Building a Social Commerce Platform

Ebba Cronqvist & Ian Thorslund

DIVISION OF INNOVATION ENGINEERING | DEPARTMENT OF DESIGN SCIENCES FACULTY OF ENGINEERING LTH | LUND UNIVERSITY 2020

MASTER THESIS





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Abstract

Over the past several decades, we've seen a rapid deployment of web-based technologies which has drastically changed the way most businesses operate. For instance, the diffusion of information and communication technologies have paved way for entirely new types of businesses and business models. Among these is *social commerce*, a phenomenon rooted in Web 2.0 technologies and social media. As social commerce, described as the marriage of social media and e-commerce, is emerging so are new types of social networks and commercial platforms. These platforms rely on network effects to create value for its participants. Additionally, social media users are shifting from general social network to vertical networks where they can connect with specific, like-minded audiences. This trend is opening up for new businesses to take on a vertical social commerce role within a specific niche. To help these new businesses on the rise, we propose a framework of business tactics that handle value creation within the network as well as the adoption of value propositions targeting several customer groups.

The research is based on a triangulation methodology, consisting of a comprehensive literature review coupled with expert interviews and mini case studies of companies within the social commerce context.

The report can be divided into two primary parts. In the first part, the authors identify, describe and analyze prominent business tactics for building a social commerce platform. The prominent business tactics are compiled into a tabular framework that can be used as a tool for setting a strategic plan when building a social commerce platform. The second part of the report commences as a case study on the Swedish startup Ridebrain, on which the framework is applied. Flaws in the company's current strategy for launching their ski- and snowboard themed social commerce platform are identified and actions potentially mitigating these drawbacks are proposed.

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List Of Definitions

Electronic word-of- mouth (eWOM)	Word-of-mouth through internet based technology i.e. on- line recommendations
Hybrid network	A network structure that contains two or more different types of sub-networks
Multi player mode	A game or application mode designed to be played/used co-operatively or competitively by two or more users
Single player mode	A game or application mode designed to be played/ used by a single user
Social commerce	A new business model of e-commerce often described as the marriage of e-commerce and social media
S-commerce	The abbreviation for social commerce
Social network	A dedicated website or other application which enables so- cial interactions and personal relationships among users
Vertical social net- work	A specifically targeted social network that connects people with specific interests, hobbies, and passions
Vertical social com- merce	A social commerce (social network and marketplace) specifically targeted to people with very specific interests, needs and demands.
Web 2.0	The second stage of development of the Internet, charac- terized especially by the change from static web pages to dynamic or user-generated content

1

Introduction

This chapter aims to put the reader and the master thesis in a context, by stating the relevant background information, the issue of study and the purpose of study. Furthermore the research questions are presented. Lastly, a summary outline of each chapter in the thesis is presented.

1.1 Background

1.1.1 Introduction to Ridebrain

Ridebrain is a vertical social commerce platform for ski and snowboard enthusiasts. The company was founded in 2016 and launched their first platform available for users in 2018. The initial platform combined social media tools so that the users could interact and socialize in a closed community. In the fall of 2019 the company started to extend their social network by creating a commercial platform on which the users should be able to purchase everything ski- and snowboard related. Not only do they wish to connect consumers and retailers within the ski niche, Ridebrain does also create editorial content to seamlessly market products and inspire users in ski related stories, articles, videos etc. Hence, the mission is to serve as a place to connect and consume content about gear but also a place where users can purchase it. Ridebrain is, by the company itself, described as:

A marketplace for the worlds leading brands when its comes to equipment and style for riders. (Ridebrain, 2020)

An all in one platform where skiers and snowboarders can communicate in maximum ways. (Ridebrain, Google Play Store, 2020)

According to the founder, Jens Mathiasson, the startup has set a goal to be the world's main skiing and snowboard community and future marketplace for all ski/s-nowboard -related gear. Regardless of wanting inspiration for a upcoming ski-movie or looking to purchase new gear Ridebrain should be the first place that comes into peoples mind. The position to be the leading global ski community online is open. However, uncertainties remain regarding how to successfully build such a vertical social commerce platform.

1.1.2 Niche Social Communities

More than ever, people are looking for a sense of belonging where they can express, collaborate and learn. They want to connect with a specific type of social community. As a result, people are shifting from broad social platforms to niche networks (also referred to as vertical networks) where they can connect with specific, like-minded audiences. Instead of trying to be everything for everyone, niche social communities aim to serve only the people who want to be there.

The reason why general social networks such as Facebook are becoming less interesting is the growing interest in vertical networks. A vertical social network is a specifically targeted social network that connects people with very specific interests, hobbies and passions. Users on general social media platforms can easily get lost among all the irrelevant content. However, if they join a platform that is specifically focused on their main interest, they would find way more value and satisfaction in its purpose. With this trend being on the rise, we can expect vertical networks to grow even further. (Forbes, 2019)

As the landscape of social online communities are changing, there are great opportunities for new platforms to overtake a target audience and serve as the social go to destination of a specific niche. As a result, numerous apps and web platforms are popping up, some more successful than others.

1.1.3 Emergence of Social Commerce

The emergence and popularity of social media have not only changed the way we communicate but also the way we shop. Thanks to the 24/7 available shopping platforms, consumers today have the opportunity to indulge in consumption behaviour wherever they are. This evolution has opened opportunities for new business models for electronic commerce, often referred to as social commerce (Liang and Turban, 2011).

Nowadays, consumers literally have shopping platforms at the tip of their thumb from which they can scroll through providers' apps, save their favourite products, add them to wish lists, and indulge further in a buy-now-see-now shopping culture. Social commerce goes even further in that it involves a variety of consumer tools to socialise and share commercial-related information. (Boardman et al., 2019)

The emergence of social commerce raise a variety of new issues for e-commerce researchers that require the development of new theories. According to Liang and Turban (2011) social commerce could become one of the most challenging research arenas in the coming decade. While, the phenomenon is moving rapidly along the technology life cycle from *buzz* to *experimentation* and then to *adoption* and *maturity*, many hundreds of start-ups are now making use of social commerce.

1.2 Research Question

Together with the founders of Ridebrain two research questions have been defined with the purpose to contribute to both the research and business fields of social commerce (RQ1) and to Ridebrain themselves (RQ2). The aim of the thesis is to answer the following two questions:

RQ1: What are the prominent business tactics for building a vertical social commerce platform?

Based on the answers on research question 1, research question 2 will proceed as a case study on Ridebrain.

RQ2: What business tactics are recommended for Ridebrain, in order to succeed as a social commerce platform within the the ski- and snowboard community?

1.3 Purpose

The purpose of this thesis is to identify, describe and analyze the prominent business tactics for building a social commerce platform within a specific niche. The gained insights are utilized to form a recommended strategy for start-ups such as Ridebrain.

1.4 Strategy and Business Tactics

Strategy and business tactics are two frequently used terms throughout the report. In order to avoid confusion the terms are hereby defined as follows:

The strategy gives the path needed towards achieving an organization's long-term goals. It can be defined as the combination of all the decisions taken and actions performed by the business to accomplish high-level business goals. In the context of this report, "strategy" refers to the long term business goal of becoming a competitive social commerce platform.

Business tactics are more concrete and detailed in comparison to a strategy and often oriented toward smaller steps and a shorter time frame compared to a strategy. The many business tactics of an organisation do together constitutes a path to reaching the business long term business goals, i.e. a strategy.

An organisation sets a strategy, e.g. becoming a competitive social commerce platform and thereafter identifies more detailed/concrete business tactics that works in line/towards the set strategy.

1.5 Disposition

Chapter 2 - Methodology

This chapter presents a thorough description of the work process. Different methods and approaches to conduct a thesis are introduced, and the chosen method is motivated with the purpose of the research in mind. Furthermore, the credibility of the research is discussed.

Chapter 3 - Theoretical Background

The definition of social commerce is discussed and the social commerce context is developed after having presented the components constituting it; social media and e-commerce. Furthermore, a theoretical view of networks is provided, covering areas such as network effects, networks structure and a networks value.

Chapter 4 - Network Structure of Vertical Social Commerce Platforms

The theoretical areas covered by the thesis (chapter 3) are put into context as the network structure of a social commerce platform is developed and a number of strategic implications are discussed.

Chapter 5 - Business Tactics and Framework

Important prerequisites for building up a social commerce platform are presented. Based on these, prominent business tactics are identified. The result is eight business tactics that are based on the theoretical background and further literature review, interviews and the mini case studies. The business tactics are compiled into a framework.

Chapter 6 - Application of Framework: Ridebrain

The business tactics and framework is applied to the case organisation Ridebrain. First, an introduction to Ridebrain is provided. Thereafter, the framework is applied and weaknesses in Ridebrain's current strategy are brought to light. An alternative strategy, with respect to company limitations and the identified weaknesses, is recommended.

Chapter 7 - Conclusion and Final Remarks

The master thesis's conclusion and final remarks are formulated. It involves a summarized formulation of answers to the research questions, critical review, contributions and proposal for future research. $\mathbf{2}$

Methodology

This chapter presents a thorough description of the work process. Different methods and approaches to conduct a research thesis are introduced, and the chosen method is motivated with the research purpose in mind. Furthermore, the credibility of the research is discussed.

2.1 Research Purpose

The purpose of any research can be put into one of the following four categories; exploratory, descriptive, explanatory, or problem solving (Höst et al., 2006). What differentiates these categories is what the researcher aims to achieve by performing the research. Research with an exploratory approach aims to deeply understand an unknown phenomenon, and to contribute with new insights related to that research field. The approach is suitable when investigating problems that are less "well-explored". A descriptive study aims to describe how something works or is performed while an explanatory study aims to map out cause and effect between variables. Lastly, a problem solving approach, most commonly used in engineering studies, is used to solve a predefined problem.

With the aforementioned research purpose in mind; "Identify, describe and analyze the prominent business tactics for building a social commerce platform within a specific niche", this research can be classified as being descriptive and explanatory. The descriptive part aims to give a fundamental understanding of what the concepts and building blocks of social commerce platforms are and and how they work. The purpose of the explanatory part is to map out cause and effect in connection to business tactics for building a social commerce platform. In addition, the answer to **RQ2** is answered in a prescriptive way.

2.2 Research Strategy

2.2.1 Research Approach

Quantitative or Qualitative Research Approach

Most research can be put into one of the following two categories: quantitative or qualitative research.

Quantitative research uses numerical data as the unit of analysis and uses mathematics and statistical analysis to test hypotheses and study variables (Denscombe, 2017). The extent to which data can be processed, generate insight and, at the same time, be statistically reliable depend on its quality as well as quantity. Therefore, a quantitative research is highly reliant on the quality of the data in order to be credible. The qualitative approach uses non-numerical data such as words or images as the unit of analysis. Compared to a qualitative research which often only focus on a few variables at a time, a quantitative research can incorporate multiple variables and their interrelations, in a more holistic analysis (Creswell and Creswell, 2017).

For the purpose of this thesis, a qualitative research approach was selected. This approach enables a flexible and iterative process (see section 2.2.2) for formulating research questions as well as collecting and analysing data (Denscombe, 2017). A qualitative research approach also allows for open ended questions during expert interviews (2.4.3) and a holistic perspective in the analysis.

Inductive, Deductive, and Abductive Research

The research approach follows an abductive logical reasoning, which is a combination of inductive and deductive reasoning. The inductive method implies that a generalised rule is derived from an empirical analysis of a set of data or case observation. A deductive approach however, creates a hypothesised rule based on theory. In order to validate/reject the hypothesis, the rule is applied to specific cases which either demonstrates the rule or falsifies it (Timmermans and Tavory, 2012). For both the inductive and deductive approach to work as intended the researchers are assumed to have quite a lot of knowledge about the field to be studied. When this is not the case, an abductive approach is preferable.

In contrast of only going one or the other way between theory and data, the abductive method allow researchers to move back and forth between the two earlier mentioned approaches. (Saunders et al., 2015). This in turn creates a work process of a more iterative/dynamic nature by i.e. letting the researchers modify the research questions during the process of acquiring more knowledge, while conducting the research.

This study aims to identify commonalities regarding business tactics, factors and their relationships. Theories regarding this matter emerged from a foundation of existing theory. Based on data (case observations and interviews) new or developed theories on a specific subject were formulated and thereafter applied in the relevant case of Ridebrain. The desired final framework type was not formulated in the beginning but developed as the iterative research proceeded. Hence, the abductive approach was most useful for the research.



2.2.2 Work Process

Figure 2.1: An illustration of the iterative work process (Created by the authors)

The work process (see Figure 2.1), describes the procedures and activities necessary to conduct the research and achieve its goals. In an initial phase it can aid the researchers by visualizing how the research is going to be conducted. By illustrating some of the central activities, their inputs, outputs and desired goals it can later on be used as guidance during the research process.

The work process for conducting the research thesis is split up into three phases; the Design Phase, the Data Collection & Analysis Phase and the Application of Framework Phase. Each phase involves central activities and desired outcomes. Due to the research approach being of qualitative and abductive nature, an iterative work process approach is appropriate (illustrated by the blue arrows in Figure 2.1) (Hutter et al., 2011) as it allowed the researchers to go back to the design phase to re-design the research question based on newly obtained insights from the data collection phase as well as iterate between data collection and analysis when necessary.

Design Phase

The first phase is the Design Phase in which the projected was initiated. The main purpose of this phase was to define a research question and a strategy/method for conducting the study. Additionally, part of the design phase was also to align all the stakeholders, such as Ridebrain (the case organisation) as well as our supervisor on the research scope and potential outcomes. Once the research questions and design was agreed upon the second phase could commence.

Data Collection & Analysis Phase

The data collection aimed to gather information on variables of interest. Gained knowledge, mainly from the literature review and the conducted interviews, was used for re-designing the research questions making sure they were adequate for the main purpose of the thesis. The literature review conducted during the Data Collection Phase led to an extensive understanding of the theoretical background. The analysis which led to the identified business tactics as well as the created framework was based on the information gathered during the literature review, interviews and the mini case studies. For details on how the data was collected see section 2.4.

Application of Framework Phase

During the last phase the designed framework was applied on the case organisation Ridebrain. Based on the conclusions drawn from the analysis a recommendation, regarding how Ridebrain should proceed with building their social commerce platform, was created.

2.3 Research Design

To establish answers to the thesis' research question the concept of a vertical social commerce platform was dissected to analyse it's internal parts and details. As it is a phenomenon which originates from e-commerce and social networks and involves further complexity in terms of platform and network structure, the suitable research strategy was designed to treat these key stones as individual entities. By firstly zooming in on them separately a more targeted deep-dive into each corresponding research field was performed. This was followed by case observations and interviews putting the insights and theories in a practical context, where the areas overlap. Finally, a synthesised result was formulated to answer the research questions in regards to the phenomenon as a whole.

There are substantial research within the different fields of social media networks, platform strategies etc. However, research treating platforms considered being both a vertical social network as well as a two-sided e-commerce platform are rather scarce. The identified research gap opens up for the study to contribute within the social commerce research field.

2.4 Data Collection

2.4.1 Data Collection Methodology

To increase the research validity, the data collection was conducted using a triangulation approach. Data triangulation is a collection method based on multiple sources of data providing information on the same topi. The use of the approach aims to increase the level of knowledge about the topic, strengthen the researcher's standpoint from various aspects and to capture different perspectives of the investigated phenomenon. This study used a triangulation approach with three sources of data: published research (literature review), industry experts (interviews) and mini case studies (observations) of platforms similar to Ridebrain.

2.4.2 Literature Review

The literature review involved collecting, evaluating and analyzing published research related to the topic of the thesis. It was conducted in order to find relevant literature, to familiarise with the subject of study and to get an overview of current knowledge, allowing the researchers to identify relevant theories, methods, and gaps in existing research. Apart from providing understandings and background knowledge, the information collected during the literature review was used for setting an aim and theme to interviews and the case studies. Due to the work process being of iterative nature (2.2.2) the data collected during the interviews and mini case studies yielding new insights was iterated back as input for finding additional relevant published research.

The sources used in the literature review were found using well-known and established databases. The two main sources for theoretical data were;

- **LUBsearch** the search engine for academic articles, journals, PhD theses, and more, provided by Lund University.
- **Google Scholar** the search engine for academic articles, journals, PhD theses, and more, provided by Google.

The authors used the following keywords to find articles and other literature sources: "social commerce framework", "definition of social commerce", "social media and e-commerce", "vertical social networks", "general social networks", "e-commerce", "ewom", "network structure", "network effects", "platform strategy", "multi-sided platform design"

In addition to academic literature, non-peer-reviewed literature such as reports from consulting firms as well as website sources were used for gathering background information on the topic.

Author	Title
Afuah, 2013	Are Network Effects Really All About Size? The role of Structure And Conduct
Curty & Zhang, 2012	Social commerce: Looking back and forward
Cushman, 2010	Reed's Law and How Multiple Identities Make the Long Tail Just That Little Bit Longer
Evans and Schmalensee, 2010	Failure to Launch: Critical Mass in Platform Businesses
Han and Trimi, 2017	Social Commerce Design: A Framework and Application
Kietzmann, Hermkens, Mc- Carthy and Silvestre, 2011	Social media? Get serious! Understanding the functional building blocks of social media
Liang and Turban, 2011	Introduction to the Special Issue Social Commerce: A Research Framework for Social Commerce
Lin, Li and Wang, 2017	Social commerce research: Definition, research themes and the trends
Mendelson and Shen, 2019	Network Effects in Social Marketplaces: The Case of Kiva
Metcalfe, 2013	Metcalfe's Law after 40 Years of Ethernet
Obar and Wildman, 2015	Social Media Definition and the Governance Chal- lenge: An Introduction to the Special Issue
Odlyzko and Tilly, 2005	A refutation of Metcalfe's Law and a better esti- mate for the value of networks and network inter- connections
Sparrowe, Liden, Wayne, and Kraimer, 2001	Social Networks and the Performance of Individuals and Groups
Stummer, Kundisch, and Decker, 2018	Platform Launch Strategies
Teubner, 2018	Journal of Systems and Information Technology
Timmermans and Tavory, 2012	Theory Construction in Qualitative Research From Grounded Theory to Abductive Analysis

$Table \ {\it 2.1:} \ List \ of \ papers \ used \ in \ the \ literature \ study$

2.4.3 Interviews

There are three types of interview approaches; structured, semi-structured, and unstructured interviews. The unstructured interview type is characterised by having open questions and each interview does not need to consist of the same questions asked in the same order. Instead the questions can differ depending on the specific interview's focus or the interviewee's area of expertise (Höst et al., 2006). In addition the unstructured interviews are informal and award the interviewee the opportunity to freely elaborate on themes or aspects. Due to the qualitative research approach of this study unstructured interviews were chosen to be the most suitable. Prior to each interview a interview guide was conducted based on the interviewees role and expertise. the interviews were thus of different focus and involved different questions. As the interviews were meant to be unstructured, the guides were used as a basis from which follow-up questions were formulated as the interview was performed and new areas of interest were brought to attention.

The interviewees can be divided into three categories:

- **Industry experts** Consists of interviewees who is or has been in a context of relevance for the subject being studied. The interviewees were chosen with different backgrounds in order to shine light on the research questions from different perspectives and thus includes an assistant professor as well as an investment manager, etc.
- Mini case study employees In order to gather detailed and insightful information about strategies performed by the companies of the mini case study (see 2.4.4), employees of some of these companies were interviewed, when possible.
- **Ridebrain employeees** Multiple employees of Ridebrain were intervieewed in order to understand the fundamentals of the organistion, business model and value propositions etc..

	Table 2.2: List of interviewees
Interviewee	Role
Marcus Lewold	Head of Candy Crusch Franchise and Studios
Jonas Colliander	Assistant professor within marketing and social media, Stockholm School of Economics
Theis Sondergaard	CPO and co-founder, Vivino
Niklas Strandanäs	Co-founder and investor relations, Ridebrain
Alexander Ljung	CCO, Ridebrain
Jens Mathiasson	Co-founder and CEO, Ridebrain
Erik Lerander	Head of development, Ridebrain
Karin Edström	Investment Manager, Almi Invest
Miles Scherrer	Founder of Bookself and Plugd

2.4.4 Mini Case Studies

To understand how existing companies within the social commerce context have built their platforms and businesses, mini case studies have been conducted. Common business tactics were identified and characteristic parallels to theories from the literature and interviews were made. The mini case studies includes organisations that are similar to Ridebrain in various aspects. Some are similar in regards to their vertical offering, others in terms of platforms structure or social commerce characteristics. Taking a slightly broader stand and involving different types of social platforms decrease the risk of missing an important or interesting perspective.

The selection of companies to study was conducted using a funnel approach. The first selection of case-objects was done through an extensive internet search for platforms falling under the social commerce definition, resulting in 32 platforms. The platforms were then mapped out in the "social commerce context" (as seen in Section 3.2.2). Platforms being positioned in the far ends of the x-axis (platforms

that are either mainly a social network or an e-commerce site) were removed due to their network structure not being representative to the one of a social commerce platform. Out of the 20 platforms left, 9 were picked out as case-objects due to their similarities to Ridebrain.

After having conducted the literature review the authors listed questions they wanted to have answered from the perspective of each mini case company. The questions were many and included topics such as; how the company overcame the chicken and egg problem, if they build the social network or marketplace first, what their most prominent roadblocks were and how they overcame these, etc. Information about the 9 organisations in the mini case studies was mainly gathered through non-peerreviewed literature such as reports as well as from website sources. Additionally, if the answers to the listed questions weren't found this way, data was collected by conducting interviews with employees working for the organisations (see 2.4.3).

The mini case studies was done in close collaboration between the two authors. This was done in order to increase objectivity by reducing the risk that the collected data was interpreted in a biased way by one of the authors.

Company	Description
Bookself	A modern reading platform offering a social and interactive reading experience, search engine and collection saving of books
Fishbrain	An online mobile logging, photo-sharing and social net- working service for sport fishing as well as a marketplace.
Plugd	A mobile platform for bite-sized audio clips
Ridely	An app for planning, logging and sharing riding activities within the niche riding community.
Strava	A social-fitness network, primarily for tracking and sharing cycling and running exercises.
Tonsser	Social network for football players.
Trail forks	An app for locating mountain bike spots as well as for logging and sharing rides.
Vertical Life	An app to aid sports climbers to find spots and share their climbing activities.
Vivino	An online wine marketplace and wine app, powered by a community of millions of wine enthusiasts.

Table 2.3: List of companies included in the mini case study Description

2.5 Data Analysis

Firstly, when having conducted the literature review, the authors identified areas related to the subject that were deemed relevant to delve deeper into. One of the areas considered being of high relevance was the one of network structure. Therefore the gathered data was analysed and synthesised for the authors to create their figure of the network structure of the platform being studied.

Further, the areas considered relevant set the direction for the future data collection. For example, it helped the authors to understand how they should select the platforms being studied in the mini case studies as well as highlighting topics to be brought up during the interviews.

The literature review also gave the authors the 5 "prerequisites" for building a social commerce platform. The business tactics brought to light during the mini case studies as well as during the interviews were grouped under these 5 "prerequisites". This was done by marking important statements in the data and connecting them to one or several "prerequisites". By grouping the coded text, patterns in opinions and reasoning about certain keywords or concepts were identified, either in certain subsets or the total sample. Based on these observed patterns, new theories were formed about how to overcome these "prerequisites".

2.6 Research Credibility

Credibility is to which extent a research is believable and appropriate. In order to increase the credibility of this study, its validity, reliability, representativeness and objectivity have been considered.

2.6.1 Validity

Validity means that the findings of the research truly represent the phenomenon that is claimed to be measured. In order to increase the validity of this study a triangulation approach was used which implies multiple methods to collect data on the same topic. When using such an approach, validity is increased when several references indicate the same thing. Data was collected from the following types of sources; published research (literature review), industry experts (interviews) and through studying platforms similar to Ridebrain, around which the thesis revolves (mini case studies).

2.6.2 Reliability

Reliability is how trustworthy the data collection and analysis are with respect to random variations (Höst et al., 2006). A study with high reliability should give the same results if performed using the same method by someone else. Due to the qualitative nature of the study, speaking with diverse interviewees was the primary ways of increasing reliability. However, the reliability of the study could have been increased further by having access to a larger selection of interviewees. As a consequence of the COVID-19 pandemic, some interviews being scheduled couldn't take place.

2.6.3 Representativeness

The representativeness of a study is the degree of which results represent the whole population, which relies on the data source or sample (Höst et al., 2006). To make the results usable to other platforms other than Ridebrain a general framework based on the answer to the first research question, which does not revolve around Ridebrain, was developed. Additionally, in order not to be colored by the specific situation of Ridebrain, the interviews and data gathering regarding Ridebrain was performed subsequently to the additional data collection. The representativeness of the framework will be be further discussed in section 7.2.

2.6.4 Objectivity

The objectivity of a study is to what degree the research can produce findings that are unbiased by the researcher (Denscombe, 2017). The main stakeholders in this study are the authors, the Faculty of Engineering of Lund University, and the case organisation Ridebrain. The objectivity of the study could potentially be damaged by financial incentives or conflicts of interest. However, none of the authors have any financial incentives for conducting this study, and there have been no conflicts of interest between the authors, Lund University and Ridebrain. In qualitative data collection, such as interviews, the interpretation of data can affect the results and thereby the objectivity of the study. In general, the authors strove towards objectivity by, as far as possible, attend all interviews in order to be able to discuss interpretations of different situations.

Theoretical Background

In this chapter, the definition of social commerce is discussed and the social commerce context is developed after having presented the components constituting it; social media and e-commerce. Furthermore, a theoretical view of networks is provided, covering areas such as network effects, networks structure and a networks value.

3.1 Social Media

The Internet and the World Wide Web was initially used for the sole purpose of content consumption. The consumers read it, they watched it, and they used the consumed content as a basis on which purchase-decision were made (Kietzmann et al., 2011). The Internet then evolved into a platform used to partly facilitate simple social interaction. However, the evolutionary leap forward in the social component of web use, with which we are familiar with today, came during the first decade of the new millennium. During this time there was an emergence and rapid diffusion of Web 2.0 functionalities. This, in combination with falling costs for online data storage opened up for new possibilities for online interaction (Obar and Wildman, 2015). Consumers were now able to utilize platforms, such as content sharing sites, blogs, and wikis, to create, modify, share, and discuss internet content. This, alongside the diverse set of opportunities for linking these platforms together represents the social media phenomenon.

3.1.1 General Social Media Platforms

There cannot be a discussion about social media without mentioning Facebook which is the largest social media platform today. The platform has, measured in number of active users, had a rapid growth since its launch in 2004. In 2008, there were 100 million active users on Facebook. A couple of years later Facebook was the first platform to ever reach over 1 billion active users. Fast-forward a couple of years, to 2018, and Facebook could find 2.19 billion active users on their platform (Leadem, 2018). Even though Facebook is the biggest social media platform in terms of active users there are other examples of global social platforms such as Youtube, Twitter and Instagram having gone through a similar process of ample growth. However, such rapid growth comes with its own set of challenges. One could argue that these platforms are simply to big and broad for the companies behind them to control the content within. Everything from fake news to data breaches to oversaturated, unorganized content-pages jammed with clickbait have made people look for alternatives to the major social media platforms (Leadem, 2018).

A report released by eMarketer in 2019 states that engagement with Facebook is set to decline or remain flat for the foreseeable future. The report also highlights the fact that the daily time spent on Facebook declined by 7% among U.S. users in 2018 compared to the daily time spent in 2017 (eMarketer Editors, 2019).

With this said, their are two options; either the total number of social media users is declining or the users leaving Facebook are spending their time on other social media platforms. Current research is pointing towards the latter rather than the former is true as people tend to be using social media more and more. In 2018, 2.78 billion internet users used a social network at least once per month (von Abrams, 2019). This figure is expected to grow by 130 million people per year on average which means that 3.43 billion people are expected to use a social network at least once per month by 2023.

The alternatives to the general social media platforms, to which users seem to be moving to, are social media platforms targeting an audience within a specific niche. Such a platform is commonly referred to as a vertical social media platform in contrast to the general social media platforms such as Facebook, Twitter, etc.

3.1.2 Vertical Social Media Platforms

Social media users are moving increasingly towards platforms that help eliminate the noise and posts that aren't relevant to them. Vertical social media platforms provide an ideal space for people to unite and interact based on common interests. Instead of passively scrolling through irrelevant content on a general feed, users can participate in conversations related to their specific interests. By joining vertical social networks, users get to be surrounded by like-minded individuals, paving way for new connections tending to be stronger than the ones gained on general social media platforms (Forbes, 2019).

It's not only social media consumers who have found the vertical platforms to be of great use. The possibility to form strong relationships presents great opportunities for businesses who wants to connect with a highly target and engaged community. The vertical social media platforms opens up for businesses to get to know their target audiences, how they think and act and build closer, more intimate relationships with them. With this said, vertical social networks provide many advantages over general, broader platforms. Many of the major general social media platforms are introducing features aiming to become "less general". Facebook is putting more effort and resources towards their group forming features as communities are getting more engagement from their users. Additionally, many other general social media platforms are becoming more vertical by letting their users sort the content using tags, geographic location etc.

3.2 Social Commerce

This section explores the roots of social commerce, also referred to as s-commerce, and provides an overview of what social commerce is, per definition but also as a business concept.

Social commerce was initially acknowledged by Yahoo! in 2005 when they created features on their online platform which allowed consumers to interact by sharing and commenting on products. Since then, both the concept and practice of social commerce have continued to constantly evolve alongside the evolution of e-commerce and the widespread use of social media. (Curty and Zhang, 2011) Meanwhile websites, like Yahoo, have been adding social features to their platforms, Social networking platforms like Instagram and Facebook are integrating commercial features and activities to their platforms. This is changing the landscape of traditional electronic commerce. Consequentially, the line between social and commercial online activities becomes blurry, as consumers today are able to connect where they usually buy but also able to buy where they usually connect. Since s-commerce is a relatively new phenomenon which involves multiple disciplines and has been looked at from different perspectives there is not one standard definition to describe the term(Han and Trimi, 2017). Instead, it has resulted in a variety of definitions which will be explored in the section bellow.

3.2.1 Definition of Social Commerce

A general take is that social commerce is a new business model of e-commerce which involves using Web 2.0 technologies and social media to support online interactions and user contributions to assist in the acquisition of products and services (Liang and Turban; Lin et al.; Han and Trimi, 2011; 2017; 2017). S-commerce has become a popular consumer tool for consumers to socialize and share commercial-related information (Lin et al., 2017) hence many definitions reflect community-level participation and social science impacts in e-commerce (Liang and Turban, 2011). The IBM definition states that s-commerce is the concept of word of mouth applied to e-commerce (Dennison et al., 2009). Dennison further describes the term as the marriage of a retailer's products and the interaction of shoppers with content. Han and Trimi (2017) compiles definitions from 21 different studies and articles on the subject. The definitions are grouped into different streams which vary in complexity. Some definitions simply described s-commerce as a subset of e-commerce involving social media while some take a wider stand and view s-commerce as a platform combining web 2.0 and social media not only for commerce/purchases but to enable and engage users in the entire life cycle of a product/service.

To summarize, s-commerce has three major themes; social media technologies, community interactions and commercial activities.(Liang and Turban, 2011). In this research we view these three themes as fundamental elements in order for a website or application to be referred to as s-commerce.

3.2.2 Positioning of platforms within the Social Commerce context

As described above social commerce can be classified into different configurations: social networking platforms can add commercial features to allow for advertisements and transactions (e.g. Facebook, Instagram). Secondly, e-commerce websites/platforms can add social networking capabilities to take advantage of the power of social networking (e.g. Amazon, e-Bay) (Lin et al., 2017). This creates wide discrepancies between the platforms found under the social commerce umbrella. Even though both Facebook and Amazon can be classified as social commerce platforms they are vastly different due to their diverse positioning on a scale of being a social network vs being an e-commerce site. While Facebook is a social network which has enabled the possibility for its users to make purchases through the platform, Amazon is mainly an e-commerce platform on which its users can leave product reviews and ratings with limited social networking capabilities. Platforms like Vivino, Fishbrain and 21Buttons are positioned somewhere in between due to them consisting of both a full scale social network as well as an e-commerce site. What separates Vivino and Fishbrain from 21Buttons are their level of verticality which is another factor distinguishing the social commerce platforms from one another.

Take Chain Reaction Cycles for example. The platform is, just like Amazon, mainly an online retailer which has integrated a limited amount of social networking capabilities. In other words they are similarly positioned on the scale of being a social network vs being an e-commerce site. However, what distinguishes them is that Chain Reaction Cycles has specified in selling bike-related goods while one could find almost anything for sale on Amazon. In other words, Chain Reaction Cycles is a social commerce platform which has a higher level of verticality compared to Amazon.

Based on these two factors of differentiation, social commerce platforms can be mapped out in what we'll refer to as the social commerce context, seen in Figure 3.1. Later on, such a mapping will be shown useful due to the strategic implications a specific position of a platform has.



Figure 3.1: Mapping of companies within the social commerce context (Created by the authors)

3.2.3 The benefits of Social Commerce

Many of social commerce benefits can be derived from e-commerce as it's sub category of the latter. The main identified benefits with e-commerce, and thereby scommerce, includes: convenience (flexibility of time and space) that online shopping offers, a broader selection of goods, lower prices and a greater access to information (Jozanovic, 2016). For the business selling goods online the advantages are many e.g. lower costs and therefore increased margins, data gathering yielding customer insights, 24/7 availability etc. In the following sections emphasize will be put on the benefits being unique for social commerce.

While there are far more known benefits, there are still some less ideal aspects associated with e-commerce and the ability to make purchases online. The negative effects derived from these drawbacks can somewhat be mitigated by adding the word "social" to "commerce". For example, what is said to be one of the most common causes for not shopping online is the customers lack of trust (Gustavsson and Johansson, 2006). As elaborated on later, the ability to increase trust is one of the main benefits associated with social commerce.

The benefits associated with social commerce is best manifested explaining how the customer journey can be affected yielding positive impact. The online customer journey can be divided into the following five steps (Balter, 2018):

- 1. Awareness When the potential customer learns about the brand/product for the first time.
- 2. **Consideration** The potential customer weights pros and cons against other offers

- 3. **Conversion** The potential customer makes a purchase and becomes a customer
- 4. Retention The customer might come back for additional purchases
- 5. Advocacy The most engaged customers can become brand ambassadors

Each of the five steps above do of course include multiple actions. Without deepdiving into each action within the customer journey we explore how social commerce have a positive impact on the customer journey.

Streamlining the customer journey

Customer journeys that have unnecessary steps in the conversion funnel faces greater risk of losing the potential customer (Big Commerce, 2019). The shorter the purchase journey is, the more likely the customer is to go through with the purchase. Therefore, streamlining the purchase journey is crucial for decreasing friction within the journey. This will in turn increase the chances that customers moving through the five steps. Social commerce has proven to be a great tool to do this. In traditional e-commerce the customer is likely to visit multiple sites and platforms to pursue the five steps listed above. For instance, a customer become aware of a product on a micro-blog, read about its pros and cons on a separate forum while considering a purchase. After having made a decision to buy the product the consumer browse around differnt e-commerce sites to find the "best" place to purchase the product. With the use of social commerce all these actions can be made on one platform. Providing the potential customer with a buy button at the place and exact moment when he or she decides to make the purchase will drastically decrease the risk of loosing the customer compared to having him or her looking for a place to make the purchase. The same goes for the rest of the customer journey. Lowering the barriers, making it easier for customers to advocate for a product, which social commerce does, drastically increase the chances that they will.

Reduces the asymmetry of information while promoting trust

According to a survey conducted by the global research company Ipsos, involving over 24 thousand respondents form 24 countries, 49% of the respondents who never shop online gave lack of trust as the reason (Centre for International Governance Innovation IPSO, 2017). Increasing the customers trust for the brand is a great tool for boosting online sales. This can be efficiently done with the help of social commerce.

Out of all the promotional choices on the table, none build trust for brands quite like good old-fashioned, word-of-mouth marketing (WOM) (Rival IQ, 2017)

The enabling of word-of-mouth through internet-based technology (eWOM) is one of the many advantages with social commerce. Consumers tend to trust the opinion of a real person more than they trust advertising, news by the traditional media or information on a corporate website. eWOM has a large effect on consumer buying decisions. According to a survey conducted in 2014, 88% of the respondents say they

trust online reviews as much as personal recommendations (BrightLocal, 2014).

Enabling customers to share their experience regarding the products for sale does not only boost the trust of the brand. This platform functionality does also aid the customer during the consideration-phase, when it seeks to reduce the asymmetry of information standing in the way for a transaction to go through. According to a 2018 study by Gfk, the number of US internet users who feel that social networks have become as important as other information sources in making purchase decisions rose from 27% to 36% between 2015 and 2018 (eMarketer, 2018).

3.3 Network Effects

Firms in many industries— from banking to telecommunications to social networks —depend on their offering of products that exhibit network effects (Afuah, 2013). A network effect occurs when a product or service becomes more valuable to its users when more people use it (Odlyzko and Tilly; Mendelson and Shen; Afuah, 2005; 2019; 2013) The classic example is the telephone network. The more people who own a telephone, the more are the number of potential calls and the more valuable is the telephone (and network) to each owner. Online networks works in the same way, in fact for many of the big platforms such as Facebook and Youtube it is these network effects that have created exponential growth. To understand network effects and how network value can be leveraged, it's important to recognize the structure of networks.

3.3.1 Understanding Network Structure

A network is, in mathematical notation, described as a set of nodes connected by links, which all together constitutes what is called a graph. Even though it can be simply described, networks in practice can be very complex. The complexity depends on a networks properties such as the number of members (nodes), the relationships (links) among them and their characteristics i.e. whether the nodes are homogeneous or heterogeneous (Hariharan; Afuah, 2016; 2013).

The homogeneous one-sided network

A homogeneous network is a network composed of similar types of nodes, as seen in Figure 3.2a. An example of such a network is, again, the telephone network which consist of one distinct user category; telephone owners interested in placing a call. Markets that derive most of their value from a single class of users (homogeneous network) are what economists would call one-sided markets (Gallaugher, 2012). The value that is derived in a one-sided market is often a result of direct network effects. The direct network effects, also referred to as same-side network effects, is the direct positive relationship between the size of the installed base and the value to the users, within that installed base. (Mendelson and Shen, 2019).

A more modern example than the one of the telephone network is social media networks like Instagram which derives most of its value from users sharing content within the network. The more users that join the network and post content on the platform, the more content can be consumed by other users, which increases the utility that users have from the network. To claim that Instagram's network structure resembles the simple structure of a general communication network, would be an easy way out. In fact, online social networks have increasingly complex networks and business models that management scholars and practicing managers alike are struggling to understand (Afuah, 2013). However, breaking down the complexity could benefit the understanding of social network theory which in turn can help when exploring strategy questions.

Figure 3.2: Illustrations of Network Structures (Created by the authors)



The heterogeneous two-sided network

In contrary to a homogeneous network, a heterogeneous network is composed of different types of nodes (Hariharan, 2016), i.e. consumers and merchants. In such a network both categories of participants are needed to deliver value for the network to work (Gallaugher, 2012). Often, the two types of nodes form a bipartite (two-sided) network structure, as seen in Figure 3.2b. Generally described, indirect network effects arise when (1) the network is based on two complementary sides, say A and B; (2) there is a positive relationship between the installed base of B and the value to users of A, and (3) there is a corresponding positive relationship between the installed base of A and the value to users of B (Mendelson and Shen, 2019). This results in a positive feedback loop between the installed bases of A and B: an increase in the installed base of A makes the network more attractive to the B's, and as more B's join the network, it becomes more attractive to the A's. This means that more A's attract yet more A's indirectly through the B's—hence the term indirect.

An example of a heterogeneous network is Airbnb with two complementary components/distinct categories of participants; on one side of the network there's guests and on the other side there's hosts (1). More hosts attract more guests and more guests attract more hosts. More hosts implies more availability for guests (2) and more guests enable more business for hosts (3). A unique aspect of some peer-to-peer marketplaces like Airbnb is the overlap between supply (hosts) and demand (guests). In other words, guests can also become hosts and hosts can also become guests (h4 in Figure 3.3) (Hariharan, 2016) Thus, even though there exist two types of nodes, the network does not represent a strictly bipartite graph like Figure 3.2b. Figure 3.3 provides a schematic illustration of Airbnb's transaction network (Teubner, 2018).



Figure 3.3: A schematic illustration of Airbnb's transaction network (Teubner, 2018)

3.3.2 A Networks Value

The quantitative modeling of network effects is an issue that researchers have addressed for decades. As a result, various value laws regarding social networks have been conceived. While they're based on simplifying approaches, they help explain the complexity of social networks and determine the potential economic value of social network-based firms. An understanding of these laws not only help us asses the value more reliably but also provide guidance into how we might create such value.

Before we immerse into the laws of network theory, it's important to clarify that a network can be valuable from the consumers perspective as well as the perspective of firms. Going forward, we will use Afuah's explanation and refer to a network as being valuable to a firm (whether the firm is a network provider or a network member. when the network contributes to the firm's value creation and/or capture, and therefor to the firms competitive advantage. It is valuable to a consumer when it contributes to satisfying the consumer's needs (Afuah, 2013).

To assess the value of a communication network in which users can freely interact with each other (i.e. phone services, e-mail or instant messaging) it has been widely accepted that Metcalfe's Law applies. Metcalfe argues that if a network is too small, its cost exceeds its value; but if a network gets large enough to achieve critical mass, then the sky's the limit(Metcalfe, 2013). The Law states that the systematic value (V) of a network is proportional to the square of the number of connected users (N). With N nodes each connecting to N - 1 other nodes, V would be proportional to the total number of possible connections, $N \times (N - 1)$. When dealing with rough approximations, $N \times (N - 1)$ grows like N^2 : $V \sim N^2$ (Metcalfe; Odlyzko and Tilly; Cushman, 2013; 2005; 2010), implying that once N grows to a certain size the value shoots exponentially. In its context; once a service or network attain sufficient size, the non-linear growth of Metcalfe's Law would kick in, and network effects would start to operate.

Further, Metcalfe's network theory explains why the growth of networks used for one-to-one communication follows the pattern it does. For example, if a consumer joins a N=4 network the number of possible connections changes from 3(3-1)=6 to

4(4-1)=12 and the added value to each network member and the network provider is proportional to 6. But if a consumer joins a N=8 network, the number of the added value is proportional to 16. With each additional network member, the provider of an N=8 network gets more 'new' value than the provider of an N=4. Thus, new users will almost always choose to join the larger network over the smaller, because they will reason it offers more value to them (Cushman, 2010). As a consequence to Metcalfe's law being focused on size, the normative advice given to firms in network industries have been that early in the life of a network (before it reaches its critical network size), all efforts in attempt to gain value should be devoted to growth.

3.3.3 Critical mass in a two-sided network

Creating value within two-sided networks is slightly more complex than it has been found to be for one-sided networks, due to value being derived from indirect network effects. In order to spark indirect network effects critical mass on both sides of the network must be reached. But in a two-sided network consumers won't join the network until they see value provided by producers, and producers would not create that value until they see an installed user base of consumers, implying that each side depends on the prior existence of the other side. This complex catch-22 scenario is common among multi-sided platforms and referred to as the chicken-andegg problem (Evans and Schmalensee, 2010)

The problem give rise to a two-dimensional critical mass constraint that must be satisfied. Platform businesses must offer appropriate incentives to ensure that they reach the critical user mass on both sides in order to create and capture value across the network.

3.3.4 Are network effects all about size?

Structure

Although Metcalfe's law is widely accepted there are many objectors being critical to the way it emphasize on size. The article "Are network effects all about size" by Allan Afuah (2013) brings up interesting perspectives regarding this matter. Afuah argues that network research that only focus on size may lead to wrong strategies (John Wiley and Sons, 2012). Referring back to our definition of a network and its properties we know that a networks structure is the number of members, the relationships among them and the relative characteristics of them both. In this construct, network size becomes one of several factors. Since size has proven to be an important value determinant it's not unreasonable to believe there are other factors too contribute to competitive advantages.

Anu Hariharan lists the *degree* of connections and the *directionality* of these connections as important properties of a network affecting its structure. ¹ (Hariharan, 2016). In the telecommunication network where members can freely interact all nodes have the same degree, proportional to the number of network participants,

 $^{^{1}}$ The degree measures the number of connections to a specific node. Directionality refers to whether the connections between two nodes are unidirectional or bidirectional i.e. if transactions can appear one way or both ways
N. But the assumption of free interactions across the entire network seldom holds for many of today more complex networks. Neither does the assumption that all connections are bidirectional. When Afuah compares sub networks of the same size but of different structures, he explores that despite that the networks have the same size, the value they create varies depending on the number of connections that the network consist of. Afuah therefore proposes that the more that each network member can transact with every other member, the more valuable the network is likely to be. His proposal moves the former focus, on size and number of nodes, to emphasize on volume of transactions, partly determined by degree and directionality.

If not all network members can connect and transact with every other member, each member's position in the network is likely to be different. Hence, members should have a different impact on how much value the they add to or captures from the network (Afuah, 2013). A more centrally located node, said to have a higher degree of centrality (Sparrowe et al., 2001), can create and/or capture more value from the network than a less centrally located one. Furthermore, the number and distribution of roles played by each actor in a network also influences the network's value. According to Afuah, the more roles that each network member plays, the more valuable, on average, the network is likely to be to each member and to the network provider (Afuah, 2013). If a node has more than one role, i.e. both a host and a guest as in the case of Airbnb, it's regarded as more critical. Identifying critical nodes in a network can be strategically smart in many regards e.g. to spread eWOM, increase conversion and find so called champion users to analyse.

A common opinion among critics and more recent research, is that Metcalfe's law is a significant overestimate (Odlyzko and Tilly, 2005). Odlyzko and Tilly claim that both Metcalfe's law fails in the assumption that all connections or all groups on the network are equally valuable. They state that in general, connections are not used with the same intensity. In fact, in large networks such as the Internet most connections are not used at all. In a social network for example, some members are more engaged, transact more often and adds more value to the network. Backed by several arguments, Odlyzko with colleagues, propose an alternate rule-of-thumb valuation of a general communication network. This rule suggest the value of a network of size N grows like N log(N), which is much slower than the quadratic and exponential growth of the two foregoing examples,??, explaining that interconnection in networks often require time and effort. This law diminishes size impact on network effects and propose that value can't only be derived from growth (Odlyzko and Tilly, 2005).

In summary, later research argue that the number of transactions is a more accurate determinant of value than the number of nodes. The volume of transactions is depended on the interconnections of a network and the intensity among these. Interconnections require effort and intensity rely on member engagement, two components that can't be derived by simply focusing on growth. Managers must therefore look beyond network size when setting the strategy for the networks early stage adoption and value creation.

Conduct

Beyond the structure of a network, the conduct of its members also has an impact on value creation. The conduct involves for example opportunistic behaviour, reputation and trust within the network. The greater the perception of trust in a network, the more valuable that network is likely to be to members and to the provider(s) (Afuah, 2013). But trust can be jeopardized if opportunistic behavior arise. Since network members are limited rational and unlikely to know, or to be able to obtain, all of the information they need for many transactions information asymmetry arise. This creates an opening for opportunistic behaviour. The more opportunistic behavior there is in a network, the less valuable, on average, is the network likely to be to members and the network provider(s).(Afuah, 2013) Since high levels of opportunism in a network can reduce the network's value to members, a primary goal should be to pursue activities that combat information asymmetry.

Different networks are designed for very different transactions. The importance of trust in a network is depending on the nature of the transactions for which a network is earmarked. It's reasonable to assume that trust is more important in connection to monetary transactions than in a network were transactions are pure communication.

3.3.5 Network effects importance during the technology life cycle

According to Mendelson and Shen (2019) network effects have major impacts on the deployment of platforms and in particular on online marketplaces. They go as far as viewing network effects as an inherent feature of online marketplaces. While there's a sufficient amount of research on the presence and impacts of network effects, there's few studies involving the perspective of a life cycle effect. During an analysis of data from Kiva, the world's largest online, peer-to-peer social lending marketplace, Mendelson and Shen (2019) immersed in this unexplored area of the field by investigating network effects influence during the development of Kiva's platform. While the traditional network effects literature would expect network effects to persist in both growth and maturity periods, Mendelson and Shen identified strong and positive network effects during Kiva's initial stage of growth, but as the platform matured the network effects essentially disappeared. The researchers suggest that early on, network effects are all-important, customer acquisition and speed are key success factors and the primary objective is to grow and achieve critical mass. But as a platform stabilizes it can be expected that other factors and tactical moves undertaken by the platform overtake the network effects as drivers of performance. In other words, while online marketplaces may need to grow early on with an emphasis on network effects (quantity), their long-term survival as they reach maturity requires a quality focus (Mendelson and Shen, 2019).

While Mendelson's and Shen's findings promote growth as a crucial initial strategic focus in early stage deployment of a platform, Afuah (2013) reason slightly different. Afuah argues that when a rational customer wants to buy a product that exhibits network effects, a customer will choose to join a product's network not only because of the expected value from the network effects but also because of the benefits from

the product itself. Early in the life of a product and its network, the network's size, N, is very small and the expected value, which is proportional to N2-N, is also very small. Thus, in this early stage, the dominant influencer of a customer's choice of network is likely to be the benefits from the product. The value the product delivers in itself is a stepping stone in gaining initial traction and moving towards the critical mass, from which network effects start to act. However, as N increases, N2 -N increases rapidly. Beyond the critical size, the value from network effects dominates since it is proportional to N2-N (Afuah, 2013).

To summarize, before reaching the critical mass, value derived from the product itself is all important in order to offer value to users and gain initial growth. By then having a strategic focus on growth critical mass can be reached implying an inflection point from which network effects become strong and dominate value creation. Once growth stabilize network effect's weaken and the strategic focus should therefor shift to other factors and quality drivers. 4

Network Structure of Vertical Social Commerce Platforms

The theoretical areas covered by the thesis (chapter 3) are put into context as the network structure of a social commerce platform is developed and a number of strategic implications are discussed.

Breaking down a complex network into its components could benefit the understanding of the network and how value is created, which in turn help when exploring suitable strategies and business tactics. This is particularly important when speaking of social commerce considering that it's a wide concept that covers many different types of platforms. Depending on the position in the social commerce context the platforms vary in network structure.

The different network variations and their relation to the positioning within the social commerce context will be described based on the network breakdown. Starting off, the sub networks that are considered to constitute a vertical social commerce platform are:

- A social network¹ A homogeneous one-sided network (3.3.1) of social interactions and personal relationships.
- A two-sided marketplace platform A heterogeneous two-sided network (3.3.1) of cross-sided commercial interactions and transactions.

Depending on where a company is positioned in 3.1 its network combination of these two sub networks can consist of more or less of either network. As most s-commerce platforms have started of as either a social network or an e-commerce and later on developed into a variation of social commerce, we see different networks within the s-commerce context of social commerce. The general rule is as follow: the network structure of a company's initial network affects the structure of the social commerce network that the company ends up having. Facebook for example, is primarily a social network with a relatively small marketplace sub network. Hence, given the

¹The fact that the social network is directed towards a niche target group (vertical) doesn't affect its network structure. Due to the analysis to follow being based on network structure this component will, for simplicity, be treated merely as a social network.

desired long-term network and business model it could be beneficial to start building one of the sub networks and from there evolve into a hybrid network over time. This is further investigated in section 5.4.2. However, the main take-away for now is that a company's position in the s-commerce context and it's coherent business model affects the network structure both short-term and long-term which in turn affect the development strategy.

Regardless of what the network combination might be, the generic description of a social commerce platform is a heterogeneous two-sided network where one side includes suppliers and the other side includes customers, that are also users in a vertical social network. It is therefore a constitution of the network types listed above where the social network is nested in the two-sided marketplace platform. A simplified example of the resulting hybrid network can be depicted in Figure 4.1.

As seen in 4.1 such a network includes three value propositions². In order to make strategic decisions increasing the value created for the network participants it is not only essential to define the value propositions but also crucial to understand how each value proposition is affected by the network structure. For example whether they are affected by direct or indirect network effects or if there is any inter-dependencies between them. The three value propositions and customer groups of a *vertical social commerce platform* are the following:

- Value Proposition 1, Community members The value created for the participants of the social network.
- Value Proposition 2, Customers The value created for the customers being part of the demand side of the two-sided market
- Value Proposition 3, Suppliers The value created for the suppliers being part of the supply side of the two-sided market

Value Proposition 1 is more or less dependent on direct network effects. In order to benefit from these network effects the platform provider must make sure to attain a critical mass of community members. However, as mentioned, size isn't necessarily the only factor contributing value creation. As an example, the type of links linking the participants together could play an important part. The platform provider needs to investigate what kind of connections are most valuable to its participants and thereby yielding the better value proposition. The connections could for example be designed in a way such that the members of the social network become friends (bidirectional link, like Facebook) or follow each other (unidirectional, like Twitter/Instagram).

Value proposition 2 and 3 are both affected by the indirect network effects that the two-sides generates. Simply put, an increased number of customers could improve value proposition 3 for the suppliers (as they can sell to a greater audience) attracting more suppliers. An increased number of suppliers could improve value proposition 2 for the demand (as there's an increased range of supply) attracting more demand. Both value propositions could be extended by the platform provider in order to

 $^{^{2}}$ It could of course include many more, but needs at least three in order to motivate its existence

become more unique or stronger.

Combining the two network types yielding a *vertical social commerce platform* generates inter-dependencies between the value propositions. The added complexity, if identified and understood correctly, can be strategically leveraged by the platform provider in order to boost the value propositions and create synergies among them. For instance, we know that eWOM plays a crucial part in the consideration phase of the customer journey (see section 3.2.3). As a member of the social network could take part of the eWOM he/she can make a better informed purchasing decision later on in the marketplace. Hence, the community enabled eWOM enhances value proposition 2.

Understanding the network complexity of the hybrid network can also benefit the user acquisition strategy. The social commerce network of figure 4.1 has three critical mass constraints; community members, consumers and suppliers. Understanding how these constraints overlap is of great importance. Compare any blue node with any yellow node in figure 4.1. The blue node, representing a community member, participate in the value creation within the social network. A vellow node, representing a community member who's also a consumer, participates in the value creation of both sub networks. For the platform provider a yellow node is therefore more valuable and the ultimate goal should be to convert as many blue (and orange) nodes to vellow nodes. When a community member is successfully converted to a customer he/she will also contribute value propositions 2 and 3 and is is also likely to be more engaged and loyal as he/she captures value from both sub networks. This is an important insight due to many reasons; the cost of converting members to both sub-networks could potentially be lower than the cost of acquiring new users. Furthermore it may be more effective as two critical mass constraints will be managed.

In addition to this, the degree of centrality a blue node has in the social network and orange node has in the two-sided network, is a factor that also matter when choosing which nodes to target for conversion. A successful conversion of a central node with many connections will yield widespread eWOM that may boost trust. This could potentially result in a positive conversion spiral generating other members of the social network to engage in commercial activities and vice versa.



Figure 4.1: Network structure of a social commerce platform (Created by the authors)

Business Tactics and Framework

Important prerequisites for building a social commerce platform are presented. Based on these, prominent business tactics are identified. The result is eight business tactics that are founded based on the theoretical background and further literature review, interviews and the mini case studies. The business tactics are compiled into a framework.

5.1 Fundaments for building a Social Commerce Platform

The hybrid social commerce network can simplified be divided into the two sub networks. In the upcoming analysis these sub networks will be treated separately by answering the two questions bellow. In the end, the insights will be summarized and supplemented to answer RQ1.

- 1. What are the prominent business tactics for building a **social network**?
- 2. What are the prominent business tactics for building a **two-sided market**place platform?

To answer the questions above, the corresponding processes *building a social network* and *building a two-sided marketplace platform* have been broken down into prerequisites. How well a company succeeds in fulfilling these prerequisites will determine whether they will become successful or not. Therefore, each prerequisite have become an area for deeper analysis which aims to determine the prominent business tactics underlying their success.



Figure 5.1: Prerequisites for building a social network (Created by the authors)



Figure 5.2: Prerequisites for building a two-sided marketplace platform (Created by the authors)

5.2 Social Network Platform

In order to find the prominent business tactics for building a social network platform, the business tactics for its three prerequisites are identified in this chapter. Together they constitute the prominent business tactics for building a social network platform.

5.2.1 Users must join the network

One of the first blocks for app developers to overcome in order to acquire a critical mass of users, is first of all getting the users to download the mobile app. Fishbrain and Vivino launched in 2010 and 2009 respectively, just a few years after Apple launched the App Store in 2008. Since then a lot has evolved, both regarding user behaviour as well as the app market in general.

The app market now compared to when we launched Vivino is extremely different. Back in 2009 when the app market was new we saw a massive boom of apps. Users' expectations were a lot lower and people had more patience when it comes to app performance. Today the market is much more established and consumers have higher expectations. (Sondergaard, 2020)

When Vivino launched their wine app there were already 600 other wine apps on the market and every week there were 4-5 new wine apps coming out. Over the years, Vivino has come out as one of the strongest competitors among the wine apps and today they rarely see new players entering their segment. This is not a unique case for Vivino and the wine app market but rather a pattern shared by the entire global

app economy. The mobile data and analytics platform *App Annie* contextualise this pattern among other market changes in the App Maturity Model (5.3). As we go through it's phases you'll find that it substantiate Sondergaard's perceived market change. Simply put, as the global app economy grows, individual markets will move through three different phases of maturity: *Experimentation, Expansion* and *Maturation*. During *Experimentation* users drive a surge in downloads as they discover and experiment with new apps in search of their favourites. After some time users start to understand the types of apps that are most useful to them and therefore search for new apps less often. In the *Expansion* phase, the downloads remain high but the curve's growth rate levels out. Instead the App Usage increases as people dive deeper into their preferred apps. Entering the *Maturation* phase the app download growth rate has stagnated, although its still of high volume. As app owners have found ways to monetize on their users and users willingness to transact on app platforms have matured, App Revenue increases in their preferred apps.



Figure 5.3: An app market's path to maturity (Created by the authors inspired Cheney and Thompson (Cheney and Thompson, 2018))

The App Maturity model can be applied to a segmented app market but also works to explain how the global app market has developed since its birth 12 years ago. Back in 2008 App Store offered a selection of 500 apps while in the first quarter of 2019, one could choose from over 1.8 million apps on the same platform (Clement, 2020). There has been, and still is, a great boom in app development. While thousands of apps are being added to the app stores every day, apps aren't being downloaded quite as often. In fact, a user downloads on average zero apps per month (Comscore, 2018). Some data analytic platforms question this number and argue that the number is closer to 1. But, regardless of what the exact number is, it's a low number considering the amount of apps being developed. What does this mean for new apps wanting to reach out to users? If a products value proposition isn't easy to communicate or easily perceived by the target group, it will be very challenging to stand out on the app store platforms. Not only because of the massive competition in supply, but also because the increasing amount of time spent on apps is concentrated to a selected number of apps, dominating the overwhelming majority of user attention share(Comscore, 2018). If users are going to turn their attention to something new, it must be very clear why they should, and to what purpose.

If you're a new player you really have to offer something unique. Something that delivers a very, very clear value which must be easy to communicate to your audience. (Lewold, 2020)

The fact that app consumers are more selective regarding which apps they use and aren't experimenting to the extent they used to makes it harder to break through on the app market. Unless, you have a really good product matching a great demand. Hence, it is critical now more than ever that app developers solve valid problems with their product and perform real research before writing any code. This is fundamental in order to offer value to future customers but also when it comes to retention and building engagement further down the line.

A well-known trap when it comes to software development is the strive to build the perfect product before launching it. With today's user being more picky when it comes to quality, this might be more common than ever. In order to not fall into this trap, which can be very costly, developers should start simple. The core product should focus exclusively on meeting the identified need, and doing that really well. Once that is in place more customer-oriented features and qualities can gradually be implemented.

Business Tactic 1: Identify a product with an adequate market fit. Focus primarily on delivering on core functions to meet user expectations. Ensure that the product and value proposition is communicable in order to catch users attention.

Once an app has been downloaded or a user has set up a network user account the social network platform, or app owner in general, face another crucial challenge to master. According to Clement (2019) 25% of apps downloaded around the world are only ever used once (Clement, 2019). It's therefore very important to make an instant impression and deliver value to the user from start.

For network based products and services which rely on network effects to create value, this can be somewhat trickier. Since all network effects to some extent rely on a critical mass of users, platforms must figure out a way to deliver value to the early adopters joining the network even before the user base have reached the critical mass.

Users won't sit around and wait on the platforms for other people to join. Somehow, they must be activated from the start in order to feel satisfied and want to come back. As a platform provider you should seek to find a single player offer that can attract and entertain users while the network is small. (Scherrer 2020)

What Scherrer describes as a single player offer is in line with the theories from Mendelson, Shen and Afuah proposing that there has to be value delivered by the product itself, that is not depended on a network of users. To investigate if these theories are manifested in examples of vertical social platforms, an analysis of eight social networks was done. The analysis was carried out as a mapping of both single player and multi player offerings. The result is shown in Table 5.1.

Company	Single Player Mode	Multi Player Mode
Fishbrain	Fishbrain's initial product was a	The platform has implemented
	tool for anglers to use for logging	social features enabling activities
	and tracking their personal fish-	such as sharing pictures, location
	ing experiences.	and other information of a catch
		and connecting with other anglers
		by liking and commenting each
		others posts.
Vivino	Vivinos initial value proposition	Social features allowed Vivino's
	was based on the premise to	users to follow each other, com-
	"never forget another bottle of	ment on wines that other peo-
	wine". The app enabled users to	ple have tasted and increase the
	create a list/photo album of wines	range of wines they were exposed
	they liked and rate these wines on	to in the process.
	a scale of one to five stars.	
Ridely	Ridely provides a single player	It's also has a social network for
	mode which enables riders to plan	riders and a learning hub with
	and log their training and follow	lots of training videos with well
	their and their horse's progress.	known riders and trainers.
Strava	Strava is an app for athletes to	Members of Strava can follow
	track their activity, record routes,	each other, compete and partic-
	map trails and analyse a run etc.	ipate in challenges, and take part
		in each others activity results etc.
Trailforks	Trailforks core value proposition	Trailfork now offers a product
	is a tracking tool and interactive	with user generated content and
	trail maps.	data allowing users to get in-
		spired and informed based on
		other users earlier adventures.
Vertical Life	Vertical Life's app for climbers	The company developed their
	help users find information about	product, now users can con-
	different sport climbing spots all	nect with friends and share their
	across Europe. Users can also	tracked achievements.
	track their climbing.	
Tonsser	Tonsser enable youth soccer play-	Tonsser provides a social network
	ers to build their own online pro-	allowing users to showcase their
	file. Users can track scores, tricks	achievements to potentially get
	and stats to their profile.	discovered by a bigger club as well
		as take part of other players tricks
		and scores.
Bookself	The main value proposition as	Bookself's long-term value propo-
	bookself launched was based on	sitions is a modern reading plat-
	the functions of finding and get-	Iorm oπering a social and inter-
	ting recommendations of books	active reading experience. Users
	based on user preferences. User	can create sub forums for differ-
	can search and save books to their	ent book related discussions and
	profile, in lists such as reading,	follow each others reading activ-
	read and to read.	Ity.

Table 5.1: Player Mode Analysis

Many products that we think of as strictly multiplayer also have single player modes. In many cases this single player mode helped adoption in the early stages when the network effect were not yet strong. Even when a product is primarily social and has reached a critical mass it might still be useful to offer a single player mode. Take Vivino for instance, their wine saving photo album and rating functionality made up for a good enough value proposition during the first couple of years in order to attain a greater audience. The company added social multi player features enhancing the single player offering and improved the original single player product with data generated from users inputs. As the single player mode got stronger, so did the social network and vice versa. Thus, the single player and multiplayer offerings complement each other and create synergies among the different value propositions.

Another example is Bookself. The start-ups initial idea was to be a social platform where readers interact and discuss. As this value proposition is highly dependent on a critical mass they've implemented functions that satisfy the individual reader as is. These functions are what user's primarily come back and use the app for until the network is big enough for discussion. Many companies that are categorized social platforms are mainly built on prominent asynchronous and non-communication features which in combination with social functions and synchronous activities create great value. According to Lewold, the single player offering should be at the center of product development and design.

A product offering can be described as a number of interconnected loops. There has to be at least one meaningful loop for the single player that works asynchronous. On top of this loop one can build more complex loops which rely on synchronous requirements and interactions. When designing the first loop, you must define a clear purpose and figure out how to make it attractive enough to get a sufficient crowd going. (Lewold 2020)

Business Tactic 2: Create instant product value. In order to attain critical mass while network effects are small or non-existent, make sure to offer users value that is not depended on or derived from other users.

For some products it is really hard to imagine single player modes. This is true for pure communication products and some social networks such as Tinder and Facebook. In these cases, other business tactics have been adopted. Tinder and Facebook came around these problems by creating network effects within a limited part of the network. This business tactic is often referred to as *Local Saturation*. Simply put, it means that a company focus on a smaller target group and quickly create a critical mass within it. They then experience the network effects within the smaller segment of users and eventually expand or apply the same business tactic to broader target groups.

5.2.2 Users must become returning users

According to Metcalfe's theory users will choose to join a larger network over a smaller because they will reason that, due to it's superior size, it offers more value to them. If this was always the case, one could question how come we see a trend of users switching from the big general social platforms to smaller vertical ones. This

trend indicate that users don't always choose social networks because of the size of the user base but rather the quality of the user base. In other words, members of a vertical social network are more concerned with who they connect with, than how many. Assuming that this statement is true, there is great incentives for vertical platforms to not focus on growth solely as attracting more and more users, but rather the right users.

Delving deeper, growth proves to be far more complex than just attracting users. In fact, to describe the entire growth process five steps are presented below:

- Acquisition: Customers visit the site through various acquisition channels.
- Activation: Customers have enjoyed their first time experience in your site.
- Retention: Customers come back and visit the site multiple times.
- **Referral:** Customers start referring the product to other (word of mouth).
- **Revenue:** Customers conduct monetizing behavior.

When comparing these steps importance on long-term success experts agree that what matters is primarily retention. While acquisition could potentially boil down to be just about spending money (marketing, monetary subsidization etc.) retention, especially long-term retention, is something you can't buy to the same extent. Good retention numbers are manifested if you have a good product and is a validation of your offering. If you're showing signs of good retention you can move on to growth hacking and accelerate with performance marketing in the acquisition phase (Lewold, 2020, Almipersonen).

Again, the importance of designing a product based on valid understanding of the customers needs, is emphasized. With that as a foundation for good retention, the return on investment and effort put on acquisition activities is likely to be higher. But solving a problem is not by itself the key to success. Companies must also make sure that there is a clear and relevant application context as well as high frequency for when the user return to that context.

In the early days we used the analogy of the corkscrew to describe why we were successful. The corkscrew has two main components, firstly it helps you access the wine you want to drink. It solves a real problem and is the perfect tool for it. Secondly, it has a high frequency of use as you use a corkscrew every week. That's what you want to have with an app. If your app doesn't have those things, it's really hard to get a virality going. The fact that our problem was something that people would have every week and that we helped them in a really useful way, was the key for us to have retention. (Sondergaard 2020)

Based on the corkscrew analogy and the belief of a close relationship between context and app usage, the applications of our mini case study were investigated in terms of the context in which their app-usage occurs e.g. location, time trigger, activity and/or social context. Additionally, the frequency of how often the users are likely to return to the specific context is labeled as either daily, weekly, monthly or yearly. An overview of the most distinct context examples is provided in table 5.2.

Company	Context	Frequency
Fishbrain	Before and after a fishing session	Weekly
Vivino	Every time you're at a restaurant	Weekly
	or buy wine.	
Ridely	Before, after and in between rid-	Daily/Weekly
	ing sessions	
Tonsser	In connection to a soccer prac-	Daily/Weekly
	tice/game	
Strava	During and after you run	Weekly
Bookself	Every time you're searching for	Monthly
	new books to read	

Table 5.2: Context and frequency of platform utility

As seen in the table there are clear contexts for when the apps are useful. These contexts are triggers that creates an obvious action to the user - to visit the platform (given that the app creates a meaningful experience for that context, P1). The ultimate goal is for this action to become a natural habit as it will provide organic user retention. And the higher the frequency is, the likelier is the application to become integrated with users daily life. Bookself, which have a less frequent application scenario, have experienced difficulties regarding this matter.

Social reading and digital book discussions were the ultimate goal that we built features for. But reading takes time. So, the frequency of using the app is a little too low to build that behavior. Due to this users that want to discuss a new potential read or recently read book go into the app and experience that there is no one there - our community is busy reading. (Scherrer 2020)

To summarize, companies looking to build a social network must not only understand the context of use and the intentions of the user when usage takes place, but make sure that context is recurrent. Applications that have these two things are more likely to have an increasingly competitive edge and retain users long-term.

Business Tactic 3: Identify frequent application contexts that provide organic retention. Clear and well-established use cases and contexts of use, that are of high frequency, will increase the chance of users returning to the platform.

5.2.3 Users must engage in the platforms social-related exchange activities

The more that each network member can transact with every other member, the more valuable the network is likely to be to each member and to the network provider. (Afuah, 2013)

Obtaining members and making them return is essential but not all it takes to build a social network. As discussed in the theoretical background, recent research argue that the number of transactions is a more prominent determinant of value than the number of network members. Based on this information the last keystone to build a social network lies in a platform providers ability to make the members transact beyond the single player functionality. These transactions can be of different forms i.e. sharing user generated content in form of posts, comments, likes, ratings and reviews or peer-to-peer communication such as discussion forums or direct messaging.

The volume of transactions depend on different factors. Among them are, as demonstrated, the number of links between the members, the direction of these links and the intensity of usage over these links. As part of the product/platform design, it is up to the platform provider to design the appropriate connections and desired network structure. What's appropriate depends on the nature of the transactions that are to be made on the platform and should complement the single player offering. Once the connections are decided, platform providers must form a tactic to engage members in the desired user transactions. Firstly, it must be clear to a user what actions he/she is expected to perform on the platform. Secondly, understanding what trigger users to perform these actions is important as these triggers can be incorporated in the product offering.

Not only does engagement boost transactions and network effects, it also feed growth. Referring back to the growth process, in section 5.2.2, referral follows retention, which means that once a customer is loyal and engaged he/she start referring the product to others (word of mouth). As users are highly influenced by there friends chances are that they too will download the app leading to a positive growth spiral. This growth tactic is both effective and cost-efficient. It is manifested in the growth story of Vivino. They saw that the single most important factor leading to growth were having engaged users spreading the word about the app. Vivino is a particularly good example of an application that benefits from word of mouth as many their application is often used in the physical world, out in the open among friends.

90% of new users come organically and 75% of them come from a friend's recommendation. This has been the case from day one and still is because people use our app in social events, as you don't drink wine by yourself. (Sondergaard, 2020)

Business Tactic 4: Create engagement triggers and encourage community interactions. Design the links between the members. Set a business tactic on how to encourage members to use these links in order to make them engage in social-related exchange activities.

5.3 Two-sided Marketplace Platform

In order to find the prominent business tactics for building a two-sided marketplace platform, the business tactics for its two prerequisites are identified in this chapter. Together they constitute the prominent business tactics for building a two-sided marketplace platform.

5.3.1 Get both sides on board

Due to the chicken-and-egg dilemma described in 3.2.4 many two-sided networks struggle to launch successfully. Getting to critical mass on both sides of the network is a frequent challenge that must be overcome in order to proceed in developing the platform. Just like the problem itself, the answer on how to solve it is far from one-sided.

Business leaders, researchers and entrepreneurs declares a number of effective platform launch tactics able to tackle the underlying chicken-and-egg dilemma. Depending on network structure and business model some are more suitable than others. (Stummer et al.; Currier, 2018; 2019).

The two-sided networks that we've analyzed differ from most of the two-sided network examples that have been raised in previous research, as no company within our analysis have ever been merely a two-sided network/-marketplace. I.e. Vivino, Fishbrain and Ridely have all started of as more or less social networks and developed the marketplace/second side offering, later down the line. Therefore, tactics for overcoming the chicken-and-egg problem couldn't be established solely based on these examples. However, their business tactic resembles a common platform launch tactic presented by former research; to start as a single sided platform. This tactic can help multi-sided platforms to break the deadlock of "no consumers and no producers". A two-sided marketplace can focus on one side as a traditional company would do - and then once it has developed a value proposition that makes sense for that customer group, start opening the other side. Thereby the negative perspective of indirect networks effects in the early development stage are avoided.

When deciding which side of the platform to focus on there are many factors to consider such as which value proposition is the strongest, which value proposition can be transformed into a standalone functional offering/solution, which side is harder to attract etc. Whether a two-sided network should focus on supply or demand side isn't the same for all two-sided networks. Some platforms must start attracting the supply, others by securing the demand. What's known as best practice is to focus on the harder side to attract first. When executing a staging tactic, the platform design should be geared toward the final network structure from the outset, although a traditional business model may be applied in the first stage (Stummer et al., 2018).

Plugd for instance, a platform for bite-sized audio clips, is an example of a multisided platform connecting audio consumers, -producers and potentially advertisers. In order to attract advertisers (from which Plugd can charge money from) there is a need for a critical number of consumers. Consumers will only adopt to the platform if there's content, an offering which in turn rely on a critical number of producers. Producers wont be interested in uploading content unless they see demand from consumers, and so the chicken-and-egg problem arise.

Plugd have transformed their multi-sided platform to a single sided by sourcing already existing content from a third party platform. This way they solve the supply and can focus on building up the demand side first. Once there's a sufficient size of demand validating their business offering, they can open up their platform for creators and advertisers, which due to an attained critical mass constraint on the demand side will be easier to attract.

This is a simplified business tactic description. The purpose of this example is to emphasize on the benefits of deciding a market side focus. The same tactic can be identified at Fishbrain, Vivino and Ridely.

Business Tactic 5: Decide market side focus. To overcome the barrier of having two critical mass constraints, focus on attaining critical mass on one first. Later on this can be leveraged to win over the other side.

5.3.2 The two sides must engage in transactional activities

Merely getting the demand and supply side on board a marketplace is not enough for it be successful. After having done that, focus should be put on getting sufficient marketplace liquidity. Liquidity is the essence of marketplaces. It is the efficiency with which a marketplace matches supply and demand on its platform, enabling transactions. One could argue that a marketplace without liquidity has no real product because the ability to transact on the platform is the product itself.

Depending on the network structure the nature of transactions takes different forms. In the context of a social network this was manifested in the need of a tactic for encouraging the members to start interacting and engaging in content creation and communication, leading to *Business Tactic 4: Create engagement triggers and encourage community interaction*. However, in a two-sided marketplace context the result of the research is manifested in the need for reaching sufficient marketplace liquidity, i.e. making the two sides transact.

After getting both sides of the market on board, the platform needs to match, enable connection and enable transactions between the two sides.

- Match In order for both sides to interact, they need to be introduced first. The platform needs a tactic regarding how the matching should be done.
- Enable connection In many cases, platform participants need to exchange additional information with their counter party before moving on to the transaction stage. This platform functionality also increases the trust of the parties and reduces the asymmetry of information that may get in the way of the transaction. The platform needs to decide how the two sides should interact.
- Enable transaction The transaction, which is at the heart of the platform value proposition, needs to be enabled. The nature/core of the transaction must be designed. In most cases it is a product/service being traded for some

sort of payment.

Business Tactic 6: Define connections and engage transactions Design the links between the two sides of the marketplace. This includes deciding on how the two sides should match, connect and transact. Set a tactic on how to trigger transactions.

5.4 Social Commerce Platform

Business Tactic	Description	
BT1	Identify a product with an adequate market fit. Focus pri-	
	marily on delivering on core functions to meet user expectations.	
	Ensure that the product and the value proposition are communica-	
	ble in order to catch users attention.	
BT2	Create instant product value. In order to attain critical mass	
	while network effects are small or non-existent, make sure to offer	
	users value that is not depended on or derived from other users.	
BT3	Identify frequent application contexts that provide organic	
	retention. Clear and well-established use cases and contexts of	
	use, that are of high frequency, will increase the chance of users	
	returning to the platform.	
BT4	Create engagement triggers and encourage community in-	
	teractions. Design the links between the members. Set a business	
	tactic on how to encourage members to use these links in order to	
	make them engage in social-related exchange activities.	
BT5	Decide market side focus. To overcome the barrier of having	
	two critical mass constraints, focus on attaining critical mass on	
	one first. Later on this can be leveraged to win over the other side.	
BT6	Define connections and engage transactions. Design the links	
	between the two sides of the marketplace. This includes deciding	
	on how the two sides should match, connect and transact. Set a	
	tactic on how to trigger transactions.	

Table 5.3: The six initial Business Tactics

The outcome of the study, where the two sub networks, *social network* and *two-sided marketplace*, have been treated separately, are six business tactics (see Table 5.3). Even though these six business tactics are identified as important they do not provide a fully comprehensive answer on how to build a vertical social commerce platform. When combining the two network types additional complexity is added which gives rise to new challenges that need to be taken into consideration. Hence, in the following section, the two networks will be viewed as merged, yielding the desired social commerce platform, 4.1.

5.4.1 Trust versus Monetization

In the context of a social commerce platform, where the demand side of the twosided network partly consists of a social network, the activity of making the two sides transact isn't as straight forward as for the general two-sided marketplace. As previously discussed, the trust within the social network can be of immense value for both the members of the network as well as for the platform provider. When obtaining marketplace liquidity in such a context it is of great importance not to do it in a way that could potentially compromise the trust. If not done with caution, matching the demand side (members of the social network) with e.g. retailers could make the members of the network think of the platform provider as opportunistic or "too commercial". In order for the platform provider to monetize on its users without compromising trust they need to be aware of how trust and monetization is correlated within their specific network. Depending on how they have positioned themselves in the social commerce context they are perceived more or less commercial by their network members which in turn create different expectations among them network members on the platform provider. For instance, a firm that has started of by building up a community on which it later starts to monetize on, could potentially damage the trust more compared to a platform that has been transparent regarding their aim to monetize from the start. However, a platform that has had a plan to monetize on the network from the start may have a harder time building up a community and trust in the first place.

In addition to platform perception being of importance, timing does also play a crucial part regarding the balance between monetization and trust. Let's say a company chooses to tackle the chicken-and-egg dilemma, as Vivino and Fishbrain, by building up a demand side consisting of a social network first. Then the platform provider must ensure the right timing to start monetizing on its members. Fishbrain launched their app in 2013 and served as a social community solely for six years before the purchasing functionality was launched in 2019. Vivino, who launched in 2010, built up an engaged user base of millions of users and a widely trusted rating system, before they launched their marketplace in 2017. According to Jonas Colliander at Stockholm School of Economics, introducing purchasing functionality before getting a solid footing with the members of the social network does dramatically decrease the possibility to build trust within the network. His conception is backed up by Vivino's experience when launching their marketplace.

Even though the most requested feature among our users was being able to purchase the wines through the app we saw examples of users thinking Vivino became too commercial once the commerce features were implemented. It is a very fine balance and it wasn't until we saw clear demand from our users that we implemented the purchasing functionality. (Sondergaard, 2020)

In order not to be forced to take shortcuts to revenue streams, the founders of Vivino made sure, when raising capital, that the investors they took on board understood that they would not monetize on their users during the first 5-6 years. Their tactic was, which played out well, to build up a strong demand side and introduce purchasing functionality once they saw clear indicators that their users were ready to be converted into making a purchase through the app. After having built up substantial trust within the network they knew that their was a purchase power among their users and that the timing therefor was right. The Vivino case is in accordance with the App Maturity Model, which states that it isn't until later on, the the maturity phase, that users willingness to transact has matured.

Business Tactic 7: Ensure that monetization doesn't cannibalize on trust within the network. The platform provider needs to be aware of how monetizing on its users potentially could damage the trust within the social network; either by loosing existing trust or having a harder time building up new trust. Companies must set a tactic regarding how to mitigate this risk as well as how to balance trust against monetization.



5.4.2 Strategic Roadmap

Figure 5.4: Illustration of the re-positioning of Vivino and Fishbrain in the social commerce context (Created by the authors)

We have, several times, peeked at the opportunity to build one sub network prior to the other. Due to the network complexity of the social commerce network and several critical mass constraints, it's often a good tactic. Take for example a company wanting to position its platform in the middle of the social commerce scale, 3.1. Looking at the context map, the options seems to be either to start of with a social network and later on add e-commerce features or as an e-commerce site and then build the social network. Both roads would eventually lead to a centered position. However, gathered data indicates that moving a platform around freely, re-positioning it within the social commerce context could be somewhat difficult. As illustrated in Figure 5.4 both Vivino and Fishbrain, who today posses a centered position, started of to the left of the s-commerce scale by building a social network/community. Once they added the purchasing functionality they re-positioned themselves more to the right on the scale (as explained in 5.4.1). However, starting of as a e-commerce site, positioned to the right of the scale, trying to turn the demand side into a social network turns out to be way more difficult. Of course a company such as Amazon positioned to the far right could move slightly to the left by enabling additional social networking capabilities. However, no examples have been found of platforms succeeding to build a full scale social network/community having started of as a e-commerce site. Both Jonas Colliander,

Stockholm School of Economics and Karin Edström, Almi Invest confirms this finding.

Almost all platforms, start off by building up the user base while loosing money planning to monetize on it in the future (Colliander 2020)

A platform wanting to consist of a community as well as a marketplace should start of building up the community. This way, they can get to know their customers in order to know what they want before starting to monetize on them. Starting at the other end is way more difficult. (Edström 2020)

According to business experts, former success stories and research based theories about networks and platform strategies, platforms that wants to take a centered position and build both an established community and a marketplace, should start by building the community. Partly because focusing on the marketplace first implies higher requirements on strong or unique value propositions and a difficult challenge to build up the social network in hindsight. And partly because it helps overcoming the formerly described chicken-and-egg dilemma, that social commerce platforms also face. According to founder Theis Sondergaard, Vivino's business idea from the very beginning was to make money by having customers buy wine online. But there was not a clear idea of how that would happen. Although the marketplace model was important in order to define their funding they knew that they needed to get to a critical mass of demand before going to the supply side. Their value propositions towards demand and supply (corresponding to value proposition 2 and 3 in figure 4.1) in the initial marketplace model wouldn't have been strong enough to overcome the chicken-and-egg problem. It was therefor necessary to make a "detour" and build a product with a completely different value proposition - an app for remembering the wines (value proposition 1, 4.1). With that value propositions, which they developed over the years, Vivino managed to build up a world wide social community. Leveraging on this installed user base they could easily attract the supply side - "look at this demand we have, let's start selling wine". Once the supply side was on board all Vivino had to do was to convert community members into wine shoppers.

Based on the learnings and insight above *Business Tactic 5* is modified to not only manage the chicken-and-egg dilemma from a two-sided marketplace perspective but rather suit the broader social commerce perspective. The result is two new, replacing business tactics referred to as *Business Tactic 5a* and *Business Tactic 5b*.

Business Tactic 5a: Build up demand side first. Focus on the community development of the social network and its coherent value proposition.

Business Tactic 5b: Get the supply side on board by leveraging the demand. By leveraging on the community and potential demand it represents, get the supply side aboard. Develop appropriate value propositions attracting the both sides to each other.

5.5 Framework

The six original business tactics have expanded into eight business tactics that are applicable within the social commerce context: BT1-BT4, BT5a, BT5b and BT6-BT7. The business tactics are compiled into a tabular framework. Besides presenting the business tactics, the framework proposes an order in which the business tactics should be taken into consideration. This order is based on the strategic direction that is proven to be successful when building a social commerce platform consisting of a social community and a marketplace.

The framework can be used as a diagnostic tool by companies to get an overview of a platform's current strategy's strengths and weaknesses and/or set a strategic action plan for launching a social commerce platform. It serves as a helpful tool to identify areas of improvement from which strategic action can be defined. Regardless of whether a company is in the starting point of designing their business idea or are looking to delve deeper into s-commerce in general, the business tactics should be relevant.

Table 5.4: Business Tactics for building a vertical social commerce platform

Business Tactics	Description	
BT5a	Build up demand side first. Focus on the community develop-	
	ment of the social network and its coherent value proposition.	
BT1	Identify a product with an adequate market fit. Focus pri-	
	marily on delivering on core functions to meet user expectations.	
	Ensure that the product and the value proposition are communica-	
	ble in order to catch users attention.	
BT2	Create instant product value. In order to attain critical mass	
	while network effects are small or non-existent, make sure to offer	
	users value that is not depended on or derived from other users.	
BT3	Identify frequent application contexts that provide organic	
	retention. Clear and well-established use cases and contexts of	
	use, that are of high frequency, will increase the chance of users	
	returning to the platform.	
BT4	Create engagement triggers and encourage community in-	
	teractions. Design the links between the members. Set a business	
	tactic on how to encourage members to use these links in order to	
	make them engage in social-related exchange activities.	
BT5b	Get the supply side on board by leveraging the demand.	
	By leveraging on the strong demand, get the supply side aboard.	
	Develop appropriate value propositions attracting the both sides to	
	each other.	
BT6	Define connections and engage transactions. Design the links	
	between the two sides of the marketplace. This includes deciding	
	on how the two sides should match, connect and transact. Set a	
	tactic on how to trigger transactions.	
BT7	Ensure that monetization doesn't cannibalize on trust	
	within the network. The platform provider needs to be aware	
	of now monetizing on its user potentially could damage the trust	
	within network. Set a tactic regarding how to mitigate this risk as	
	well as how to balance trust against monetization.	

6

Application of Framework: Ridebrain

The business tactics and framework is applied to the case organisation Ridebrain. First, an introduction to Ridebrain is provided. Thereafter, the framework is applied and weaknesses in Ridebrain's current strategy are brought to light. An alternative strategy, with respect to the company's limitations and the identified weaknesses, is recommended.

6.1 About Ridebrain

Ridebrain was founded in 2016 upon the idea to create a social network for adventureand action sports. As more and more vertical platforms in a broad range of categories were breaking new market ground, the two founders Jens Mathiasson and Niklas Strandanäs saw an opening to take a similar role as Fishbrain, but in the action sport scene (in particular the ski and snowboard arena). Over the years that followed, the community business model developed. Today, Ridebrain is both a community and a marketplace and consist of two separated platforms that overlap on certain areas. The mobile app is "home" for the social community while the web page serves as the marketplace, publish ski- and snowboard related editorial content. Together their platforms aims to serve as a the go to destination for people looking to buy ski/ snowboard gear and outerwear. By designing two complementary platforms Ridebrain seek to provide activities supporting customers throughout the purchase process, in particular during the awareness, consideration and conversion phases.

Ridebrain's social community is reached by users through their mobile app. After setting up an account users can share photo posts from their latest snow adventures which are uploaded to the community feed. They can also follow ski spots in order to get updates from other community members that have visited the specific spot and thereafter left reviews, join discussion groups and chat with other users etc. Additionally users can consume content published by Ridebrain and scroll through gear which they also can review and rate on a scale from 1 to 5. The prime purposes of the community is for it to strengthen the Ridebrain brand, inspire users with editorial ski and snowboard content which occasionally involves product marketing (awareness) and engage customers to rate, review and discuss gear with each other in various sub forums (consideration). If a user want's to read more about a specific product he/she is redirected to www.ridebrain.com (conversion). On Ridebrain's web page visitors can, as in the community, consume content published by Ridebrain. Besides editorial content Ridebrain's web page is home of the marketplace. This is where Ridebrain connects ski and snowboard brands with their community as well as other web page visitors and promote commercial transactions among the two sides; consumers and retailers. A screenshot of Ridebrain's current product can be found in Appendix B. Unlike most e-retailers Ridebrain doesn't carry inventory. When a consumer buys a product the brands are notified automatically as Ridebrain passes on the order to the specific brand. The brand then send their parcel to the buyer as if the purchase was made from their own e-commerce while Ridebrain takes a commission of what is sold. This commission is smaller than the industry standard commission for a conventional, physical store.

In regards to the value propositions of the marketplace, Ridebrain aims to extend the retailers offerings (which are not unique in comparison to other e-commerce sites) towards the demand side by providing deliberate and professional guiding across both platforms. By having the best digital gear-guides and customer service, leveraging on the community generated recommendations and eWOM, Ridebrain plans to obtain competitive advantage.

6.2 Platform Strategy Analysis

In this section, the eight business tactics have been used as a basis for conducting an analysis on Ridebrain and their current strategy. Weaknesses are brought to light and alternative strategies mitigating these flaws are presented.

6.2.1 Recommended strategy

In accordance to our findings and presented application of the eight business tactics, Ridebrain's social commerce platform have been evaluated. The following analysis highlight areas for improvement from which Ridebrain can take strategic action. The purpose of the evaluation is to recommend Ridebrain approaches to successfully build a social commerce platform.

BT5a: Build up demand side first

Ridebrain's future competitiveness and differentiation relies on two main things; their social community and their offering of the best digital guiding experience when purchasing gear and outerwear. Based on that premise and the company's communicated goal to build "the world's main skiing and snowboard community and marketplace" our recommendation is to build the community first. Therefore, Ridebrain's emphasis should be put on ensuring that BT1 - BT4 are fulfilled before commencing to build the marketplace (BT5b-BT7).

BT1: Identify a product with an adequate market fit

Ski gear is, due to its technical complexity, a purchase that often involves a lot

of research and consideration from the customers perspective. As there are some difficulties navigating the gear jungle one may argue that the customer is in need of help and that Ridebrain's product offering should meet a market demand. However, the concern is 1) whether a social community and gear rating system solves that problem for the individual 2) whether the need is widely rooted and big enough and to make users attracted.

We believe that Ridebrain need to validate their product and community value proposition among their target group, break down their users gear related problem and design their core functions accordingly. As of today, Ridebrain's community platform involves an overload of features with different purposes and degree of functionality, furthermore they're also pursuing the marketplace. This is making their community value proposition confusing to their users and hard to communicate.

- 1. Examine whether the current product offering is found in an existing and strong demand. If not, identify an adequate product market fit.
- 2. Scale down the current products features and functionality. Focus on the core and offer quality over quantity.

BT2: Create instant product value

Ridebrain's current community offerings are to a high degree dependent on network effects. As Ridebrain hasn't reached critical mass these offerings fail in creating value. Ridebrain must therefore focus on a single player offering in order to attract and retain users and eventually reach critical mass. This could be done by taking inspiration from other digital, action sport related communities that focus on a strong single player mode from which they implement social activities around i.e. a tracking tool of some sort.

In regards to the editorial content offering we identify a single player mode possibility. If Ridebrain wants to be a platform which users come to for guiding and inspiration, it must be clarified and incorporated into the product design. It should be what Ridebrain focus their communication and initial value delivery on.

BT3: Identify frequent application contexts that provide organic retention.

As there are no primary or single use case context, in the current product, that trigger users to return to Ridebrain's community platform its hard to trigger a returning user behaviour. Ridebrain is in need of a clear context for when to use the app, preferably in connection with practising the sport. Returning to Ridebrain's platform for the sole purpose of making informed purchasing decisions is most likely not enough as most skiers buy new gear infrequently i.e. only during winter and maybe not every year. Therefore, this shouldn't be the primary use case that Ridebrain build their initial product around. By going back to BT1, Ridebrain should find a value proposition that generate frequently reoccurring use cases and define a corresponding context that will trigger those (while fulfilling BT1 and BT2).

BT4: Create engagement triggers and encourage community interactions In Ridebrain's current community it is unclear how users are connected. Our perception is that there isn't an established tactic in regards to community connections but rather that Ridebrain is trying out different types of connections. Ridebrain should help the users understand how they can connect with appropriate community members as well as how they are supposed to utilise the community and interact with each other. It's Ridebrain's responsibility to design the desired types of user interactions in order to spark the spread of eWOM.

Once BT1-BT4 is fulfilled, Ridebrain should focus on continuing to build a strong user base, build up retention, engagement and trust, extend their value proposition by developing their platform with more features based on user behaviour and demand. Eventually, as they reach critical mass, direct network effects should kick in, enhancing the value for each member of the network, enabling organic growth of the community.

Business tactics BT5b-BT7 are discussed below based on the assumption that Ridebrain builds a strong community by following the business tactics above.

BT5b: Get the supply side on board by leveraging the demand

Due to the already acquired community constituting the demand side of the two sided network, Ridebrain mitigates the chicken-and-egg problem. Their next focus should be to get the supply side aboard and to convert their community members to consumers. The supply side shouldn't be hard to attract considering 1) great possibility for suppliers to reach out to a targeted audience. 2) Ridebrain take a lower share on sold product than physical retailers do 3) signing up doesn't imply changes in the retailers supply chain and is therefore not associated with additional costs.

BT6: Define connections and engage transactions Once both sides are on board Ridebrain should focus on matching the members with appropriate retailers and design the perfect purchasing experience across their entire network; from community to marketplace as well as from marketplace to community.

BT7: Ensure that monetization doesn't cannibalize on trust within the network It's important that BT5b and BT6 are fulfilled when the timing is right. Ridebrain must build up the trust over time while forming a community with high purchasing power, before monetizing. Timing for introducing purchasing functionality can become less crucial if introduced the right way. Even after the marketplace is launched Ridebrain must balance the community build-up and marketplace sales to keep trust and engagement strong while generating revenue.

Pursuing the strategy, consisting of the business tactics in the order they are listed above, the three present critical mass constraints (within the social network, within the demand side of marketplace and within the supply side of the marketplace) would have been overcome by only solving the first of the three. The drawback with this strategy is that it is very capital intensive due to the time and resources it takes to build up the community and for it to be mature enough to start monetizing on.

6.2.2 Alternative strategy

The recommended strategy presented above conforms with Ridebrain's initial "go to market"-tactic back in 2016 as their early days vision was to build a social com-

munity platform first and build it very strong in terms of users and engagement. With the social community as a foundation the platform would then extend to social commerce as Ridebrain developed their marketplace. However, according to Niklas Strandanäs, co-founder of Ridebrain, it turned out to be difficult to raise capital without showing investors signs of revenue or profitability within a relatively near future. To generate revenue sooner, Ridebrain changed their strategic directions to try to build both parts, the community and the marketplace, parallel. Although the two platforms are being developed simultaneously they are to a large extent built separately. As per the analysis, important aspects, stemming from the added complexity, emerge as the two networks are combined into a hybrid network. Hence, when the platforms are treated and built separately these aspects may be forgotten and thus not taken into consideration resulting in two platforms that aren't complementing each other.

Over time, the marketplace have become Ridebrain's priority and instead of attracting the demand side, Ridebrain has lately been focusing on the supply side. While this still conforms with BT5, Ridebrain face a harder time getting both sides on board. To understand the root of this problem, we begin by discussing their different value propositions.

The value offered to the community members (value proposition 1) is scattered as focus is no longer to start off building the community. The value offered to the demand side of the marketplace (value proposition 2) exists thanks to having gotten the supply on board, but is considered weak. While there will be an assortment in Ridebrain's marketplace, their value proposition towards the demand is not unique in relation to competitors. Ridebrain follows an "if we build it they will come approach" which risks not being enough as customers may as well go to a competitor whose trust and brand is stronger. Ridebrain points out that their competitive advantage regarding the marketplace partly lies in their community as it extends the value proposition towards demand by offering the customers guidance through eWOM, etc. In other words, the value proposition towards the demand side of the marketplace is to a high degree contingent on having a community. The value proposition towards the retailers (value proposition 3) selling their goods through the platform, is strong. There are many incentives and few drawbacks for the supply side to get on board, hence why they have done so. However, Ridebrain will find it difficult retaining the retailers on their marketplace if they do not provide them with demand when they hard launch the marketplace in August, 2020.

With that being said, Ridebrain should put more focus on the side that is harder to attract, namely demand. To attract customers they must identify a stronger and more unique value proposition directed to the consumers or community members. This could be done by either:

- 1. Make sure *value proposition 2* towards consumers of the marketplace is strong and unique *without* being dependent on the community.
- 2. Give their current community platform a "face lift", see BT1-BT4 above. Design the community to complement the marketplace by focusing on for example guiding the customer through the purchasing journey. Skip redundant

features not contributing to this cause.

The first case implies Ridebrain positioning their platform to the right within the social commerce context (as Tradera and Amazon in 4.1). Their core product would merely be a marketplace needing a competitive advantage such as offering the lowest prices etc. Due to Ridebrain wanting to build a community as well, this alternative is not being further explored.

For Ridebrain to succeed on building a full scale community as well as a marketplace, it is necessary that they change their focus. Focusing on the marketplace and supply first and not the community is of high risk as the value offered to the customers of the marketplace is dependent on the community. The second case can be considered a "light version" of the recommended framework strategy, in which the community is built up before adding the marketplace. However it differ considering that the marketplace is built simultaneously as the community. Since resources and efforts are being allocated on two platforms the result is likely to be a "less prominent" community yielding less eWOM and trust compared to a community that receives 100% of a company's resources. However, Ridebrain must still take BT1-BT4 into consideration in order to make the social community prosper. Ridebrain must also consider BT7 but instead of making sure that trust is not cannibalized, they must understand how trust can be built in the community while pursuing the marketplace in parallel.

Conclusion and Final Remarks

In this chapter, the master thesis's conclusion and final remarks are formulated. It involves a summarized formulation of answers to research questions, critical review, contributions and future research.

7.1 Answers to Research Questions

7.1.1 Answer to RQ1

RQ1: What are the prominent business tactics when building a vertical social commerce platform?

Answer: In order to build a vertical social commerce platform consisting of both an established community and a marketplace, the following eight business tactics are considered to be prominent:

Build up demand side first

The results from this thesis indicates that it is difficult, if not impossible, to build a full scale social network having started of as a e-commerce site. Because of this, focus should initially be put on the community development of the social network and its coherent value proposition.

Identify a product with an adequate market fit

In order for the social network to attract members it has to be developed with the users in mind. The platform developers must understand a valid demand rooted among their targeted audience, on which they build their product around. Focus should primarily be put on delivering on core functions to meet user expectations, while ensuring that the product and the value proposition are communicable in order to catch users attention.

Create instant product value

The value propositions of social networks are often dependent on a sufficient number of users (critical mass) to create value. But to attract these users the product must also offer value before critical mass is reached. In order to attract users while network effects are small or non-existent, make sure to offer users value that is not depended on or derived from other users.

Identify frequent application contexts that provide organic retention

Identifying a product with an adequate market fit and creating instant product value is crucial but not sufficient in order for the social network to prosper. If the the problem which the app solves reoccurs on rare occasions the users will not come back to the app frequently enough. Therefore, identifying clear and well-established contexts that trigger application usage and that is of high frequency is important.

Create engagement triggers and encourage community interactions

The platform provider does not only need a tactic to make people join the network and to retain them. They also need a tactic to encourage their users to engage and interact. Therefore they need to design the links between the members and set a tactic on how to encourage members to use these links and engage in social-related exchange activities.

Get the supply side on board by leveraging the demand

After having built the social network, which will constitute the demand side of the marketplace, it should be easier to attract the supply side by leveraging the strong demand. Appropriate value propositions have to be developed so that the two sides attract each other to join the platform.

Define connections and engage transactions

Merely getting the demand and supply side on board a marketplace is not enough for it be successful. After having done so, focus should be put on getting sufficient marketplace liquidity. Therefore links between the two sides of the marketplace have to be designed. This includes deciding on how the two sides should match, connect and transact. A tactic regarding how to trigger transactions has to be set.

Ensure that monetization doesn't cannibalize on trust within the network

Due to trust being one of the most prominent strengths of social commerce, the platform provider needs to be aware of how monetizing on its users potentially could damage the trust within network. It needs to set a tactic regarding how to mitigate this risk as well as how to balance trust against monetization.

7.1.2 Answer to RQ2

RQ2: What business tactics are recommended for Ridebrain, in order to succeed as a social commerce platform within the the ski- and snowboard community?

Answer: The strategy identified as optimal for building what Ridebrain is aiming for, implies starting off building a strong social network. After having done so, the marketplace would be introduced. Due to this strategy being very capital intensive

and given the company's financial situation, the strategy considered optimal is not an option and can therefore not be pursued.

In order to comply with the requirements from the investors wanting the platform to generate revenue in the near future, the marketplace has to be built initially. However, only building the marketplace will not work due to: 1) The offering to the customers in the marketplace is dependent on the community. 2) Building a community with trust after having started off as merely a marketplace is difficult. Because of this, the marketplace and community has to be built simultaneously.

Due to the available resources being split up on both s-commerce components great care has to be taken to not develop redundant features (which will also confuse the users). It's recommended that the community available today should be stripped down to primarily consists of features guiding the users when purchasing gear, boosting the value proposition offered to the customers of the marketplace. In addition to this, features offering single player mode value has to be identified and implemented in order to attracts users to join the community before network effects kick in.

7.2 Critical Review

It is of importance to point out that the recommended framework isn't fully comprehensive for designing a social commerce platform strategy. The framework is derived from the eight business tactics that constitutes the answer to the first research question. The aim of the first research question was to identify the **prominent** business tactics (not **all** business tactics) when building a social commerce platform. Potentially, there are other important factors/determinants when building a social commerce platform which are not covered by the framework. With this said, the framework can still be used as a tool and foundation for assisting in the process of building a strategy.

It should also be mentioned that the business tactics on which the framework is based are derived from a limited number of case studies and interviews. Because of this, there is a risk that essential aspects, manifested in unexplored examples, haven't been brought to light, potentially compromising the representativeness of the framework.

In order to increase the validity of the thesis the results could be verified using a quantitative approach. This would require collecting data on numerous platforms and categorizing their business tactics and could potentially validate that the business tactics identified as prominent in this thesis actually is. Additionally, the validity of the thesis could be increased by taking the user perspective into consideration to a larger degree.

7.3 Contributions and Future Research

Firstly, the purpose of this thesis was to identify, describe and analyze the prominent business tactics for building a social commerce platform. The answer to the first research question which consists of the identified business tactics contributes to the current literature regarding social commerce strategies. There is a great variety of research regarding strategies for building a social network and two-sided platforms separately. However, there exists a general paucity of research viewing these two networks as one unit. Combining the two networks, yielding a more complex hybrid network, gives rise to new challenges that need to be taken into consideration, which the thesis aim to do.

Secondly, the thesis does also make a contribution to the case company Ridebrain by identifying flaws in their current strategy and by proposing what actions could be taken in order to mitigate these drawbacks.

Due to social commerce being a relatively new and unexplored phenomenon there are a vast variety of areas regarding social commerce that could be the topic of future research. Because of the proven commercial benefits of combining social media technologies and commercial activities a boom in research regarding strategies for social commerce platforms is not unlikely to be seen during the upcoming years. For future studies the authors of the thesis propose deep-diving into the business tactics presented in this report. This study does for example identify that monetization could cannibalize on trust within the network. In order to be more hands on, future studies could examine how this is prevented in practice.

Bibliography

- A. Afuah. Are Network Effects Really All About Size? The role of Structure And Conduct. *Strategic Management Journal*, 34(3):257-273, 03 2013. URL URL:https://www.jstor.org/stable/23362656.
- S. Balter. Building Relationships Through the Customer Loop. Web page, 2018. URL https://ducttapemarketing.com/building-a-relationship/. Accessed 2020/06/13.
- Big Commerce. The Secret to the Future Growth of Your Ecommerce Channel: Social Commerce. Web page, 2019. URL https://www.bigcommerce.com/blog/ social-commerce/#what-is-social-commerce. Accessed 2020/04/29.
- R. Boardman, M. Blazquez, C. E. Henninger, and D. Ryding. *Social Commerce: Consumer Behaviour in Online Environments.* Palgrave Macmillan, 2019.
- BrightLocal. Local consumer review survey 2014. Technical report, BrightLocal, 2014.
- Centre for International Governance Innovation IPSO. 2017 cigi-ipsos global survey on internet security and trust. Technical report, IPSOS, 2017.
- S. Cheney and E. Thompson. App Maturity Model. Web page, 2018. URL https://www.appannie.com/en/insights/market-data/ app-annie-2017-2022-forecast/. Accessed 2020/06/13.
- J. Clement. Percentage of mobile apps that have been used only once from 2010 to 2019. Web page, 2019. URL https://www.statista.com/statistics/271628/percentage-of-apps-used-once-in-the-us/. Accessed 2020/04/16.
- J. Clement. Number of apps available in leading app stores 2019. Web page, 2020. URL https://www.statista.com/statistics/276623/ number-of-apps-available-in-leading-app-stores/. Accessed 2020/04/15.
- Comscore. The 2017 u.s. mobile app report. Web page, 2018. URL https://www.comscore.com/Insights/Presentations-and-Whitepapers/2017/The-2017-US-Mobile-App-Report. Accessed 2020/04/15.
- J. Creswell and J. Creswell. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. SAGE Publications, 2017. ISBN 9781506386690.
- J. Currier. 19 tactics to solve the chicken-or-egg problem and grow your marketplace. Web page, 2019. URL https://www.nfx.com/post/ 19-marketplace-tactics-for-overcoming-the-chicken-or-egg-problem/. Accessed 2020/05/05.
- R. G. Curty and P. Zhang. Social commerce: Looking back and forward. Proceedings of the American Society for Information Science and Technology, 48(1):1-10, 2011. doi: 10.1002/meet.2011.14504801096. URL https://asistdl.onlinelibrary. wiley.com/doi/abs/10.1002/meet.2011.14504801096.
- D. Cushman. Reed's law and how multiple identities make the long tail just that little bit longer. 6045:123–130, 2010.
- G. Dennison. S. Bourdage-Braun, М. and Chetuparamdefined. bil. Social commerce 2009.URL https: //digitalwellbeing.org/documents/IBM2009.pdf?fbclid= IwAR32dqJHo4Y3b3iZlunMXCBvDbTqHEobqdGnUHSC5i81mIneUtTTmjOfNrY.
- M. Denscombe. *The Good Research Guide: For Small-scale Social Research Projects*. Open UP study skills. Open University Press, 2017. ISBN 9780335226863.
- eMarketer. The Future of Retail in 2019: Social Commerce Has its Day. Web page, 2018. URL https://www.emarketer.com/content/ social-commerce-could-finally-happen-but-not-in-the-way-marketers-thought-it-wou Accessed 2020/04/28.
- eMarketer Editors. eMarketer Reduces US Time Spent Estimates for Facebook and Snapchat. Web page, 2019. URL https://www.emarketer.com/content/ emarketer-reduces-us-time-spent-estimates-for-facebook-and-snapchat. Accessed 2020/04/18.
- D. S. Evans and R. Schmalensee. Failure to launch: Critical mass in platform businesses. 9, 2010. doi: 10.2202/1446-9022.1256.
- Forbes. The rise of niche and vertical social networks. Web page, 2019. URL https://www.forbes.com/sites/ilkerkoksal/2019/12/21/ the-rise-of-niche-and-vertical-social-networks/#1889b1e73582. Accessed 2020/03/18.
- J. Gallaugher. Getting the Most Out of Information Systems, A Manager's Guide v. 1.1. 2012.
- M. Gustavsson and A.-M. Johansson. Consumer trust in e-commerce. Technical report, The Department of Business Studies, 2006.
- H. Han and S. Trimi. Social commerce design: A framework and application. Journal of Theoretical and Applied Electronic Commerce Research, 12(3):50–68, 2017. doi: 10.4067/S0718-18762017000300005.
- A. Hariharan. All about network effects. Web page, 2016. URL https://a16z. com/2016/03/07/all-about-network-effects/. Accessed 2020/02/25.
- I. Hutter, M. Hennink, and A. Bailey. Qualitative Research Methods. SAGE Publications Inc., 2011. ISBN 978-1-4129-2226-5.
- M. Höst, B. Regnell, and P. Runeson. *Att genomföra examensarbete*. Studentlitteratur AB, 2006. ISBN 91-44-00521-0.

- H. Jozanovic. The pre-purchase journey of online shopping. Technical report, School of Business and Engineering, Halmstad University, 2016.
- J. Kietzmann, K. Hermkens, I. McCarthy, and B. Silvestre. Social media? get serious! understanding the functional building blocks of social media. *Business Horizons*, 2011.
- R. Leadem. 6 Niche Social Media Networks Changing the Ways We Connect, Collaborate and Discover New Opportunities. Web page, 2018. URL https: //www.entrepreneur.com/slideshow/317173. Accessed 2020/04/18.
- T.-P. Liang and E. Turban. Introduction to the special issue social commerce: A research framework for social commerce. International Journal of Electronic Commerce, 16(2):5–13, 2011. doi: 1DOI10.2753/JEC1086-4415160201. URL https://eds-a-ebscohost-com.ludwig.lub.lu.se/eds/pdfviewer/pdfviewer? vid=8&sid=2c248230-5f0b-4583-bf74-14b486469112%40sessionmgr102.
- X. Lin, Y. Li, and X. Wang. Social commerce research: Definition, research themes and the trends. *International Journal of Information Management*, 37(3):190–201, 2017.
- H. Mendelson and Y. Shen. Network effects in social marketplaces: The case of kiva. Proceedings of the Federated Conference on Computer Science and Information Systems, 18:535–538, 2019. doi: DOI:10.15439/2019F76.
- B. Metcalfe. Metcalfe's law after 40 years of ethernet. Computer, IEEE Computer Society, 46(12):26-31, 2013. doi: 10.1109/MC.2013.374. URL http://resolver. ebscohost.com.ludwig.lub.lu.se/openurl?sid=EBSC0%3aedseee&genre= article&issn=00189162&isbn=&volume=46&issue=12&date=20131201&spage= 26&pages=26-31&title=Computer&atitle=Metcalfe%27s+Law+after+40+ Years+of+Ethernet&btitle=Computer&jtitle=Computer&series=&aulast= Metcalfe%2c+B.&id=D0I%3a10.1109%2fMC.2013.374&site=ftf-live.
- J. Obar and S. Wildman. Social media definition and the governance challenge: An introduction to the special issue. *SSRN Electronic Journal*, 01 2015. doi: 10.2139/ssrn.2637879.
- A. Odlyzko and B. Tilly. A refutation of Metcalfe's Law and a better estimate for the value of networks and network interconnections. 03 2005. URL http: //www.dtc.umn.edu/~odlyzko/doc/metcalfe.pdf.
- Ridebrain. Ridebrain. Web page, 2020. URL https://ridebrain.com/. Accessed 2020/04/19.
- Ridebrain, Google Play Store. Ridebrain, Google Play Store. Web page, 2020. URL https://play.google.com/store/apps/details?id=com. ridebrain_app&hl=sv. Accessed 2020/04/19.
- Rival IQ. WOM: Marketing Everyone Can Trust. Web page, 2017. URL https://www.rivaliq.com/blog/establish-trust-wom-marketing/. Accessed 2020/04/29.

- M. Saunders, P. Lewis, and A. Thornhill. *Research Methods for Business Students*. Pearson Education Limited, 2015. ISBN 9781292016627.
- R. T. Sparrowe, R. C. Liden, S. J. Wayne, and M. L. Kraimer. Social networks and the performance of individuals and groups. 44:316–325, 2001.
- C. Stummer, D. Kundisch, and R. Decker. Platform launch strategies. 60:167–173, 2018. doi: 10.1007/S12599-018-0520-x.
- T. Teubner. Journal of systems and information technology. *Strategic Management Journal*, 20(3):262–277, 09 2018. doi: 10.1108/JSIT-11-2017-0104.
- S. Timmermans and I. Tavory. Theory construction in qualitative research from grounded theory to abductive analysis. *Sociological Theory*, 30:167–186, 09 2012.
- K. von Abrams. Global social network users. Technical report, eMarketer, 2019.

Appendix A

Interview Guide

Industry Experts and Employees of companies of the Mini Case Study

- Do you know of any current, specific trends among consumer apps? - What is being produced/ consumed?
- What do you at X do to compete on the app market and attract users? - What made you break through competition and stand out as the winner?
- When did you feel you had a good product market fit?
 What features in the product contributed to reaching it?
- How did X garner initial traction when you first launched the app?
- According to you, what factors affect an apps level of "stickiness"?
- Did you experience, and if so how, that X overcame an inflection point when it comes to critical mass? If so, how was that manifested?
- What factors have been crucial to X growth?
- Based on your experience, what building blocks are key factors for succeeding as a niche social community?
- What typical pitfalls can you think of when launching a social community such as X?
- What strategies do you have for increasing engagement and retaining users?
- Before you had the community and network in place, what was your value proposition back then? If applicable
- How developed was the marketplace business model at the very beginning?
- How did you convert already retained users to make a purchase?

• Could promoting the purchase-functionality to hard damage your relationship with the users?

Ridebrain

- How would you describe Ridebrains business model?
- What is Ridebrains core value offering/ what problem or need do you meet?
- What was the initial idea how was it invented?
 Was the marketplace business model part of the idea from the start or did it developed over time?
- What is the relationship between community and marketplace today?
 - As of today, are you primarily a marketplace or a community?
 - What should Ridebrain be perceived as in the future?
- Can you tell us about Ridebrains strategy to build two platforms, separately but in parallell?
- Have your investors impacted Ridebrain on a strategic level?
 Would the chosen focus be aimed towards the same goal and priority if the investors were somebody else?
- How does Ridebrain differentiate from competitors?What is your unique value propositions towards supply and demand?
- How does Ridebrain attract new users today? Is there any acquisition strategy that is proven to be more successful attracting your specific target group?
- What makes Ridebrain's user return? - For what reason/ in which context?
- How are you planing to convert users to purchasing customers?

Appendix B

Screenshots of Ridebrain's platforms



 $(a) \ Screenshot \ 1 \ of \ the \ Ridebrain \ website$

(b) Screenshot 2 of the Ridebrain website



(a) Screenshot 1 of the Ridebrain app

(b) Screenshot 2 of the Ridebrain app