that the digitalization pressure will change the pricing model to monthly rates, due to the fact that clients want to know what their accounting services are going to cost every month. Mr Shoebox wants to challenge this thinking even further and is planning to provide their customers with accounting services for free within the upcoming month. The CEO of Mr Shoebox believes that the income from providing digitalized accounting though the client is not the only way to go. He explains that customers understand that the more digitalized the services becomes, the less it requires of an accounting firm. The CEO of Mr Shoebox explains that today their system / app is free to download for the client and he/she can use it as accounting software without paying. But most clients want the support of an administrator and then they can through the app, initiate contact with different accounting firms that are connected to the system. Then the service will be charged by monthly rates from the administrator. Mr Shoebox then bills the administrator for supplying them with the customers. He also says that Mr Shoebox wants to challenge the existing pricing models even further and find other sources of income. They want to connect customers to other services when using the free version of their system and act like a platform for clients to collect information relevant for expanding their business in many areas. He also shared that shortly in 2016 Mr Shoebox plans to launch a free version that includes an administrator, but to the cost of having to be targeted with advertising of services and special offers that could help the client's company e.g. save money on expenses, lower insurance costs etc. But only business-critical add-on services, to remain the trust of business knowledge in the eyes of the client. Mr Shoebox would then be able to take the income from these new income streams and pay the accountant's services for their users and make their own profit on the excess revenue.

The CEO of Bquik Redovisning says that taking payment per hour will not work for them as a pricing model, since the work has been so effectively and quicker digitalized. Bquik Redovisning has chosen to charge for the market value of the services rather than per hour, with a monthly rate depending on how many transactions the client has. But they are experiencing it as hard to estimate what it could demand in time and cloud space to take on different clients.

“The problem we see now is that it's very hard to charge for accounting services like bookkeeping.” - CEO of Bquik Redovisning

When trying to find a fitting price model, the business manager at Company X believes the most common way to proceed is to use digital tools to make the business more efficient. He also the way is to provide lower and provide fixed prices through a price ladder, depending on volume of the clients scoop. But the accounting business is a conservative business and it will take time for many of the actors to adjust to this pricing model.

“Now you need to find other business models, it is not possible to charge per hour. Normally and what accounting companies generally do in the industry, is trying to charge a fixed amount per month.” - Business manager at Company X

When describing his thoughts regarding pricing models, the business manager at Company X believes that the industry can be facing many other options in the future. If the digitalization leads to atomization, he thinks it could mean that digital system suppliers could become competitors in a not so distant future. But he also believes it is important to point out that accounting requires a human factor of “know-how”, to review accounting processes even if they are digitalized.

“Accounting companies save a lot of time through atomization and more customers are starting to ask more for consultancy services. So as the automated services grows holistic for the accounting industry, accounting consultancy is growing to become a more common service offered.” - Business manager at Company X

When it comes to pricing models at Company Y, they offers their customers a fixed price every month for their services, the business manager says it is because they want to provide their customers with the security to know what their accounting is going to cost them every month. She also says it is also a security for them to know what the revenue stream is going to be every month. She thinks their transparency of the pricing towards customers build trust and a good relationship. The business manager believes that this is a model many other accounting firms will start to use more and more. She perceives it as many accounting firms are still offering hourly rates

To conclude, customers seem to be willing to pay for the digital accounting service if consulting is an add-on according to the CEO of Bquik Redovisning and the business manager at Company Y. The CEO of Mr Shoebox has a different view since there are many free digital accounting tools that you can find online, the digital accounting services is not what the customer wishes to pay for. They believe that if income in the future could come from directed ads that the customer can be willing to watch and get free accounting consultancy for it, which is the value for the customer. The digital system is not value adding according to them. Company X sees the fixed pricing model to be the most commonly used, but the industry can be facing many other options in the future.

What is the current price? How do customers pay? How would customers prefer to pay?

The CEO of Bquik Redovisning and the business manager at Company Y believe that the customers prefer to pay a fixed monthly amount. The CEO of Mr Shoebox does not believe that the customer using the system is the paying component or willing to pay for the service. They believe that it is add on elements as directed commercials for business-critical add-on services and products for business growth, which will give income. The business managers at Company X and Company Y see monthly pay rate as what to provide customers right now, but is not sure it is the right way in the future.

With what and how much do revenue streams contribute to the overall?

Independent if charging the client or an advertiser, it's a single income revenue channel to the accounting firm.

4.2 Empirical findings of barriers and facilitators

In the interview with the CEO of Mr Shoebox, he describes the accounting business as an industry where only a few innovation improvements on the administrators end has happened with digitalization, but barely nothing has happened on the client's side since the beginning of accounting services.

“The responsibility to develop the accounting service on the clients end, lies on the administrator according to me, since it's very seldom the client possesses the accounting knowledge, the clients are for the most only entrepreneurial oriented” - CEO of Mr Shoebox

Bquick Redovisning have seen a problematization that digitalization brings to the accounting market. The CEO of Bquick Redovisning believes it has created an open market with less need of seal of quality in accounting knowledge. He says that when the atomization takes over most of the material handling, it gives space to actor with less industry and profession knowledge.

When looking at the future, the CEO of Bquick Redovisning believes there is a need to work with even more parameters, in order to stay competitive. He perceives that the technology is constantly improving and competitors are catching up. If they do not improve the next upcoming three years, competitors will catch them up. Their way to stay competitive today is through having standardized work methods and by that gains a quality seal and streamlined workflows in their offerings.

“Do we have the right services and services supply for the future? Will there be accounting personnel engaged in bookkeeping in the future? Maybe not, that means that we will not have any job in 10 years and therefore we have to try to raise the level.” - CEO of Bquick Redovisning

The CEO of Bquick Redovisning believes that a lot will change in the accounting industry the upcoming years, but it is hard to know when and exactly what, because of the fact that accounting regulations act like a stopper.

“[...] it has happened so much technical for a while now, but to little has happened with the regulations to keep up with it. So the accounting business has a lot of work and needed changes ahead.” - CEO of Bquick Redovisning

The business manager at Company X describes the outsourcing market as being very sceptical against digital solutions up until 2009; he believes that it wasn't until 2012-2013 this type of solutions got generally accepted on the market. The reason for this he explains is that the accounting business is a very traditional business. He believes it hasn't been a journey of technical transformation so far, rather a cultural. The reluctance from the industry, he believes is primary due to abolishment of audit requirements for small companies. This law abolishment made accounting services more demand-driven instead of being only supply-driven as before. But what has happened is that the market demands actually are higher than offered.

“Well I would like to say that 2015 is the year that it got necessary to working digitally, [...] but already 2012-2013 it became accepted. But from being accepted to becoming a matter of survival, it took a few years.” - Business manager at Company X

In the future, the business manager at Company Y believes that line operations in traditional accounting will no longer look like they do at many companies today e.g. with manual documentation. She believes that clients in the future will be asking for an advisory accountant that can help them create a flexible company, since the economy department in companies often have trouble keeping up with quick changes.

“The accounting business have been and is still behind in the digital world, [...] I would say that we are on our way, but it is still many smaller accounting firms that is behind” - Business manager at Company Y

“It is a lot happening on the market and it will probably just go quicker and quicker, but it is extremely out-dated still [...] if you are looking at mature digital accounting firms its very few at the moment” - Business manager at Company Y

The business manager at Company Y believes that there is a largely embedded culture among experienced accountants to feel the need to have manually control over material. She also sees a wish from experienced accountants to keep the habit of interacting with customers, without digital tools. She points out that experienced accountants dislike of working with technical solutions, is partly what's holding back the digitalization of the accounting industry.

“The future is to be as quick moving and flexible as possible with finance and accounting” - Business manager at Company Y

“We hire a lot of young staff that comes directly from college and we can see that it is a huge difference than from hiring an experienced accountant, when it comes to embracing the digitalization culture” – Business manager at Company Y

To conclude, the business manager at Company X believes that accounting companies has understood that it is a matter of survival to be a digitalized accounting business, The CEO of Mr Shoebox and the business manager at Company Y do not agree to this. They say that the perseverance of what a digitalized accounting business differs from company to company. They both believe that many companies have a long way to go until being digitally mature businesses.

All the interviewed companies position themselves as digitalized companies but it can be seen that they differ in maturity. Mr Shoebox is digitalized to the degree that they provide the digital services only. They do not provide the accounting themselves and can in that way be as fully digitalized as possible, since they do not do the manual checking of the accounting services. Bquik Redovisning does not accept papers and has a digitalized accounting system. But they buy in their digitalized system and do the manual checking of the accounting services. Company X and Company Y have their own digital accounting systems but accept papers from customers if necessary even though they would prefer not to, customers sometimes wish it as a service from them.

When talking about embracing digitalized accounting, the business manager at Company Y sees it as a generation issue. The problematization with not having fully embracement of the digitalization culture is what's holding back the digitalization according to them. The CEO of Mr Shoebox says that is due to the fact that accountants make more money charging by hour. That is a price model that is hard to motivate when digitalized, it slows down the adoption of

digitalization if accountancies makes more money if they take their time with the services. The CEO of Mr Shoebox and the CEO of Bquik Redovisning mentions that legislation as a great influence on what they can do and not. They say that it has happened a lot on the technical side for accounting, but too little has happened with legislation to keep up with being able to fully embrace it. According to them the accounting business has a lot of work and needed changes ahead on this area.

A problem both the CEO of Bquik Redovisning and the business manager at Company X see from digitalization is that it has created an open market with less need of seal of quality in accounting knowledge. That is why they believe that other specialized knowledge will be needed in the accounting business in the future, in order to keep customers.

Findings from the interviews is that the actors have started to realize that the customer influence in the business is growing with the digitalization and they are trying to make it to their advantage by incorporate customer suggestions in their business offerings. One of the interviewed is concerned that the accountants might not have what requires in the future for satisfying customer demand. This could possibly be an issue approaching the industry. Findings from the interviews implicates that the former supplier driven structure is opening up to become more demand driven with the digitalization of accounting firms and this could possibly mean forced changes for all of the market actors.

5 Literature findings and analysis

Chapter five aims to present the literature findings arranged in the chosen framework: The business model canvas. The findings has been analysed and is presented under the headlines of the business model canvas categories. The findings and an analysis of the barriers and facilitators for becoming digitally mature will be presented in a subchapter by its own. The barriers and facilitators affect the possibility to benefit from a digital business model and are therefore presented in this report.

The construction of the framework was founded upon the literature and theories presented in the report as well as the empirics. The report aims to give a complete insight to the research area through mapping out the results of these two complementing data collections but in to a framework of visualization. The tool chosen was picked due to the fact that it achieve the desired requirements for this report, but there are more tools existing that could provide the same desired requirements. The tool used is the business model canvas, this was done in order to clarify the result as much as possible and not to duplicate the research methods.

5.1 Literature results in the framework used: the business model canvas

5.1.1 Literature findings of key partners

Who are the company's key partners and key suppliers?

The literature by I Boundless (2015) mentions communication of financial information to external parties like banks, government and shareholders, as an element of accounting and they can be seen as a key partner due to the obligations for it.

What motivate for the partnerships that exist or are wished?

In the literature study done for this report, no parameters that motivates partnership is in the accounting industry was identified. This question was answered exclusively by the case study findings.

5.1.2 Literature findings of key activities

What key activities does the company's value propositions need?

In the literature findings from Southern Cross University (2016) and Kane et al. (2015) researches, a fully digitalized company has effective actions, tools, knowledge sharing and communication internally and towards the customer. Southern Cross University (2016) also have found that the distance communication that comes with digitalization, enables and makes the work more efficient in approaching and consulting new and existing clients.

What are the most important activities for distribution channels, customer relationships, revenue streams etc.?

In the literature study done for this report, there were no parameters of most important activities for distribution channels, customer relationship, revenue streams etc. in the accounting industry identified. This question was answered exclusively by the case study findings.

5.1.3 Literature findings of value proposition

What core value does the company deliver to its customer?

In the literature, the benefits of digitalization is listed as giving more effective actions, tools, knowledge sharing, communication, more skilled employees and larger knowledge in digital techniques according to Kane et al. (2015). Southern Cross University (2016) stated that customers and employers will save time through digitalized accounting having all the data in one place and will provide visibility, traceability and enables customized clientele advising that all gives value to the customer. To be read from the findings about innovation by Rogers (2003) and BusinessDictionary (2016) in combination with the digital accounting description by Southern Cross University (2016): digital accounting is an innovation and will provide the company value creation, through new techniques, services and technology in order to satisfy customers.

Which customer is the company satisfying?

In the literature study done for this report, there were no findings of which customer the accounting firms should satisfy. This question was answered exclusively by the case study findings.

5.1.4 Literature findings of customer relationship

What kind of relationship does the target customer expect the company to provide?

In the literature study done for this report, there were no findings of what relationship the target customers the accounting industry expects to provide. This question was answered exclusively by the case study findings.

How can the company incorporate that into the business?

In the literature study done for this report, there were no parameters of how the accounting firms could incorporate the wished customer relationship from the customer, since an answer to the previous question could not be identified. This question was answered exclusively by the case study findings.

5.1.5 Literature findings of customer segment

Which customer segments is the company creating values for?

In the literature study done for this report, there were no findings of what customers segment the accounting companies creates value for. This question was answered exclusively by the case study findings.

Who are the company's primary customers?

In the literature study done for this report, there were no findings of primary customers to the accounting firms. This question was answered exclusively by the case study findings.

5.1.6 Literature findings of key resources

What key resources do the company's valuable offers need?

A key resource that is mentioned in literature from Gustavsson (2015) is having a flexible company structure, strategies, and actions and is able to keep up with changes. He has found that possessing a well-structured platform for digitalization is vital for successful digitalization. For getting strategic advantage within digitalization, the literature shows that companies should have key resources that make it possible to quickly disrupt their business model and innovate strategies Kane et al. (2015) and Southern Cross University (2016). Teece (2010) adds that it is also important to continuously analyze company relevance to stay up-to-date with market changes. Today's constantly markets changes, challenge companies to stay flexible to new technologies and new law requirements, but still provide a solid business strategy and model. Some key resources for being a digital firm is seen to be using digital technology tools like cloud, analytic tools, social tools, digital storage of data and mobile solutions according to Kane et al. (2015) and Southern Cross University (2016). Kane et al. (2015) also mentions constructing a company culture for embracing digitalization is vital to succeed with digitalization and be able to provide value, that is why a digital culture and a formable company structure is a key resource in order to create actions that provide value. Also, Chesbrough (2010) have found that there is a need for an innovation leader of the digitalization in order to be able to manage the changes and monitor the company culture, strategies, actions etc. in relation to the digitalization for successful integration and maintenance.

What key resources are most important for distribution channels, customer relationships, revenue stream etc.?

According to literature the key resources that are the most important are: employees; user friendly digital accounting tools internally and externally integrated; a flexible company structure, strategies and actions; a positive company culture towards digitalization and an implementation/maintenance leader. As Southern Cross University (2016) states, digitalized tools will make the business more: automated; more accurate in details and numbers; easier access to data; more reliable data due to the atomization; more secure storage through cloud storage; more cost and time efficient; easier overlook of the data and the scalability of the company to grow is less complicated when it comes to documentation.

5.1.7 Literature findings of distribution channels

Which are the preferred channels of the customer?

In the literature study done for this report, there were no findings of preferred channels of the customer for the accounting industry. This question was answered exclusively by the case study findings.

Which channels distribute the communication the best? What does it cost? Could they be integrated into the company and customers' experience?

From the literature findings Kane et al. (2015) have also stated that mobile solutions are necessary for digitalization and should be supported by a holistic platform to ensure the positive company and customers' experience.

5.1.8 Literature findings of cost structure

Which is the largest cost in the business?

In the literature study done for this report, there were no findings of the largest costs for digital accounting businesses. This question was answered exclusively by the case study findings.

What key resources and activities for the company are the priciest?

In the literature study done for this report, there were no findings of the priciest resources and activities for the digital accounting companies. This question was answered exclusively by the case study findings.

5.1.9 Literature findings of revenue stream

What value will the company's customers pay for?

In the literature study done for this report, there were no findings of what value the digital accounting businesses are willing to pay for. This question was answered exclusively by the case study findings.

What is the current price? How do customers pay? How would customers favor to pay?

Southern Cross University (2016) states that not having a hourly billing for client communication, will makes it possible to take fixed fees and package the company services for the accounting company and it is more cost and time efficient for both customers and accounting firms.

With what and how much do revenue streams contribute to the overall?

In the literature study done for this report, there were no findings of what and how much the revenue streams contribute to the overall of a digital accounting business. This question was answered exclusively by the case study findings.

5.2 Findings of barriers and facilitators

The literature findings also have found that being a fully digital mature accounting company is rare (Southern Cross University, 2016). Kane et al. (2015) states that the fundamental difference between a not fully mature company and a mature, is that a not fully mature company get stuck in finding solutions for separate business problems with specific non company standardized digital technologies, while a fully mature company has structural strategies and a standardized digital technology to solve holistic issues. Southern Cross University (2016) also explains that the accounting industry is not used to technology shifts, this is the second large one happening since the beginning of accounting. It is not an industry used to changes (Southern Cross University, 2016).

Another barrier to only business modeling is the attitude towards it from employees and leaders as well as having someone leading the business model change. Having a positive company culture towards having a digitalized business model is of main essential for it to be effective and executed according to Chesbrough (2010).

An essential understanding is that it is important create an individual business model for the business. Since it takes time and a lot of resources to get it right and having a business model fit for the business could facilitate the adaption of it. Otherwise a poorly fit model could provide a barrier for digitalization of the business (Teece, 2010).

As mentioned in the literature study, Schumpeter (1942) discusses the long-term and short-term consequences for an evolutionary change in an industry. The long-term raise of standards and economy from an evolutionary process is often met in the short time by direct losses and gains from industrial-political reactions. Looking beyond the instant barriers of unpredictability and direct losses is necessary for success (Schumpeter, 1942).

Resistance to change by employees and leaders is sometimes encountered in companies. Change is scary for employees when its not clear what outcome it will mean for them and it can result in resistance of adaption of the new change or technical revolution and could provide a barrier of adaption (Coch and French, 1948).

6 Summary of empirical and literature findings in the business model canvas

The concluded findings from the literature and the empirical study will be presented in a mapping through the business model canvas. It will be graphically presented in the four different focus areas of the business model canvas.

In order to create a holistic view of the findings in the framework, they will be presented in the business model canvas. The findings from literature will be green and from the interview findings will be blue.

When looking at the business model canvas it can be seen to have 9 different categories, but within four different focus areas (Osterwalder, Pigneur, Bernarda and Smith, 2015). The division can be seen in the figure 5 below, which is created for this report and inspired by Osterwalder and Pigneur (2013).

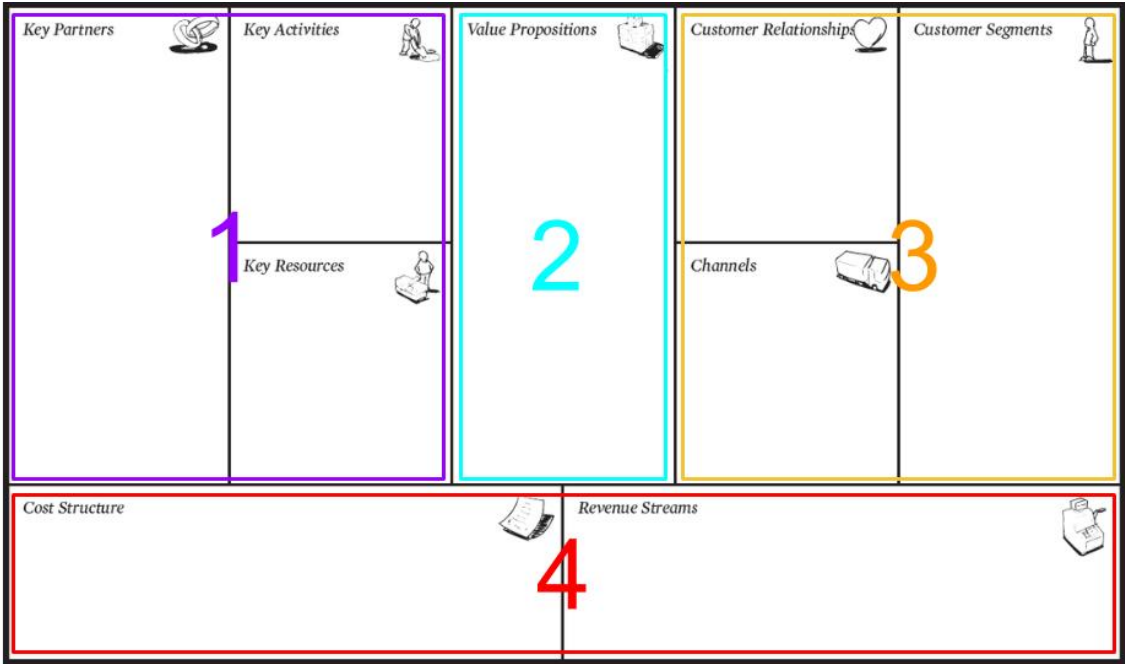


Figure 5. Business model canvas with area division.

If viewed in the figure 5 the first area is key partners, key activities and key resources. They all contribute to giving internal insights of the company. The second area is concerning what the company deliver in value e.g. services, products etc. The third will give the user market and customer insights and the fourth are for financial insight (Osterwalder, Pigneur, Bernarda and Smith, 2015). The summations of the findings will thereby be presented in graphics for each category.

6.1 Findings of needed internal insights in a digital business model



Figure 6. Business model canvas findings of internal insights.

The concluded findings on business internal insights for establishing in a digital business models can be seen in figure 6 above, which is created for this report and inspired by Osterwalder and Pigneur (2013). The findings are provided from the literature review and the interviews and have been described more in depth in chapters' 4.1.1, 4.1.2, 4.1.6, 5.1.1, 5.1.2 and 5.1.6.

6.2 Findings of needed value to deliver in a digital business model

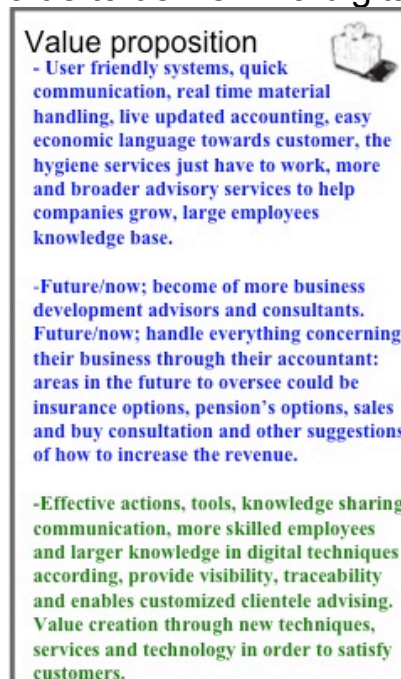


Figure 7. Business model canvas findings of needed value to deliver.

The concluded findings on needed value delivery for establishing in digital business models can be seen in figure 7 above, which is created for this report and inspired by Osterwalder and Pigneur (2013). The findings are provided from the literature review and the interviews and have been described more in depth in chapters' 4.1.3 and 5.1.3.

6.3 Findings of needed customer insights in a digital business model

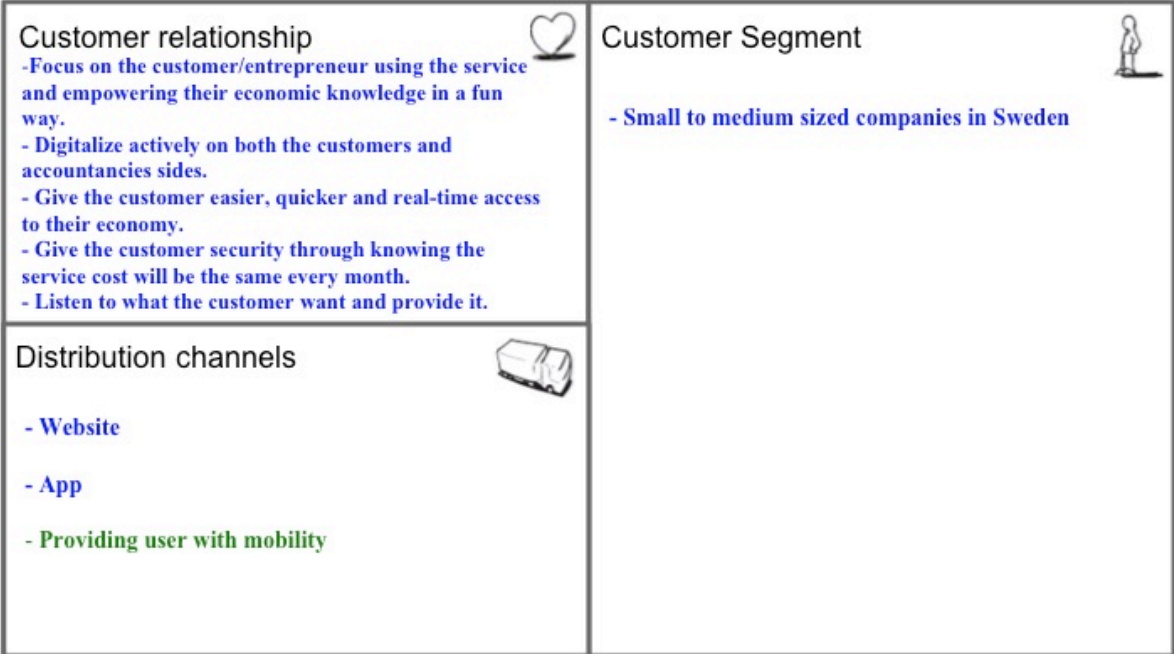


Figure 8. Business model canvas findings of needed customer insights.

The concluded findings on needed customer insights for establishing in digital business models can be seen in figure 8 above, which is created for this report and inspired by Osterwalder and Pigneur (2013). The findings are provided from the literature review and the interviews and have been described more in depth in chapters' 4.1.4, 4.1.5, 4.1.7, 5.1.4, 5.1.5 and 5.1.7.

6.4 Findings of needed financial insights in a digital business model



<p>Cost structure</p> <ul style="list-style-type: none"> - Employee costs - Costs of the digital system 	<p>Revenue streams</p>  <ul style="list-style-type: none"> - Monthly cost for customer for the service or finding other sources of billing income e.g. commercial, cooperation with other services etc. - Fixed fees and package the company services.
--	--

Figure 9. Business model canvas findings of needed financial insights.

The concluded findings on needed financial insights for establishing in digital business models can be seen in figure 9 above, which is created for this report and inspired by Osterwalder and Pigneur (2013). The findings are provided from the literature review and the interviews and have been described more in depth in chapters’ 4.1.8, 4.1.9, 5.1.8 and 5.1.9.

7 Discussion

In this chapter a discussion of the found research results and analysis will be presented. Each element findings will be discussed separately, owing the previously used disposition. There will also be a discussion regarding the framework used in this report and the generalizability of the result.

7.1 Discussion of research result and analysis of the business model canvas findings

7.1.1 Discussion of key partners

Having system suppliers, banks and government as key partners was found to be most important in the interview findings and literature. The literature by I Boundless (2015) adds the element of also considering other shareholders. There implies to be a conscience between the interview and literature findings, however the literature suggests of a broadening and identify other stakeholders than system suppliers and customers. It appears to be of importance to both have identified key partners in order to manage basic and ongoing company actions, as well as identify other stakeholders and create partnerships of beneficially for the future. This can be motivated with the need for managing the change digitalization will bring upon the company and change its structure, activities and strategies according to literature findings by Zimmermann (2000).

7.1.2 Discussion of key activities

Having key activities as manual check up of digitalized actions, follow technical development, be aware and follow trends, consultancy, easy tool/services use and atomization if possible are important for being a digital accounting company according to the interviews. They believe that a holistic and easy approached, gamified service should be presented to the customer as key activity of the accountancies business. It was also found that the interviews all thinks that consultancy is a key activity but they were not in total conscience of what to consult within. The main thoughts were that consultation was needed for the accounting service and business growth decisions, but a few also believed that consultancy needs to be involving other business critical factors as well. It was also found that the thoughts regarding these to be the needed key activities in the future differed, not all of them believes a manual check up of digitalized actions will be needed if digitalization and atomization gets further integrated in accounting services. The literature by from Southern Cross University (2016) and Kane et al. (2015) have found that effective actions, tools, knowledge sharing and communication is the key activities when being digitalized. It appears to be a consensus concerning digital tool use, effective actions (i.e. follow technical development, be aware and follow trends) and that consultation (i.e. knowledge sharing and communication). What not to forget is that knowledge sharing and communication can be done both internally and externally as mentioned by Southern Cross University (2016) and both should be taken in consideration. The interviews only implied on key activities of knowledge sharing and communication towards the customer and internally though integrate employees are a large source of building their offered customer solutions. It could be considered to have these as key activities towards other external actors as well and internally to benefit the most from digitalization.

7.1.3 Discussion of value proposition

The interview findings indicates on value proposition for digital accounting being quicker real-time information handling, easier access to their economy, digitalized tools/services, depth consultancy, customer support, mobility, quick decision making and open mindedness against changing strategies from time to time. The hygiene services provided just have to work and the employees need a large knowledge base to be able to provide the depth consultancy. In the literature from Kane et al. (2015) and Southern Cross University (2016) list effective actions, tools, knowledge sharing, communication, more skilled employees and larger knowledge in digital techniques as being core values of digitalized businesses. Having new techniques, services and technology is also value propositions according to Rogers (2003). It can be seen that the interview findings and the literature findings support each other. A discussion of the interview findings highlights the future value proposition of consultancy. Many of the interviewed believe that a focus on accounting consultancy is what's going to be seen as the core value for customers in the future, while other interviewed thinks accountants need to broaden this view to also provide business consultancy for company growth as well as handling and consulting within all the business critical factors for the company in order for industry survival. The literature findings also imply that a visibility, traceability and enables customized clientele advising is what should be provided. If the digitalization will provide atomization to most of the services like Southern Cross University (2016) implies, that accounting companies need to find other value propositions adapting to the new technology and change their services and products accordingly to maintain competitive. Accounting companies should therefore not act limited to their known services and core values of today, due to the fact that other might be needed to acquire for future business survival.

7.1.4 Discussion of customer relationship

Providing the customers with easier accounting; real-time access to their economy; the security in knowing the accounting services will be at the same cost every month through fixed costs or no costs; gamification of the services; as well as consultancy support is most important according to the interviewed. There were no focused literature findings on this element of business models but the literature from II Boundless (2015) implies that stakeholders like customers support the company's existence and have an influencing interest in the company's actions. That makes it of value for the company to use the customer relationship to be beneficial on both behalf. The interviewed seems to have identified that they need to provide their company with sources like functioning digital systems, large employee knowledge and internal acceptance of digitalization to have good qualifications to provide what they believe customers need. Most of the interview implies that they take customer ideas and suggestion in consideration when choosing what to provide as services. A clear incorporation of customer communication is vital when the digitalization give customers more influence in the business, like interviews implies. If the industry were to become customer driven as findings imply, the relationship with customers will have to change and accounting companies need to consider possible actions in their architecture of customer relationship to handle this.

7.1.5 Discussion of customer segment

Findings from all interview is that the consumer segment targeted is the small to medium sized companies in Sweden. There is only one of the interviewed that had limited it further to be service companies only within the small to medium sized companies segment. There were

no focused literature findings on this element of business models. But if the digitalization will provide atomization to most of the services like Southern Cross University (2016) implies, that accounting companies maybe should limit their customer segment further. This is due to the suggestions and findings of accounting companies would have to provide more in depth consultancy i.e. involve business critical factor and business growth consultancy. This will require more expertise knowledge from consultants to understand different industries and all their elements. Then a further restriction of what customers to approach could be of value, in order to create in depth knowledge of industry requirements and opportunities towards a focused customer segment. This is an area for reflection for the accounting companies if they want to stay competitive with the foreseen necessary future value propositions.

7.1.6 Discussion of key resources

The interviewed where in consent of their employees being the primary key resource. As the other key resource it is the digitalized services, user friendliness, quick communication through an app, real time material handling, easy understood economic-language, provide mobility, easy access to services and economy, good customer support and an effective decision making structure in the company in order to provide a flexible company structure, strategies, and actions to be able to keep up with changes. The literature findings from Kane et al. (2015) and Southern Cross University (2016) seems to be in conscience with digital companies having digital technology tools as a key resource. Teece (2010) and Gustavsson (2015) add that a key resource for a successful digital company is to analyze company relevance to stay up-to-date with market changes. Gustavsson (2015) believes for doing so, a flexible company structure, strategies, actions is needed. Kane et al. (2015) have found that a company culture for embracing digitalization is the basics for being a successful digital company and Chesbrough (2010) believe this should be lead by an innovation and digitalization leader in the company, for successful integration and maintenance. There implies to be a focus in the interviews on seeing their technique around the digital services as the key resource and a minor belief that company structure for effective decision making i.e. flexible company structure, strategies, actions is needed. The literature adds a larger focus on the company embracement of digitalization as a company culture, structure, strategy and the need for maintenance as key resources creating the value to the company and customers. They also lift up digital tools, but with the company culture, structure, strategy as the needed key resource that creates the proper use and development of the digital tools. It might be a suggestion for companies wishing to be successful in their digitalization to not have providing digital services as their key goal, but to create a digital culture, strategy deciding, action plans and a company structure to handle digitalization and possible future changes first and secondary having digital services as a key goal. If the company culture and structure is built for supporting digitalization, an embracement and strive for continuously develop the digital services to the better will probably go without saying.

7.1.7 Discussion of distribution channels

From the interviews it can be identified that the most common way to distribute the digitalized accounting service is through webpage and the second way is by app. A common conscience in the customer being mobile is evident. In the literature the findings are from Kane et al. (2015) that mobile solutions are necessary for digitalization and should be supported by a holistic platform to ensure the positive company and customers' experience. It appears to be of importance to use the latest digital portals to provide customers with the digital service the accounting companies possess and companies should keep in mind to build

holistic platforms that already now are ready to connect to the upcoming trends of digitalization. This is needed in order for survival in a digital form of accountancy firms.

7.1.8 Discussion of cost structure

The biggest cost for all interviewed seems to be employees but they also see them as their biggest resource since the accounting business is a service industry. Another cost they identify as their main cost is the digital systems that the digitalization requires. In the literature, no discussion regarding the largest cost of being a digitalized company is found. Since there is evidence of the digitalization atomizing many of the manual processes of accounting in the research by Breman and Felländer (2014) have found that many jobs is in risk of being digitalized within a period of twenty years. This is likely to change the cost structure of the accounting business and a need for accounting businesses to be aware that their largest company cost might be something else in the future, should be monitored in order to adapt their business and income streams to it.

7.1.9 Discussion of revenue stream

The accounting business is today a single revenue stream income. In the interview findings there is no consensus of how the revenue stream should look like. Most interviewed believe a fixed monthly amount is what customers are willing to pay for when receiving digital accounting service and consulting as an add-on. One interviewed say that there are many free digital accounting tools online and believe that the digital accounting services is nothing customer wishes to pay for, so the revenue stream should come from other incomes. In the literature findings, Southern Cross University (2016) states that fixed fees and packaged company services, is more cost and time efficient for both customers and accounting firms. However, since a fixed monthly pay method seems to be quite generally accepted in both the industry and the literature, it might not be the pay method to adapt if wanting to be ahead on the market, or offer customers something other then already the rest of the market is. Innovating on price models could be a way for digitalized companies to find new sources of revenue and get more than a single revenue stream income and is therefore recommended to investigate.

7.2 Discussion of research result and analysis of the barriers and facilitators

Findings from the interviews is that the actors have started to realize that the customer influence in the business is growing with the digitalization and they are trying to make it to their advantage by incorporate customer suggestions in their business offerings. One of the interviewed is concerned that the accountants might not have what requires in the future for satisfying customer demand. This could possibly be an issue approaching the industry. Findings from the interviews implicates that the former supplier driven structure is opening up to become more demand driven with the digitalization of accounting firms and this could possibly mean forced changes for all of the market actors. In the literature findings on this shift is explicitly expressed, but findings from I Boundless (2015) and Southern Cross University (2016) indicates on an identification of the accounting business being internally driven but digitalization requires progress both internally and externally for finding opportunities. Zimmermann (2000) suggests all companies waiting to be digitally successful to continuously evaluate the company, market, offerings and value creation. If a company wished to be digitally successful and keeping up with market demands, evaluating these areas

continuously could be of recommendation. This could favor a digitalized company, if wanting to possess what requires in the future for satisfying customer demand.

The thoughts of the actual maturity of the digitalization in the accounting business differ in the interviews. One interviewed believe that the market has understood that digitalization is a matter of survival while the other interviewed believe that it has not. Another findings are that all of the interviewed see their businesses as digitalized, but they all differ in digital adoption. From findings in the literature by Southern Cross University (2016), fully digital mature accounting company is rare. This could implicate that there is stillroom for improvements of digitalization to all market actors of the accounting industry and this report suggest accounting firms to actively improve their digitalization and always improve their offerings and strategies in the business model to stay competitive.

One finding from the interviews is that legislation as a great influence on what they can do and not. The interviewed says that it has happened a lot on the technical side for accounting, but to little has happened with legislation to keep up with being able to fully embrace it. Southern Cross University (2016) sees the problem of embracing digitalization to be that the accounting industry is not used to technology shift and do not know how to handle it. If all of these findings are the basis for why the accounting companies are not embracing digitalization to the fullest possible it could be concluded to be a matter of culture and change issues. In the literature Girotra and Netessine (2014) and Teece, (2010) have found in their researches that if the accounting companies are going to manage these should look and evaluate the strategic decisions. A suggested tool to use for this could be the Porter's value chain presented in this report by Porter (1985). However, it appears to be of importance for accounting businesses to see over their actual maturity of digitalization and evaluate if their strategic approaches to the best conditions, or if their reason for not being as fully digitalized as possible could be to the fact that they have for example got stuck in finding solutions for separate business problem instead of holistic ones.

A finding from the interviews is that they see that digitalization is that it has created an open market with less need of seal of quality in accounting knowledge. No literature findings that approach this view had been found. This could be an indication on future upcoming competitors on the market that the accounting business has not foreseen. This might be something that is hard for companies to take action on today, but is suggested in by this report to have in mind and try to monitor possible up springing of unexpected competitors.

Two findings of possible barriers in the literature was the employee and leader acceptance of the digitalization and the changes it bring. Having a positive company culture towards the digitalized business model is important according to Chesbrough (2010). Change is scary for employees when its not clear what outcome it will mean for them and it can result in resistance of adaption of the new change or technical revolution and could provide a barrier of adaption (Coch and French, 1948). In the interviews there is findings complementing these statements but gives more specific indications on cultural barriers like generation issues of acceptance of digitalization and in general a traditional business set in its habits. There is a holdback from experienced accountants by fear of the digitalization. If an accounting company wishes to avoid this barrier of acceptance, education, information and two-way communication could be to suggest. Educating the leaders and employees with what the digitalization will mean to them and listen to their thoughts will help them to not fear the change and be actively contributing to the change.

It is also important to be aware that copying another business models is difficult and should be avoided since it does not usually facilitate success. This is due to the fact that a business model involves many parameters of different systems, activities and resources, which are hard to copy and it will takes time and a lot of resources to get it right according to Teece (2010). Recommended is that the accounting company put in the time and effort of using the presented generalized business model in this report and modify it to fit the company's specific needs. This will make the modeling of the business model easier, quicker but personalized for the company.

Another finding from the interviews is the barrier against digitalization that exists to the fact that accountants make more money charging by hour. When digitalization makes the work more effective and quick, that is a price model that is hard to motivate when digitalized and accounting companies hesitate to digitalize their business with the fear of making less of an income. This slows down the adoption of digitalization. A well-known research by Schumpeter (1942) discusses the long-term and short-term consequences for an evolutionary change in an industry. The long-term raise of standards and economy from an evolutionary process is often met in the short time by direct losses and gains from industrial-political reactions. Looking beyond the instant barriers of unpredictability and direct losses is necessary for success accordingly to Schumpeter (1942). In order to be able to do this, this report suggest long time and short time planning, evaluation and reconstruction of both business strategies, models and economic future estimations and for the accounting companies to have patience and trust in the process of digitalization as a future need for survival as well as change of their outdated pricing model for surviving the digitalization of the accounting business.

7.3 Discussion of framework used

The framework used in this report has been the business model canvas. The aim of the used framework has been to contribute to the understanding of what a business model should incorporate for a digitalized business. Furthermore, the aim of the research is to contribute with general understanding of how a business model for an digitalized accounting firm looks like and how it could be set up in order to succeed with digitalization. The business model canvas has made it possible for the research to visualize and evaluate this.

However, a limitation of the framework is that it gives no directions of how to implement the found business strategies and actions needed for being successfully digitalized as an accounting firm. If that were wished for, the framework should be complemented with other tools to incorporate this step of business model realization. Though, the aim of the study has not been to give hands on actions and strategies for implementing a business model, only to find the general conditions of it. Another limitation with the framework chosen is how to build strategies towards other external stakeholders except for partners and customers and it does not give any consideration to strategies of managing internal stakeholders e.g. employees, managers and owner for digitalization. This is something that has to be considered when reading the report and be aware of that it has been left out. However, the business model canvas is generally accepted for business models and is therefore considered to be enough when contributing to the general understanding of what a business model should incorporate for a digitalized business.

7.4 Discussion of generalizability of the results

This study has had its focus on case companies that are Swedish actors, who market themselves as digital accountancies suppliers. However, it has come to realization during the study that they compared with each other not possess the same digital mature status and thereby possess different capabilities and working approaches. This provides an interesting view on what an actual digitally mature accounting firm should be identified as and has provided different points of view to the research. This has contributed to not getting homogenous findings within all areas researched and given a possibility to compare different actors in the industry. However, it could limit the possibility to draw general conclusions in a few aspects of the research and have had to be replaced with suggesting for individual company reflection, for actors who wish to have a successful business model through following the findings of this report. It can be seen as not all aspects of a business model could be generalized and needs individual company decisions fit for their individual conditions.

The data collected in this study have been for the most of a qualitative perspective. This has to be taken in mind of making the generalizability of the result less. However, the market representation of digital accountancies suppliers in this report should be seen as good. Having four out of 10-15 identified digital accountancies suppliers represented, provides a certainty to the findings. The consistency of using the same semi-structured questions in the case interviews gives generalizability to the result. An uncertainty though, is the unstructured supplementary questions that has varied between the interviewers and has created different depth findings in different areas for each interview. More structured supplementary questions and qualitative data could be seen to give increased generalizability and a better holistic approach to the study.

8 Conclusions, implications and future research

In this chapter the conclusions from the study will be presented. Implications for the accounting industry and research implications will also be shown, as well as suggestions for future research areas.

8.1 Research questions

The purpose of this study was to investigate how business models for digitalized accounting firms' look like and present how a business model generally could be set up, in order to be successfully digital. The goal has been to provide an understanding to how digital accounting businesses makes business decisions in order to survive the market changes. To fulfill this purpose the main research question was formulated to be:

How could a general business model for digitalized accounting firms on the Swedish market be set up in order to survive the market of today?

From this main research question four sub questions were formulated, in order to provide an understanding of how a digital accounting businesses could set up their business model in order to become a successful digitalized business, through a multiple case study. The following sections will present conclusions of the findings where each question is answered.

8.1.1 Research question 1

The first sub question of this study was:

RQ1: What is digitalization?

Concluded, the meaning of digitalization is a transforming analogue knowledge and information to become a stored digital form of knowledge and information. Digitalization provides easier access to knowledge and information in real-time and enables a global exchange between people and plugged in digital appliances. Digitalization has seen to give more effective actions, tools, knowledge sharing, communication and more knowledgeable and skilled employees within technical techniques. Digitalization provides immediately collected data to access and provide visibility, traceability and enables customized clientele advising. Digitalization enables approaching and consulting new and existing clients/partners/employees etc. from a distance. Digitalization is a technical shift that could be viewed as an innovation shift for the accounting business way to precede business.

8.1.2 Research question 2

The second sub question of this study was:

RQ2: What does digitalization mean for accounting businesses?

After an in depth literature study and semi structured interviews it could be found evident that an accounting firms' will be affected by digitalization. The literature review identified what previous researches have established about digitalization and its impact on industries. These

findings were then confirmed and complemented with industry specific findings from the interviews.

One main conclusion is that digitalization had a direct affect on how the company should strategically set up and work in their business. In general, the following conclusions may be drawn:

The company strategies will be directly affected of digitalization and have to be set up to fit a digital business, since digitalization changes the structure of the companies. The company actions will be directly affected of digitalization due to the requirements of e.g. new tools, new communication strategies and other strategies and have to be set up to fit a digital business. The company processes will be directly influenced of digitalization due to the requirements of e.g. new tools, new communication strategies and other strategies and have to be set up to fit a digital business. Digitalization will affect and create new tools for the accounting businesses when digitalized it will also affect and create new the knowledge sharing channels and distribution times, within and to external stakeholders. Digitalization will also influence and change the communication channels within and to external stakeholders to become for example communication through apps, chat tools and webpage. Digitalization will affect the employees working procedures and require more skilled employees and larger knowledge in digital techniques. The offerings to customers and the provide services will be directly affect by digitalization in a different way than an analog accounting business, through for example consulting for critical business decision and not only accounting. Digitalization will have a direct effect on the company culture and will influence/change the strategies, actions and processes in the company. Digitalization has also been identified in this report to have a direct affect on cost structure of the business. A digitalized company can not charge their customers the same way as an analogue business due to the different offerings and more effective service handling and will in that way it may affect the revenue streams. Digitalization is most likely to have an influence on what customer segment to target in the future, since it is seen to be able to satisfy more individual customer needs and it is also most likely to have an influence on changing what key resources will be important to possess in the future due to changes in strategies, actions and processes it requires. In that way it may directly affect the whole business structure. Digitalization have in this report been predicted to have an influence on changing the industry from being supplier driven to customer driven in the future, since it is seen to be able to give more influence power to customers. Digitalization among accounting companies will also most likely become more common in a near future, due to this digitalized technical shift that is foreseen to rule and other actors might enter the accounting business. In that way it may directly affect the strategies and actions for a digitalized accounting business to stay competitive.

To conclude, digitalization is most likely to affect a business whole business model and their business structure. Digitalization means for the accounting business affects on al of the aspects of the businesses e.g. the key activities, value proposition, customer relationship, key partners, distribution channels, revenue streams, cost structure, key resources and customer relationship.

8.1.3 Research question 3

The third sub question of this study was:

RQ3: What is a business model and how can it be modeled?

The literature review identified what previous researches have established to be possible ways to set up business models. These findings regarding generally accepted existing business models was not set in comparison of interview findings, since the area is not of the interviewee's expertise and the literature findings were evaluated to be of already confirmed credibility and reliability.

One main conclusion is that the business model canvas is a good tool to use when setting up a business model for a company wishing to be successfully a digitalized accounting firm. In general, the following conclusions maybe drawn:

There are many different guidelines of how to discuss and brainstorm regarding how to set up a business model, but they have many parameters in common of what the provided outcome should be. There are many different tools to use when setting up a business model, but they have many parameters in common of what the provided outcome should be.

8.1.4 Research question 4

The forth sub question of this study was:

RQ4: What barriers are there from digitalization affecting business models?

After an in depth literature study and semi-structured interviews it could be found evident that an accounting firms' business models will be affected by barriers and facilitators. The literature review identified what previous researches have established about general barriers and facilitators from digitalization and its impact on industries. These findings were then confirmed and complemented with industry specific findings from the interviews.

One main conclusion is that there are a number of barriers and facilitators that could have a direct affect on an accounting firms business model. In general, the following conclusions may be drawn:

The definition of a digital mature company is commonly accepted and easy to state, but hard to evaluate in practice and provides an over all barrier adaption of digitalization in business models. As a result of this, fully digitally mature accounting business could be concluded to not exist. This is due to the barriers of legislation, cultural resistance and accounting being an industry with limited experience of how to tackle technology shifts.

The former supplier driven structure is opening up to become more demand driven with the digitalization of accounting firms and this could possibly mean forced changes for all of the market actors. How the accounting firms meet this change though their business models, could decide if it becomes a barrier of a facilitator for the business digital survival.

An identified barrier mentioned above for digitalization of the accounting industry that will affect the business model is that legislation as a great influence on what they can do and not. Companies have to manage this and look and evaluate the strategic decisions limited by the legislations.

A barrier or facilitator for digitalization of the accounting industry that will affect the business model is that the digitalization could create an open market with less need of seal of quality in

accounting knowledge. This could be an indication on future upcoming competitors on the market that the accounting business has not foreseen. This might be something that is hard for companies to take action on today, but is suggested in by this report to have in mind and try to monitor possible up springing of unexpected competitors.

Two findings of possible barriers in the business model is the employee and leader acceptance of the digitalization and the changes it bring. Having a positive company culture towards the digitalized business model is important. Change is scary for employees when it is not clear what outcome it will mean for them and it can result in resistance of adaption of the new change or technical revolution and could provide a barrier of adaption.

There are also indications found on cultural barriers like generation issues of acceptance of digitalization and in general a traditional business set in its habits. There is a holdback from experienced accountants by fear of the digitalization that will affect the business modeling.

A self-implicated barrier could be copying another business models. It should be avoided since it does not usually facilitate success. This is due to the fact that a business model involves many parameters of different systems, activities and resources, which are hard to copy and it will takes time and a lot of resources to get it right.

Another barrier against digitalization and adaption of the business model to fit digitalization is that an accountant makes more money charging by hour. When digitalization makes the work more effective and quick, that is a price model that is hard to motivate when digitalized and accounting companies hesitate to digitalize their business with the fear of making less of an income. This slows down the adoption of digitalization.

The long-term raise of standards and economy from an evolutionary process is often met in the short time by direct losses and gains from industrial-political reactions. Looking beyond the instant barriers of unpredictability and direct losses is necessary for success and not getting stuck behind short tern economic barriers that will affect the business modeling.

A last found barrier for adopting digitalization in their business models is that the traditional accounting business is not use to changes or technology shift.

8.1.5 Main research question

From the answers of the four sub research questions the main question could be answered:

How could a general business model for digitalized accounting firms on the Swedish market be set up in order to survive the market of today?

This research illustrates findings of needed elements for a general successful digital business plan in the setting of a business model. For the reader to keep in mind is that the company specific parameters also will be needed to consider and complement this view. The reader also should be aware of the existence of other business model tools and guidelines to follow that is most likely to give probably the similarity in result and could be used. The found set up could be viewed in the figures from the findings of graphically presented figures 6, 7, 8 and 9 below, which are created for this report and inspired by Osterwalder and Pigneur (2013).



Figure 6. Business model canvas findings of internal insights.

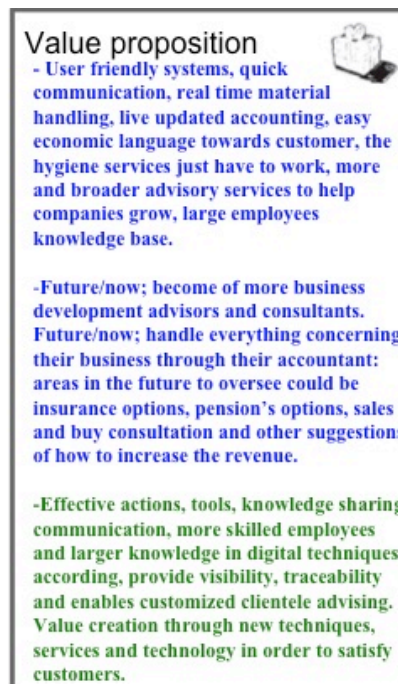


Figure 7. Business model canvas findings of needed value to deliver.

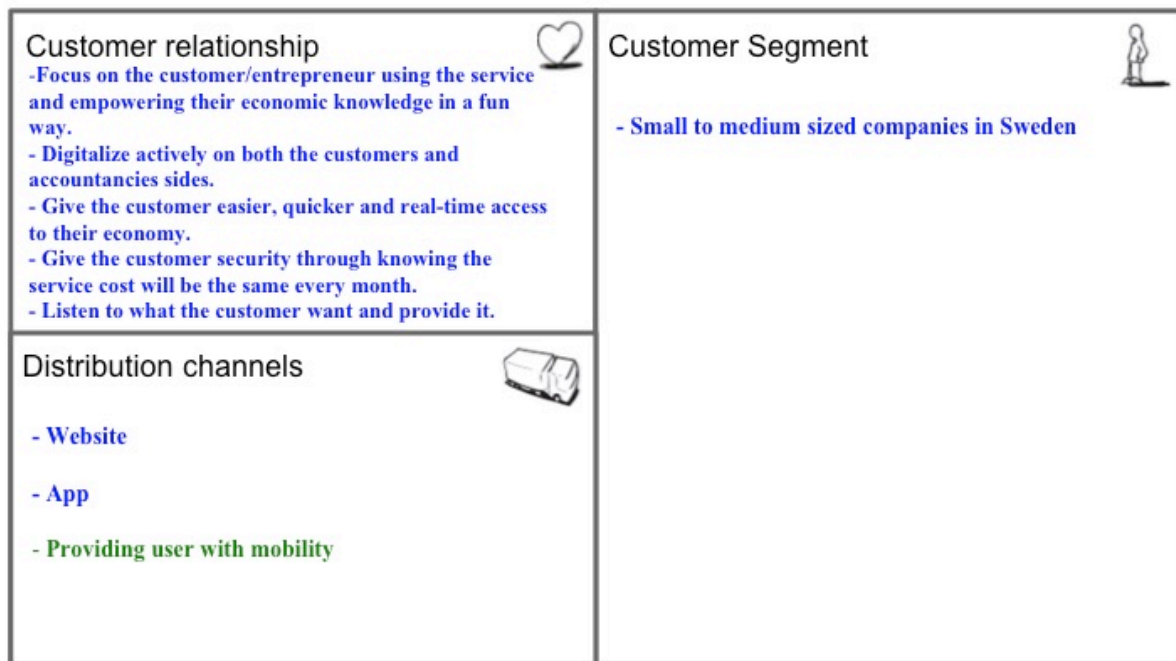


Figure 8. Business model canvas findings of needed customer insights.

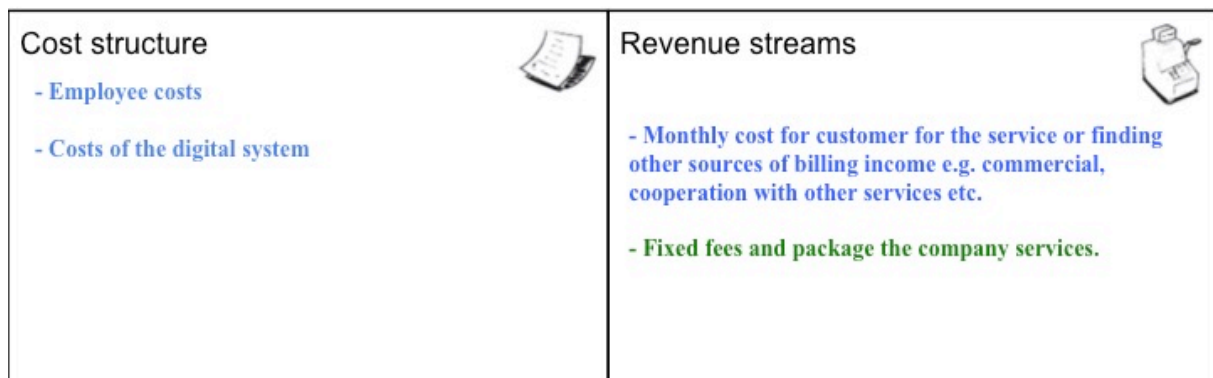


Figure 9. Business model canvas findings of needed financial insights.

8.2 Implications

In this subchapter the industrial implications of this study will be presented and reflected upon.

8.2.1 Industrial implications

The industrial implications of the study is that an accounting companies that wishes to adapt to the digitalization will need to review their current business model, strategies, actions and

processes. They have to oversee the company view of digitalization and align their culture to represent a wish for technical digitalization and progress. Furthermore, the multiple case studies and the literature review have provided an identification of provided initiatives that should be addressed.

This study had provided a clearer picture of how a successful business model for a digitalized accounting firm could be set up. Hence there is a need for a more personalized approach when putting the suggestions in practice as well as a complementary investigation of what company specific business model initiatives should be integrated. There is also a need to further proceed with the implementation of these findings, since only stating them like this study does, does not put it in practice and make it to a success. Putting the business model in practice is the next step towards being a successful digitalized accounting firm and has been left out in this study.

8.3 Research implications and future research

There is a lot of research to access within the area of digitalization and business models and this research does not provide any further findings for these theoretical areas. However, there is not that much literature about accounting and its industry digitalization implications. The findings of this multiple case study will help to cover this gap of literature and to provide knowledge of how digitalization will affect and could be dealt with through business modeling for an Swedish accounting firm, willing to adapt this technology shift.

This study has aimed to set a generalizability perspective of the business model needs for a digitalized accounting company. However, the study does not provide any findings or guidelines how to put the suggested business model in practice, which requires further research.

During the research of this report, there were no findings within the areas of what the customer relationship or segments for digital accounting is, how the cost structure for digital accounting firms should be set to be competitive now and in the future, which distribution channels to use now and in the future, what the most important key activities is in a business model for digitalized accounting and which customers digital accounting firm should aim to satisfy. There could also be researched within future possible revenue streams and conformational research about the findings that digitalization of accountancy had created a open market with less need of seal of quality in accounting knowledge, is a valid and accurate statement. This report touches upon findings for these areas, but future research to quantitatively confirm it is suggested, for example using questionnaires to reach out to more companies. Other future research areas could be within testing the found barriers and facilitators' extent of influence upon the digitalization of the accounting industry.

There is a general lack of knowledge and researches about digitalisation and the accounting industry. It could be a topic for future research towards many different focus studies.

9 Reference list

- Abernathy, William J. and Clark, Kim B. 1984. *Innovation: Mapping the winds of creative destruction*. April <http://www.wz.uw.edu.pl/pracownicyFiles/id12236-Abernathy,%20Clark%20-%20Mapping%20the%20winds%20of%20creative%20destruction.pdf> [accessed 20 April 2016]
- Alt, Reiner. and Zimmermann, Hans Dieter. 2001. *Introduction to special sections - Business Models*. *Electronic markets*: 11, 1, pp. 3–9.
- Berglund, Henrik and Sandström, Christian. 2013. *Business model innovation from an open systems perspective: structural challenges and managerial solutions*. *Int. J. Product Development*: Vol. 18, 3 April
- Betz, Frederick. 2002 *Strategic Business Models*, *Engineering Management Journal*, 14:1, pp.21-28. March
- BFN. 2016. *Redovisningsregler*. Bokföringsnämnden. [website] January. <http://www.bfn.se/sv/redovisningsregler> [accessed 12 February 2016]
- Blank and Osterwalder. 2016. *The Mission Model Canvas – An Adapted Business Model Canvas for Mission-Driven Organizations*. *Huffpost Business*. [website] 23 february http://www.huffingtonpost.com/steve-blank/the-mission-model-canvas_b_9298440.html [accessed 5 May 2016]
- I Boundless. 2015 *Defining Accounting*. Boundless Accounting. [website] 28 May <https://www.boundless.com/accounting/textbooks/boundless-accounting-textbook/introduction-to-accounting-1/what-is-accounting-17/defining-accounting-109-10922/> [accessed 15 February 2016]
- II Boundless. 2015. *Business Stakeholders: Internal and External*. Boundless Accounting. [website] 21 July <https://www.boundless.com/accounting/textbooks/boundless-accounting-textbook/introduction-to-accounting-1/overview-of-key-elements-of-the-business-19/business-stakeholders-internal-and-external-117-6595/> [accessed 15 February 2016]
- Breman, Anna and Felländer, Anna. 2014. *Digicomics - nya ekonomiska drivkrafter*. *Ekonomisk debatt*, no 6, pp 28-37. June
- BusinessDictionary. 2016. *Innovation*. WebFinance Inc. [website] <http://www.businessdictionary.com/definition/innovation.html> [accessed 15 February 2016]
- Burns, John and Vaivio, Juhani. 2001. *Management Accounting Research*. Academic press, Vol 12, 389–402. December
- I Christensen, Clayton M. 2016. *Disruptive Innovation*. Clayton Christensen. [website] <http://www.claytonchristensen.com/key-concepts/> [accessed 15 February 2016]

II Christensen, Clayton M. 2016. *Disruptive Innovation*. Clayton Christensen. [website] <http://www.christenseninstitute.org/key-concepts/disruptive-innovation-2/> [accessed 15 February 2016]

Christensen, Clayton M. 1992. *Exploring the Limits of the Technology S-Curve. Part I: Component Technologies*. Production and Operations Management Vol 1, no. 4. Fall

Christensen, Clayton M. and Bower, Joseph L. 1995. *Disruptive technologies: Catching the wave* Harvard Business Review. January

Chesbrough, Henry. 2010. *Business Model Innovation: Opportunities and Barriers*. ELSEVIER, Volume 43, Issues 2–3, pp. 354–363. April

Coch Lester and French Jr John R P. 1948. *Overcoming resistance to change*. Human Relations, Volume 1, pp. 512-532.

Collis, Jill. and Hussey, Roger. 2014. *Business Research: a practical guide for undergraduate and postgraduate students*. 4 edition. United kingdom. Palgrave Macmillan

Fray, Carl B. and Osborne, Michael A. 2013. *The future of employment: how susceptible are jobs to computerisation?* University of Oxford. September

Fritscher, Boris and Pigneur, Yves. 2009, *Supporting business model modelling: A compromise between creativity and constraints*. Springer, pp.28-43. September

Girotra, Karan and Netessine, Serguei. 2014. *Four Paths to Business model Innovation*. Harvard business review. June

González, Francisco. 2015. *Transforming an Analog Company into a Digital Company: The Case of BBVA*. BBVA. Mars

Gustafsson, Jonas. 2015. *Identitetskris och möjligheter: Digitaliseringen störtar gamla maktbalanser*. Entré, ESBRI. no 4. Pp.12-15. December

Ifac. 2013. *Handbook of the code of ethics for professional accountants*. Ifac. [website] <http://www.ethicsboard.org/iesba-code/part-general-application-code/introduction-and-fundamental-principles> [accessed 18 Mars 2016]

Kane, Gerald C. Palmer, Doug. Phillips, Anh Nguyen. Kiron. David and Buckley, Natasha. 2015. *Strategy, not Technology, Drives Digital Transformation - Becoming a digitally mature enterprise* MIT Sloan Management Review. September

Maurya, Ash. 2012. *Running Lean: Iterate from plan A to a Plan that Works*. 3 edition. O'Reilly Media.

Osterwalder, Alexander and Pigneur, Yves. 2010. *Business model generation*. John Wiley and Sons Inc.

Osterwalder, Alexander and Pigneur, Yves. 2013. *Business model generation: a handbook for visionaries, game changers, and challengers*. John Wiley & Sons Inc.

Osterwalder, Alexander. Pigneur, Yves. Bernarda, Greg and Smith, Alan. 2015. *Value Proposition Design: How to Create Products and Services Customers Want*. WILEY, 1 edition

Osterwalder, Alexander. Pigneur, Yves and Tucci, Christopher L. 2005. *Clarifying Business Models: Origins, Present, and Future of the Concept*. AIS Electronic Library, Vol 16, No. 1. May

Ovans, Andrea. 2015. *What is a business model?*. 23 January. <https://hbr.org/2015/01/what-is-a-business-model> Harvard Business Review. [accessed 16 May 2015]

Porter, Michael E. 1985. *Competitive Advantage: Creating and Sustaining Superior Performance*. THE FREE PRESS, 1 Edition

Rogers, M. Everett, 2003. *Diffusion of innovations*. London: Simon & Schuster, 5th edition

Selz, Dorian. 1999. *Value Webs - Emerging forms of fluid and flexible organizations*. Diss. University of St. Gallen

Schumpeter, Joseph A. 1942. *Capitalism, Socialism and Democracy*. London: Unwin.

Southern Cross University. 2016. *Accounting in a digital world*. [blog] 16 September <https://online.scu.edu.au/accounting-digital-world/> [accessed 15 February 2016]

Teece, David J. 2010. *Business Models, Business Strategy and Innovation*. Long Range Planning, vol 43, pp.172-194

Timmerss, Paul. 1998. Business Models for Electronic Markets. EM –Electronic Markets, Vol. 8 No. 2, pp. 3-8

United Nations. 2005. *Revised draft outcome document of the High-level Plenary Meeting of the General Assembly of September 2005 submitted by the President of the General Assembly*. 5 August. http://www.un.org/ga/59/hlpm_rev.2.pdf [accessed 18 April 2016]

UNSW. 2016. *Why accounting?*. UNSW Australia Business School. [website] <https://www.business.unsw.edu.au/about/schools/accounting/about/why> [accessed 18 February 2016]

Yin, Robert K. 2014. *Case Study Research: Design and Methods. Applied Social Research Methods Series*. SAGE Publications Inc. 5th edition

Zimmermann, Hans-Dieter. 2000. *Understanding the Digital Economy: Challengers for New Business Models*. AMCIS 2000 Proceedings, Paper 402

Appendix 1

Semi structured interview questions

- (1) Tell us briefly about your company, as well as your position.
- (2) Describe your digital services more thoroughly.
- (3) There have been major changes towards digitalization in many industries the recent years, due to the established technological shift: digitalization, has it been seen in the accounting industry? Has affected the accounting industry? How?
- (4) How do you think the current market and the actors look like today? Compared with what it looked like before?
- (5) How widespread do you feel digitalization in your industry?
- (6) Are there internal and external actors that affect the accounting industry and your company when you act / make decisions?
- (7) How do you earn money on digitalization? Future trends?
- (8) What is important for an accounting company to perform and deliver value?
- (9) What is a digital enterprise value-creating resources to process, input and output? Greatest one? (Examples Resources, sales, equity, profit)
- (10) How do your company work to improve digital accounting performance?
- (11) Is social responsibility is important in the accounting industry? Is it performed (by your company / by the industry)?