

Is Green the New Black?

A Study of the Role of Sustainability in Nordic Venture Capital

A Thesis Based on Industry Stakeholder Interviews and a Case Study on Spintop
Ventures' Investment in Worldfavor

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Abstract:

This thesis investigates the role of sustainability in Nordic venture capital. Using stakeholder interviews, the thesis aims to uncover the key drivers behind the industry sustainability momentum. The analysis concludes that the importance of, and commitment to, sustainability in the Nordic venture capital industry has increased strikingly in recent years, especially among general partners. Industry balance has started to shift from institutional limited partners pushing the sustainability agenda to general partners incorporating ESG into their investment theses to a larger extent. However, to what extent ESG is incorporated varies. In addition to regulation, which sets a baseline for sustainability incorporation, the increase in industry sustainability commitments can be attributed to three key drivers: sustainable business opportunities, the concept of future-proofing businesses, and the conviction that long-term financial return and sustainability go together. Challenges remain relating to regulatory changes and industry standardization regarding how to measure and track sustainability data. The thesis case study concludes that the key industry sustainability drivers are exemplified by Spintop's investment in Worldfavor. The investment demonstrates a business opportunity that has emerged from the transition toward a green economy, highlights that sustainability can help future-proof a business, and illustrates that economic viability and sustainability can coexist.

Keywords: Venture Capital, Sustainability, ESG Investing, Impact Investing, Case Study

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List of Abbreviations

ARR	Annual Recurring Revenue
AUM	Assets Under Management
CFP	Corporate Financial Performance
CSR	Corporate Social Responsibility
ESG	Environmental, Social, Governance
GP	General Partner
IPO	Initial Public Offering
IRR	Internal Rate of Return
KPI	Key Performance Indicator
LP	Limited Partner
LPA	Limited Partnership Agreement
MoM	Money-on-Money Multiple
UN PRI	United Nation's Principles for Responsible Investing
SaaS	Software as a Service
SDGs	Sustainable Development Goals
SRI	Socially Responsible Investing
TEV	Total Enterprise Value
VC	Venture Capital

Definition of Concepts

Concept	Definition
ESG Investing	A strategy where the investment decision is based on environmental, social, and governance factors as well as financial factors.
Green Economy	A resource-efficient, low carbon, and socially inclusive economy.
Impact Investing	A strategy of investing in companies or projects that aim to create measurable positive environmental and/or social impact as well as financial returns.
Socially Responsible Investing	Applying negative screening in order to actively avoid investing in companies the investor believes have negative effects on society or the environment.
Sustainability	The UN defines sustainability as “ <i>meeting the needs of the present without compromising the ability of future generations to meet their own needs</i> ”.

Source: MSCI, UN Environment Program, Pitchbook, S&P Global, United Nations

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1. Introduction

Sustainable development is becoming more important by the day due to global challenges such as environmental degradation, poverty, and inequalities. In 2015, all member states of the United Nations adopted the 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs) (UN Department of Economic and Social Affairs, n.d.). To achieve the agenda targets, investments in sustainability projects and businesses are needed. Market opportunities of some \$12 trillion have been estimated to be involved in achieving the SDGs (Business & Sustainable Development Commission, 2017). This opens opportunities for public and private investors to invest in accordance with the SDGs in order to achieve financial return as well as environmental, social, and governance (ESG) goals. One example of such investors is venture capital (VC) firms.

Globally, venture capital allocated to ESG-committed funds has increased significantly in recent years (Preqin, 2020). A survey conducted by the UN Principles for Responsible Investment (PRI) investigating sustainability commitments among venture capital signatories found the main drivers for ESG implementation to be senior leaders and employees of the venture capital firm caring about sustainability, and the belief that ESG improves the risk-return profile of a company (Dunbar & Leitner, 2022). Sustainability commitments are particularly strong in the Nordics and other European countries, where the topic of investing for impact in accordance with ESG principles has gained momentum in the venture capital industry in recent years (+impact by Danske Bank, 2021). To better understand what is fueling this industry development and what role venture capital can play in the development of more sustainable companies more research is required. Through semi-structured interviews this thesis investigates Nordic industry stakeholders' view on sustainability within venture capital, aspiring to uncover the key drivers behind the momentum in sustainability commitments in the sector. What stakeholders are pushing the sustainability agenda? Do stakeholders believe that sustainable investments enhance or compromise financial return?

On a global scale, venture capital is lagging other financial market participants in the adoption of ESG principles (Lenhard & Winterberg, 2021). This can partly be explained by five barriers to ESG incorporation. (1) venture capitalists invest in early-stage companies with limited resources to spend on ESG, (2) they are minority owners with limited influence over the venture, (3) the venture capital business model is one where up to 75% of investments fail which makes stakeholders question the value of ESG-focus, (4) there is a lack of transparency

and disclosure of data in the industry, and (5) the industry lacks guidance, common metrics and frameworks for ESG data tracking and reporting (Dunbar & Leitner, 2022). Despite this, the Nordics have seen an increase in sustainable investments in the venture capital sector, and in 2020 about a third of total Nordic venture capital was directed toward impact investments (+impact by Danske Bank, 2021). Against this backdrop, the first topic and research question of this thesis is the following:

1. *How is sustainability viewed by stakeholders in the Nordic venture capital industry, and who is pushing the sustainability agenda?*

Last year Sweden saw a record amount of cash targeting ventures that address at least one of the 17 SDGs (Daly, 2021), and in a survey by The One Initiative (2020) 88 percent of Nordic early-stage investors said that impact investing is very important to them. To understand the drivers behind the sustainability momentum in Nordic venture capital, the second research question of the thesis is:

2. *What is driving an increasing number of Nordic venture capital firms to incorporate sustainability into their investment practices?*

One venture capital firm which has emphasized ESG since its founding in 2009 is Swedish Spintop Ventures (Spintop). However, it was not until almost ten years later that the firm started formalizing the way that sustainability is addressed throughout its investment and ownership process. In a November 2019 seed round, Spintop acquired a minority stake in the Swedish software as a service (SaaS) company Worldfavor which provides a platform for ESG data reporting. Since the investment, Worldfavor has increased its product offering, expanded its team, and grown its global presence. In 2022, Worldfavor is looking to raise a series A round to support its continued growth and mission to make sustainability mainstream. In recent years, many of Spintop's peers have also solidified the ways in which they work with sustainability in their investments. Spintop's investment in Worldfavor provides a case study of how one venture capital firm is investing in accordance with the opportunities that arise from the transition toward a green economy, and the third research question is the following:

3. *How are the industry sustainability drivers, recognized by stakeholders, at play in Spintop's investment in Worldfavor?*

1.1. Contribution

The present thesis contributes to the existing yet limited research on the topic of sustainability within venture capital. The purpose of this thesis is threefold. First, the paper highlights how Nordic industry stakeholders view sustainability and sustainable investments in venture capital. To provide a balanced analysis, the thesis includes the perspectives of general partners (GPs) and limited partners (LPs) alike. Second, the thesis aims to uncover which factors the interviewees believe are the main drivers behind the sustainability momentum in the industry. Third, the case study of Spintop's investment in Worldfavor aspires to provide a tangible example of an investment where many of the sustainability drivers highlighted by the industry stakeholders are present. Our hope is that the thesis case study is used for educational purposes by the Stockholm School of Economics as, in our opinion, sustainability within a venture capital context is underrepresented in the available academic courses. Thus, the Worldfavor investment provides a case study which can serve to present students with an example of a sustainable venture capital investment in order to provide a basis for further discussion about the role of sustainability within the venture capital industry.

1.2. Delimitations

The scope of the present thesis is limited to support the research questions and contributions presented in the sections above. Hence, the thesis does not aim to answer other questions, such as whether sustainability seems to have been incorporated by venture capital firms on a global level or if incorporating sustainability into the investment process is a good or bad strategy for a venture capital firm. Due to confidentiality, some of the data on which the case study analysis is based cannot be disclosed. Moreover, because of the confidential nature of private markets along with the fact that none of Worldfavor's closest peers are publicly traded, any discussion about Spintop's unrealized financial return to this point remains hypothetical.

1.3. Overview of Results

First, the thesis finds that in recent years, stakeholders in the Nordic venture capital industry have increasingly started to emphasize the importance and value of sustainability. Moreover, while LPs have previously been pushing the sustainability agenda, GPs are starting to incorporate sustainability into their investment processes to a larger extent. That a growing number of GPs have started seeing the value of sustainability seems to be a key factor behind the industry sustainability momentum. However, to what extent sustainability is considered by

GPs varies from compliance to impact focus. Second, in addition to regulation which provides a baseline for how to consider sustainability, three main drivers behind the sustainability momentum in the industry are recognized. Those drivers are the business opportunities that the transition toward a green economy brings, the belief that integrating sustainability is a way of future-proofing businesses, and the conviction that sustainability and long-term financial return go hand-in-hand. Challenges that remain are to stay current with the rapidly changing regulatory environment and to develop a standardized way to measure, track, and compare ESG data. Third, the thesis finds that the recognized key industry sustainability drivers are embodied by Spintop's investment in Worldfavor. The investment showcases that economic viability and sustainability must go together in venture capital, exemplifies a business opportunity that has arisen from the transition toward a green economy, and displays that sustainability integration can help future-proof a business through, for instance, attracting employees, customers, and investor capital.

1.4. Thesis Outline

The remainder of this thesis is structured as follows. Section two presents previous literature from the fields of finance, sustainability, and venture capital. In section three the research methodology is described and discussed. Section four provides an overview of the Nordic venture capital industry, the regulatory environment, and sustainable investments in venture capital. Section five presents the findings from the conducted stakeholder interviews. In section six, a background to the thesis case study is provided before Spintop's investment in Worldfavor is presented in section seven. Section eight discusses the results and findings from the interviews and case study, and the thesis ends in section nine with some concluding remarks along with the limitations of the study and suggestions for future research.

2. Literature Review

2.1. Sustainability and Finance

2.1.1. Sustainability and Fiduciary Duty

Addressing sustainability issues has become an increasingly important component of business strategy and ESG data is nowadays often expected to be measured, tracked, and disclosed. The E refers to the energy the business consumes and the waste it creates, the S addresses the relationship the company has with society and its employees, and the G refers to internal practices and control systems (Henisz et al., 2019).

In 1970, Milton Friedman argued that “*The social responsibility of business is to increase its profits*”. This long remained the common perception of what fiduciary duty entails. Over time the perception of what the fiduciary duty of businesses and investors is has evolved. John Elkington (1999) coined the term “*Triple Bottom Line*”, which states that businesses should be as concerned with social and economic impact as they are with profits. Hence, businesses should consider three bottom lines simultaneously: profit, people, and planet. Similarly, Lydenberg (2014) makes a distinction between rational and reasonable fiduciary duty where the former is only concerned with financial interests and the latter focuses on how the whole system or society can benefit while also generating a strong financial return. The main point of his paper is that investors need to consider both to make investments successful in the long-term (Lydenberg, 2014).

2.1.2. Sustainability, Risk, and Reputation

ESG and corporate social responsibility (CSR) are predominantly used as risk mitigation tools rather than sources of abnormal return. A recent study by Karwowski and Raulinajtys-Grzybek (2021) shows statistically significant correlation between CSR action and risk, where the former is used to mitigate ESG and reputational risks. Similarly, Orlitzky & Benjamin (2001) found a risk-reducing relationship between corporate social performance and risk. In addition to mitigating risk, in a 2021 survey, reputation was named the primary driver for ESG investments and strategies (Battistella, 2021). In the same survey, almost half of the respondents highlighted the lack of a standardized reporting system as the biggest challenge for successful ESG disclosure (Battistella, 2021). On a similar note, Crifo et al. (2015) did an experiment among venture capital and buyout investors to find out what impact good versus bad ESG disclosures would have on their investment decisions. They found that although companies with good ESG practices do not become more attractive to private capital investors, those that showcase bad ESG practices become significantly less attractive, and thus have limited access to private equity.

2.1.3. Sustainability and Return

Empirical evidence on the relationship between sustainability and financial performance is ambiguous but seems to point to a positive relationship between the two. While corporate wrongdoings have negative implications for financial performance, there is only a small positive correlation between ESG performance and financial performance (Margolis & Elfenbein, 2008). However, a 2015 meta study of more than 2000 previous academic studies

finds a positive relationship between corporate social responsibility (CSR) and corporate financial performance (CFP) and arrives at the conclusion that long-term responsible investing should be important for all rational investors (Friede et al., 2015). Moreover, a study of the relationship between sustainability investments and portfolio stock returns finds that sustainability investments are not value-destroying, rather the results point to investments in sustainability issues being shareholder-value enhancing (Khan et al., 2016). In addition, there seems to be a positive relationship between ESG score and resilience in times of economic downturn. During the first phase of Covid-19, high ESG scoring European companies outperformed their peers with low ESG scores (Pizzutilo, 2021). Furthermore, in a recent survey 83 percent of respondents, consisting of investors and C-suite leaders, expect ESG efforts to contribute to more shareholder value in five years compared to today, and indicate a willingness to pay a median merger and acquisition (M&A) premium of some ten percent to acquire a company with a positive ESG record over one with a negative record (Deleivingne et al., 2020). Additionally, Barber et al. (2020) found that venture capital investors are willing to forego higher returns for non-monetary aspects of investments. In their willingness-to-pay analysis, the authors reach the conclusion that limited partners are willing to accept 2.5 percentage points to 3.7 percentage points lower internal rate of returns (IRR) ex-ante to create positive impact in society by investing in impact funds. One study that points to a negative relationship between financial return and sustainability is Blitz and Swinkels' (2021) research which shows that excluding sin stocks in trading strategies, that is stocks with low ESG score and high ESG risk, compromises financial return. In fact, such a strategy can lower expected return by 0.25 percent to 0.5 percent.

2.2. Sustainability and Venture Capital

2.2.1. Sustainable Investments

Responsible, or sustainable, investing can be divided into three categories: socially responsible investing (SRI), impact investing, and ESG investing (Caplan et al., 2013; appendix section 11.1). The authors generally classify the first two as value or mission driven, while the latter is used to improve performance. More specifically, Sandberg et al. (2009) defines SRI as *“the integration of certain non-financial concerns, such as ethical, social, or environmental, into the investment process”*. Impact investing is defined as investments made with the intention to generate positive and measurable impact as well as financial return (Global Impact Investing Network, n.d.). Leins (2020) describes ESG investing as an investment process which

considers non-financial, ESG data alongside traditional financial and economic data as the basis for the investment decision. Thus, the three investment categories can be viewed as having ESG as an ethical guide, having measurable ESG impact, and using ESG data to make decisions and create value.

2.2.2. Venture Capital and Sustainable Entrepreneurship

Entrepreneurship has started to become increasingly recognized as a major driver for the development of more sustainable processes and products (Hall et al., 2010). Sustainable entrepreneurship capitalizes on opportunities that arise from market imperfections and aims to generate profits as well as to improve environmental and social aspects of society (Cohen & Winn, 2007). Green startups, targeting environmental issues, have increased significantly in numbers in recent years (Demirel et al., 2019), and venture capital firms play a key role in supporting entrepreneurs and growing new businesses (Bocken, 2015). In his research, Bocken finds that venture capitalists believe that opportunities arise from sustainability challenges, and that venture capitalists with a sustainability focus can play an important role in helping to prove the viability and success of sustainable business formats by providing financial and network support as well as business advice related to the triple bottom line (Bocken, 2015). Cheng et al. (2014) further argues that sustainability, in the shape of CSR reporting which increases data availability and quality, can reduce information asymmetries between a firm and its investors. Despite recognizing the importance of ESG principles, venture capital is lagging other industries in adopting ESG practices as only five out of the world's top 50 venture capital firms mention a commitment to ESG or sustainability on their website (Lenhard & Winterberg, 2021).

2.3. Venture Capital Theory

2.3.1. The Venture Capital Business Model

Da Rin et al. (2013) defines venture capital as “*professional asset management activity that invests funds raised from institutional investors, or wealthy individuals, into promising new ventures with a high growth potential*”. Venture capitalists are important intermediaries in the world's financial markets, with the main purpose of providing capital and support to small, young businesses that need access to financing to grow (Gompers & Lerner, 2001).

Venture capital firms are organized as partnerships. When making investments into portfolio companies, the venture capital firm starts off by raising money from institutional investors and wealthy individuals through investment vehicles, referred to as funds (Da Rin et

al., 2013). The relationship between the two parties is contracted as a partnership, referred to as a Limited Partnership Agreement (LPA). The partners of the venture capital firm are responsible for the active management of the fund, which gives them unlimited liability, and the fund investors receive limited liability as they are not participating actively in the daily operations. The typical lifetime of a venture capital fund is ten years, during which the GP invests capital into portfolio companies that it believes can generate attractive financial returns (Da Rin et al., 2013). While the goal is usually to exit a portfolio company within seven years of the investment, holding periods can be longer and fund lifetimes can be extended by a couple of years (Kenney, 2011). Venture capitalists have several available exit routes. The most frequent ways of exiting is through the company being acquired by a strategic or financial buyer, an IPO, or if the company fails (Da Rin et al., 2013).

For the work and effort that they provide, the GP charges the LPs a 20 percent carried interest on sale proceeds exceeding the committed capital inclusive of hurdle rate (Metrick & Yasuda, 2011). In addition, the GP also annually charges the LPs a percentage of total committed capital, referred to as the management fee. This fee is typically 2 percent (Metrick & Yasuda, 2011)

2.3.2. Value Creation in Venture Capital

Apart from providing capital to novel companies in exchange for an equity stake, venture capitalists also perform several value adding activities which are aimed at maximizing firm value and hence the GP's ownership stake (Kaplan & Lerner, 2010). These value-adding activities are screening, constructing contracts, and providing monitoring and support. The screening and deal-selecting process is extensive and time-consuming (Kaplan & Lerner, 2010). Amit et al. (1998) describes venture capitalists as specialists at evaluating new ventures, in order to decide which companies have the highest probability of becoming successful. A second skill of venture capitalists is to design contracts that increases the possibility of a successful investment outcome (Kaplan & Lerner, 2010). Two concepts that are often mentioned as important to consider for venture capitalists are adverse selection and moral hazard. These arise from information asymmetries between the entrepreneur and the GP, which are inherent in the venture capital sector (Macintosh, 1994; Amit et al., 1993). To tackle these asymmetries, venture capitalists construct detailed contracts that are both intended to incentivize the entrepreneur to perform and to limit the investor's risk (Kaplan & Lerner, 2010). If the venture fails to reach its targets, GPs also often have anti-dilution clauses in place that protects them from potential down rounds (Stevens, 2012), which can dilute the entrepreneur's

stake but keeps the venture capitalist's stake constant. Thus, an entrepreneur that wants to keep a relative size of the firm will need to meet agreed-upon targets (Gompers & Lerner, 2001; Stevens, 2012). Venture capitalists also aim to create value and improve the outcome of their investments through extensive monitoring and aiding of their portfolio companies (Kaplan & Lerner, 2010). Monitoring often means taking a seat on the board of directors and occasionally replacing underperforming founders (Lerner, 1995). Aiding activities include assisting the company with business strategy, recruitment, and introductions to experts from the venture capital firm's network (Kaplan & Lerner, 2010).

2.3.3. Venture Capital and Startup Valuation

The valuation of a startup is often considered to be more art than science (Köhn, 2017). In order to understand the underlying drivers of startup valuation Köhn (2017) has performed a review of existing empirical literature. In his paper he finds that startup valuations in a venture capital context are shaped by an interplay of factors related to the startup itself, the venture capitalist, and the external environment surrounding the two. Similarly, Miloud et al. (2012) find that venture capitalists' valuation of a startup is positively affected by the quality of the venture's founders and top management team, the industry attractiveness, and the startup's external relationships. The effect on startup valuation of these qualitative factors is significant. Miloud et al. (2012) also further discuss the complexity of valuing new ventures. As the most commonly used techniques for valuations in corporate finance, such as discounted cash flow models, are assumption-heavy and require extensive accounting information, their applicability is limited when valuing startups. Both entrepreneurs and venture capitalists have thus oftentimes found themselves frustrated by the amount of variance between valuation methodologies. Due to this complexity, in addition to being largely influenced by qualitative factors, previous research indicates that venture capitalists often apply valuation methodologies based on multiples (Wright & Robbie, 1996).

3. Methodology

3.1. Empirical Methodology and Research Design

Due to the exploratory nature of the first two research questions of this thesis an inductive qualitative research method was selected (Eisenhardt, 1989). We adopted a positivist view of research as we aim to establish regular and causal relationships between different elements of social phenomena in order to develop testable hypotheses (Marsh & Furlong, 2002; Eisenhardt,

1989). Similar to Bocken (2015) interviews were used as the core element of our research. Additionally, public, and private data has been used to further quantify our analysis. Alan Bryman (1989) wrote that “*the combination of qualitative combined with some quantitative data can contribute to a better understanding of different aspects of the same phenomenon*”. We believe that the predominantly qualitative, descriptive approach was appropriate for our study due to the scarcity of previous research and ambiguous nature of our topic which makes it difficult to collect data using a solely quantitative methodology.

Similarly, an inductive case study methodology was selected to answer the third research question. Since there is limited previous research on the chosen topic, a case study methodology was deemed appropriate (Eisenhardt, 1989). The case study process is highly iterative since it involves constant iteration back and forth between process steps, and the research question was redefined during the process as more data was collected (Eisenhardt, 1989). In accordance with Eisenhardt (1989) multiple data collection methods were used, including interviews, and collecting company information and data. Analyzing one single investment case was chosen over several since it has been argued that focusing on one can provide a deeper understanding of the selected topic than conducting multiple case studies (Gustafsson, 2017).

3.2. Data Collection

To answer the research questions, interviews have been used as the primary source of data. Following Merriam (1994) the interviews were conducted using a semi-structured approach. As such, an interview template was prepared before the interviews and the interviewee was sent the main questions at least one day prior to the interview (appendix table 11.2.2). While this semi-structured approach allowed all interviews to follow a similar structure, it also gave room for ad-hoc follow-up questions when suitable. Thus, no two interviews were the same, which allowed the interviewers to dive deeper into different facets of sustainability in venture capital, depending on each interviewee’s individual interest, knowledge, and expertise.

The focus of this thesis is three-fold, that is investigating how sustainability is viewed within Nordic venture capital, understanding what factors are influencing that view, and conducting a case study on Spintop’s investment in Worldfavor. A total of 13 interviews were conducted. To provide a holistic view of Nordic venture capital stakeholders’ view on sustainability, both GPs, LPs, and a representative from the Swedish Private Equity & Venture Capital Association (SVCA) were interviewed. Purposive sampling was used to ensure that the

sample of interviewees was relevant for the research questions at hand (Robinson, 2014). The Nordic venture capital field is relatively small, and many stakeholders know each other. Hence, similar to Bocken (2015) snowball sampling was used to an extent, where some interviewees suggested other stakeholders to add to the list of interviewees. More GPs than LPs were interviewed which can on the one hand be seen as a limitation to the thesis, but, on the other hand, this selection reflects the fact that the research questions were more concerned with GPs than LPs' sustainability practices. For the case study, interviews were carried out both at the investor and portfolio company level. An overview of all interviewees can be found in appendix section 11.2.

In addition to the interviews, public and private data has been used to further contextualize the venture capital industry and the case study. The public data has been collected from data providers and industry reports. A list of the sources of public data can be found in the references section. The private data has been collected from the case study subjects.

3.3. Research Quality

Yin (2014) points out that the case study method has been criticized historically for being prone to biases and not being rigorous enough. Therefore, it is important to consider validity, reliability and ethics when evaluating a qualitative study from a research quality perspective.

Yin (2014) argues that to attain high validity when using a case study methodology, the research should be tested through construct, internal, and external methods. The construct validity test ensures that the case study has led to an accurate observation of reality. To make sure that the construct validity of our case study is high, we have used several different data sources such as interviews, private, and public data. Internal validity covers the causality of the case study and the ability to draw causal conclusions from it. Yet again, the use of several data sources can help strengthen the internal validity, through what Merriam (1994) refers to as triangulation of data. External validity refers to whether the results from the study can be generalized beyond the study itself (Yin, 2014). Since the study is qualitative, it is not possible to achieve any statistical significance, but this is also not the aim of the study. However, building theory from a case study is a bottom-up approach aiming to produce generalizable results, and tying the results to existing research and literature will improve the generalizability of the study (Eisenhardt, 1989).

The reliability test has the objective of making sure that the results can be replicated at a separate time, if the same method and procedures are repeated (Yin, 2014). To increase the

likelihood of another researcher being able to replicate the study, all the conducted interviews have been well documented and transcribed in close connection to the date of the interviews. In addition, both researchers have been present in every interview, to decrease the risk of bias and minimize subjectivity. However, it cannot be concluded that the case study is replicable, since the interviewees might have been affected by the time passed since the events discussed, as well as the settings of the interviews.

Research ethics, defined by Saunders et al. (2012) as the behaviors and standards that guide how the researcher conducts herself in relation to stakeholders affected by the research, must also be considered in a qualitative study. Ethical concerns have been taken into consideration throughout the process of writing this thesis, as every interviewed stakeholder has been well informed about its purpose, and interview quotes have only been used after receiving consent from the interviewees.

4. Sustainability and the Nordic Venture Capital Market

4.1. The Current State of the Nordic Venture Capital Market

The Nordic venture capital market has grown at an impressive rate throughout the 2010s. In 2021, total deal value reached €11.89B which represents a massive year-on-year increase of 110.1% over the previous record year of 2020 (Pitchbook, 2022). To put these numbers into perspective, venture capital deal value in the Nordic region had never exceeded €1B prior to 2015. The substantial growth can to an extent be attributed to some enormous rounds raised by a number of prized unicorns from the Nordic region. In 2021 alone, the Sweden-based battery manufacturer Northvolt and FinTech company Klarna both raised substantial rounds of \$2.75B and \$1B respectively (Northvolt.com, 2021; Klarna.com, 2021).

Venture capital was substantially affected by the Covid-19 pandemic, and exit activity showcased a significant downturn in 2020 compared to the levels of 2019. The total value of venture capital backed exits in the Nordic region decreased by €0.1B, as many exits were put on hold or pushed to 2021, mostly due to a mismatch in valuation between buyers and vendors (Pitchbook, 2022; Argentum.no, n.d.). However, Nordic exit value quickly bounced back in 2021, and reached a total value of €8.9B, a fourfold increase from the lows of 2020 (Pitchbook, 2022). While 2020 was a quiet year for venture capital fundraising, 2021 reversed the trend and total fundraising reached €1.7B in the Nordics, second only to 2019 in terms of all time high fundraising levels (Pitchbook, 2022). Further data on venture capital deal size, exit activity, and fundraising is presented in appendix section 11.3.

Looking at performance, the Nordic venture capital sector has outperformed its public market equivalents in the last two decades (NVPI, 2020). The Nordic Venture Performance Index (NVPI) includes 10 venture capital firms, 43 funds, and 835 portfolio companies, and covers the period 2000 to 2020. The net IRR for the period, measured as unrealized net return, was 18.2 percent for Nordic venture capital compared to 14 percent for the Nordic Small Cap Index and 15.1 percent for the Nasdaq 100 (NVPI, 2020). Moreover, analysis points at a higher final net IRR of some 24 percent once current funds have been liquidated and considering the effect of the venture capital fee structure (NVPI, 2020).

The future of the venture capital industry in the Nordics shows signs of optimism. The startup infrastructure, such as incubators, accelerator programs, and co-working spaces, is already in place. Deal activity has been surging for several years, and that trend is only expected to continue, as investments from other regions such as the United States has started to increase in the last couple of years (Pitchbook, 2022). As capital continues to flow into Nordic venture capital funds, venture capitalists are expected to continue to deploy capital into the flourishing local startup scene.

4.2. A Changing Regulatory Environment

New guiding sustainability principles and regulations have been introduced in recent years, especially in the European Union. 96 percent of global sustainable finance policies have been developed since the year 2000, and the pace is continuously increasing (UN PRI, n.d.). To better understand the regulatory environment that financial investors operate within, three regulations and policies need to be introduced.

First, the Sustainable Finance Disclosure Regulation (SFDR), announced in 2018 and intended to fully enter into force in January 2023, is the EU's first regulation aiming to redirect capital toward more sustainable investments. The regulation is intended to increase transparency and disclosure in the financial services industry (European Commission, n.d.). Disclosure obligations have been put in place in relation to sustainability risk integration and adverse sustainable impact matters for participants in financial markets (European Commission, n.d.). Moreover, a new classification system has been put in place where funds are labeled under Article 6, 8, or 9 of the SFDR. Article 6 funds do not integrate sustainability into their investments, Article 8 funds are considered environmentally and socially promoting and following good government practices, and Article 9 funds are targeting sustainable investments (Robeco, n.d.; Appendix figure 11.4.1).

Second, the EU Taxonomy, which entered into force in July 2020, is a classification system intended to provide policymakers, investors, and companies with definitions of which economic activities should be considered environmentally sustainable (European Commission, n.d.). The EU Taxonomy could play a critical role in implementing the European Green Deal and scaling up sustainable investments in the EU. In short, the EU Taxonomy is intended to help companies to become more sustainable, protect investors from greenwashing, and shift investments to activities where they are most needed (European Commission, n.d.).

Third, the UN PRI are principles for responsible and sustainable investing. By signing and implementing them, investors are contributing to the development of a more sustainable financial system (UN PRI, n.d.). Signatories recognize the responsibility to act in the long-term best interest of their beneficiaries, and that portfolio performance can be affected by ESG issues. Applying the PRI will also better align investors' interests with the broader interests of society (UN PRI, n.d.). Venture capitalists have been lagging other investors in signing the PRI, but, over the last year the PRI has seen an increase in venture capital signatories and will increase its efforts in the industry to further the implementation of sustainability (Dunbar et al., 2021).

4.3. Sustainable Investments in Venture Capital

Capital allocated to ESG-committed venture capital funds has increased steadily in recent years. In 2020, \$18.6B of global venture capital assets under management (AUM) was allocated to ESG-committed funds, which represents an increase by three times compared to 2018 (Preqin, 2020; Appendix section 11.5). Total global venture capital AUM was \$1.24 trillion in mid-2020 (McKinsey & Co., 2021). More funds being directed to sustainable investments in private markets overall, has also given the industry more robust data evidence that can help challenge the previous notion of a potential trade-off between financial return and sustainability initiatives. In an analysis of Preqin Pro data of vintage 2010 to 2017 private capital funds, McGrath (2020) found that impact and ESG-committed funds generated similar returns to those funds that were managed by generalist GPs. In addition to generating just as good returns, impact and ESG-committed funds showed significantly lower variance, which points to a better risk-reward relationship. These results suggest that investors can have confidence in the performance of impact and ESG-committed funds.

Venture capitalists that take a reactive rather than proactive approach to ESG will risk being caught out by regulation (Madzou et al., 2022). Historically, generalist venture capital

firms have predominantly incorporated ESG in their investment processes by applying negative screenings on potential target companies. With increased awareness of the sustainability challenges the world is facing combined with pressure from stakeholders and regulators, venture capital models of sustainable investing have evolved (UN PRI, 2013). Table 11.5.1 in the appendix section provides an overview of the spectrum of investment approaches.

5. Findings from the Industry Stakeholder Interviews

This section contains the results from the conducted stakeholder interviews. Unless otherwise stated, all information presented has been obtained from the interviews. Important to note is that the limited partners interviewed have provided their thoughts on the questions at hand strictly as independent investors in the industry and not as limited partners in the funds of the interviewed general partners. Please refer to appendix section 11.6 for more information about the firms represented by the interviewees.

5.1. The Recent Evolution of Sustainability in Nordic Venture Capital

Increasing venture capital attention and investments have been directed toward green growth and impact startups in the Nordics in recent years (+impact by Danske Bank, 2021). That the focus on and importance of sustainability for venture capitalists has increased significantly over the last couple of years is echoed by all the interviewed GPs, of which a large majority have formalized their sustainability processes by implementing sustainability policies, sustainability assessments, and sustainability KPI tracking in their recent funds. Typically, ESG is incorporated as an integral part of the pre-investment screening and due diligence phases where each component of E, S, and G is assessed thoroughly before an investment decision is made. However, to what extent and how sustainability is considered varies between GPs, and the approach varies from traditional investment strategies without a focus on sustainability to ESG integration and impact investing. Norwegian Momentum is one example of a venture capital firm that has gone from little focus on ESG to investing for impact as well as financial return when they raised their second fund in 2020. In addition to ESG due diligence, Momentum also conducts an impact assessment as part of the pre-investment evaluation.

“In the first fund, we always said we wouldn’t do oil and gas investments, which is a big part of the business activities in Norway. We took that stand early on, but other than that we were quite agnostic and didn’t put a lot of emphasis on ESG I would say. Then for our second fund

the process matured a bit for us. We focused on the ocean industries with a particular emphasis on sustainability-related opportunities, and at some point, it flipped, so the sustainability agenda became the most important one – within and outside of the ocean industries. Now we say that sustainability is the core strategy of our fund II.” (Hilde Støle Petersen, Managing Partner at Momentum, 25.02.2022)

All three interviewed LPs, which all have sustainability requirements on their GPs, confirm that they have seen many GPs’ sustainability practices improve in recent years. State-owned Saminvest requires that the GPs they invest with have a sustainability policy and that they provide Saminvest with a sustainability report annually. In addition, they always take a seat on the GPs’ Advisory Committee.

“Yes, I think a significant development has occurred over the last two, or maybe three, years where [GPs] have realized that to raise a fund you must have these [sustainability processes] in place regardless of whether the investor is Saminvest or a private investor.” (Åsa Knutsson, CIO Direct Investments at Saminvest, 31.03.2022)

Nysnø Climate Investments, which is owned by the Norwegian state and has a unique setup as being both a GP and an LP with a mandate to make both direct and fund investments, also highlights that sustainability initiatives have seen an upswing in the last year. The venture capital industry is starting to recognize that it can play an important role in building the companies of tomorrow if the right toolbox is developed.

“In 2021 visible things happened in VC in terms of ESG. You had ESG_VC, Venture ESG and then the UN PRI also launched a venture capital network so obviously those initiatives materialized from something, and that was probably the discussions held all across Europe about what is the role of VCs in scaling companies and new technologies. How can we, even if we are a minority shareholder, use our expertise but also our connection with next generation founders who have integrated sustainability into their business models to join value creation. I think there has been a collective realization that there is a role to play, we need tools to have a role to play, and we don’t have the tools readily available. So, we need to create those tools.” (Lene Elizabeth Hodge, Sustainability Manager at Nysnø Climate Investments, 08.04.2022)

Despite the recent development in the sector the word slow is still often used to describe the development and incorporation of sustainability practices within venture capital. This slow development can on the one hand be explained by the fact that venture capitalists are minority owners with limited influence over their portfolio companies and that both the venture capital funds, and the portfolio companies have limited resources, which means that it can be difficult to prioritize sustainability at the early stages of a venture's growth journey. On the other hand, sustainability in the sector has historically been driven by the large, institutional LPs, and since LPs' demand for venture capital fund investments has exceeded the supply, the industry development has to a large extent been dictated by the venture capital funds.

“At the same time, I see that one of the largest obstacles for it [the sustainable development] to happen quickly is that there is such high demand from the LP side to invest in VC, where demand has surpassed supply for quite a few years. This means that LPs to a large extent are takers of investment terms and GPs can choose which investor they accept, which I think can easily lead to them choosing investors that do not have hard demands and this makes the development a little slower than it could have been otherwise. I think this is one of the reasons why the development is slow, but I only see opportunities for everyone in the ecosystem to improve.” (Hanna Idestrom, Senior Portfolio Manager Alternative Investments at AP4, 29.03.2022)

Venture capital is built on a model of active ownership which means that governance is one of the first things a venture capital investor improves when it invests in and joins the board of directors of a startup. In terms of how sustainability within the Nordic venture capital field has developed in recent years, focus has therefore been more on social and environmental aspects. In terms of social aspects, all the interviewed LPs and GPs emphasize the importance of gender diversity. Gender balance is one of two metrics GPs must report on for their portfolio companies, together with revenue development, to their LPs annually. Additionally, venture capitalists have started to recognize the business opportunities that come from the transition toward a green economy and that sustainability is no longer a nice-to-have but a crucial component of a business model to be successful in the long term.

“We are starting to see that ESG is a strong value-driver and not only, you know, communication, marketing and a nice-to-have, but it's imperative.” (Hilde Støle Petersen, Managing Partner at Momentum, 25.02.2022)

Key Takeaways:

- The consensus among a majority of the interviewees is that considering sustainability issues has gone from a nice-to-have to a need-to-have for all stakeholders.
 - All interviewees highlight that the Nordic venture capital industry has seen a substantial increase in sustainability commitments from GPs over the last couple of years. However, sustainability is considered by different stakeholders to different extents, and there are still GPs taking a reactive approach to sustainability.
 - A majority of the interviewed GPs have in recent years adopted a proactive approach to sustainability where they are actively starting to develop the tools needed to implement sustainability into the investment process.
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5.2. A Proactive Approach to Sustainability in Nordic Venture Capital

Having concluded that sustainability is becoming increasingly important to stakeholders in the Nordic venture capital industry, the question then becomes a matter of who is driving the sustainability agenda. In a survey conducted by the European Investment Fund on the topic of ESG considerations in European venture capital investment decisions, 39 percent of the surveyed GPs mentioned that growing demand from LPs is a motivation for taking ESG information into further consideration (Botsari & Lang, 2020). Indeed, that same motivation was notable in a majority of the conducted interviews with GPs, as institutional LPs were recognized by them as truly pushing for an increased focus on sustainability throughout the venture capital ecosystem.

“I believe that many LPs, and especially the larger ones, are first and foremost ensuring that they as a first priority do no harm. I think, and there are always exceptions, but the large majority of at least institutional investors draw quite harsh lines in terms of what they do invest in and what they don’t invest in. It’s always a moving scale, but during my five years I’d say that a lot more have implemented sustainability as a goal. You want to invest in funds and business models that are sustainable in the long-term.” (Peter Carlsson, Partner at Spintop Ventures, 08.03.2022)

This view of institutional LPs as a driver of the increased focus on sustainability in the industry is also shared by the interviewed LPs.

“I would say that just about every fund that comes knocking on our door that is of interest to us has an idea of how to work with this [sustainability]. (...) What we have done is then to inspire them to go from having thoughts regarding how to implement ESG, to make them re-think it and put forth something even better. So, we have had a direct impact on the funds bettering themselves I would say.” (Åsa Knutsson, CIO Direct Investments at Saminvest, 31.03.2022)

While institutional LPs are regarded to be driving the sustainability agenda the balance seems to have shifted from GPs just complying with their investors’ requirements to now working more proactively with sustainability. In the same survey from the European Investment Fund 73 percent of GPs answered that they take ESG matters into consideration when making their investment decisions (Botsari & Lang, 2020). In addition, the implementation of ESG considerations in investment decisions is mentioned as particularly prominent in the Nordics, as well as in France, the United Kingdom and Ireland (Botsari & Lang, 2020). All the interviewed LPs have seen an increase in Nordic GPs’ sustainability commitments.

“The balance [of interest in sustainability] has definitely shifted, to where it is more proactive from the GPs, not as great resistance, and resources are dedicated to it. An increasing number of firms have hired full-time sustainability-focused employees, and it is no longer the case that some employee just puts 20 percent of his or her time toward these questions besides their ordinary role.” (Hanna Ideström, Senior Portfolio Manager at AP4, 29.03.2022)

Even though venture capital is a competitive industry, there are clear signs that firms are taking a unified approach to sustainability, as there is a mutual understanding that collaboration is needed to set standards and have an impact. Not only are venture capital firms discussing sustainability in forums such as the Swedish (SVCA) and Norwegian (NVCA) private equity and venture capital associations, but there is also an interest in sharing knowledge and best-practices across firms.

“Even if you’re not looking into the same deal or you’re not co-invested, the VC funds are still interested in and keen on talking to each other and sharing practices on sustainability. There’s an acknowledgement that everybody needs to collaborate on this. (...) What I can take from this is that it is a competitive industry, so willingness to share on ESG and approaches to that is a welcome development, because it enables everyone to improve their ESG approach.” (Lene Elizabeth Hodge, Sustainability Manager at Nysnø Climate Investments, 08.04.2022)

The sustainability agenda in the venture capital sector also seems to be pushed by entrepreneurs, as they are recognizing and targeting the business opportunities that come from the transition toward a more sustainable economy. Although the startups that venture capitalists invest in are at the early stages of developing their businesses, there are many examples of entrepreneurs who are dedicated and committed to building long-term, sustainable businesses from the start.

“I actually think it’s the entrepreneurs [that are pushing the transition]. All the fantastic entrepreneurs in Sweden and the Nordics are themselves realizing that this is very important and don’t want to take in investors that don’t understand this. (...) Many of the entrepreneurs receiving funding from our funds have started businesses before, so they are proactive, and they see what’s required for them to turn their second business into a more successful one than their first. Sustainability then becomes a natural part of that.” (Åsa Knutsson, CIO Direct Investments at Saminvest, 31.03.2022)

As discussed in section 4.2, the regulatory environment for sustainable investments has evolved in recent years, as among other regulations, the SFDR and EU Taxonomy have been introduced. The consensus among the interviewees is that more regulation is something positive for the venture capital industry. While some interviewees see the increase in regulation as a driver that is pushing stakeholders to start working with sustainability issues, others do not view it as an industry disruptor on its own but rather as one piece of a larger puzzle.

“The big changes happened before the legislation, the market was ahead in terms of these questions. There has been a lot of interest in sustainability questions from both the investors [GPs], but also from the LPs where sustainability is important. (...) So that was already happening. Some of these regulations are more about actually putting a definition into place

in terms of which businesses are considered sustainable.” (Sten Tärnbro, Analyst at SVCA, 22.03.2022)

Key Takeaways:

- Institutional limited partners have historically been the party pushing the envelope on sustainability topics in the venture capital industry.
 - A majority of interviewees recognize that general partners have started to play a bigger role in pushing the sustainability agenda over the last couple of years.
 - Despite being a competitive industry, GPs and LPs are interested in discussing and sharing sustainability best practices, which will help everyone improve.
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5.3. Challenges Arising from the Sustainability Transition in Venture Capital

The shift toward a more sustainability-focused venture capital sector does not come without challenges. As previously mentioned, a common trait for the venture capital sector is that both the venture capital funds and portfolio companies operate with limited resources which means that unlike large public corporations it is still uncommon that general partners or portfolio companies have in-house experts dedicated to sustainability operations.

“We are a very small firm, six people, and we currently have about 30 active portfolio companies and no external resources really. (...) In an ideal world we would have had one person working full time with sustainability.” (Amanda Lindqvist, Investment Manager at Spintop Ventures, 04.03.2022)

The regulatory environment is changing rapidly, and the number of regulations has increased significantly in recent years. On the one hand, staying up to date on the most recent legislation can be challenging and some GPs highlight that the increasing sustainability reporting requirements take time and effort. On the other hand, a majority of the interviewees recognize that the new legislation can help define what counts as sustainable investments and set common industry standards.

“It’s very tempting to talk about the EU taxonomy which I think is a fantastic initiative because someone needs to define once and for all what is a sustainable activity to avoid greenwashing and so on.” (Hilde Støle Pettersen, Managing Partner at Momentum, 25.02.2022)

Despite recent developments in the regulatory environment one challenge remains. How to measure sustainability data in a scientific and correct way. A key metric GPs must report to their LPs for their portfolio companies is gender diversity, which is easily measurable. However, when looking at diversity beyond gender it becomes much more complex. Similarly, defining and tracking metrics on the environmental aspects of a business’ operations is far from a simple task. Measuring the impact of an electric car replacing a car fueled by gas or diesel might seem straightforward but becomes far more complicated when you start looking at what energy source the electricity comes from, or the sourcing of the car battery components. Likewise, challenges arise in defining correct metrics for other sustainable business models, such as how to measure the impact of buying second-hand clothing instead of buying new. Many venture capital funds are starting to measure the CO2 emissions and other environmental metrics of their portfolio companies, to track the environmental footprint of their portfolios, but there is to date no standardized way of measuring, tracking, or comparing data.

“The big challenge here is developing relevant and scientific measurements.” (Åsa Knutsson, CIO Direct Investments at Saminvest, 31.03.2022)

Even though the sustainability data that is being tracked today might not be scientifically correct, an important development the venture capital industry has seen recently is that an increasing number of venture capital firms are starting to track sustainability metrics. Once consistent measurements have been established the development can be monitored and improvement areas can be recognized. This is an important first step toward developing standardized and comparable measurements.

“The most important thing is perhaps not to get an exact number that is scientifically correct, no one has that, not even the large corporations. The important thing is that it is roughly correct and that you are measuring in a consistent way so that you can see the development.” (Finn Persson, Partner & Co-founder at Spintop Ventures, 17.03.2022)

Key Takeaways:

- GPs highlight that while staying up to date on, and compliant with, the latest regulatory changes is challenging due to resource constraints, the consensus is that the regulations help guide and influence the sustainable development in the industry.
 - There is to date no standardized, scientifically correct way to measure and track sustainability KPIs.
 - By defining and measuring ESG KPIs in a consistent way, the development of sustainability data can be monitored, and improvement areas recognized.
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5.4. Opportunities Arising from the Sustainability Transition in Venture Capital

The venture capital industry would not converge toward more sustainable investments if there were not opportunities to capture and capitalize on. Historically, many financial investors have believed that a trade-off exists between doing good and doing financially well. However, an increasing number of entrepreneurs and investors are recognizing that in many instances the two go hand-in-hand and that there are many business opportunities that arise from transitioning toward a green economy.

“Coming from the West coast of Norway in general the ocean industries are very important. (...) We saw more clearly that the big bottlenecks for continuing to do profitable growth from the ocean industries are really linked to sustainability. (...) Similarly for shipping of course it's a very large CO2 footprint of global trade. Taking down fuel consumption goes hand-in-hand beautifully with saving money because that is the biggest cost of any shipping company.”
(Hilde Støle Pettersen, Managing Partner at Momentum, 25.02.2022)

The venture capital business model is built on investments in companies that are at early stages of their growth journeys. This means that unlike large, mature companies that might struggle with the challenges of changing their old business models, venture capitalists can make sure that the companies they invest in have sustainability as part of their business model from the start.

“I think that the larger a company grows the greater the obligations toward all stakeholders. However, the earlier you can incorporate this [sustainability] into your thinking and your vision the better conditions are created for diversified teams, environmentally conscious decision-making, or considering that your customers or users don't end up in bad situations (...). The more you have this in your backbone (...) the better conditions you will have to be a successful company in the long term.” (Peter Carlsson, Partner at Spintop Ventures, 08.03.2022)

That is, incorporating sustainability as early on as possible is a way of future-proofing the company. Having a track-record of sustainability data can be a unique selling point in the future, not to mention that sustainability is likely going to be a prerequisite for future exit opportunities as the importance of being sustainable will likely only increase.

“The reason why we have a rather extensive sustainability reporting is because we are preparing our ventures to grow into large companies. We believe this is valuable information. (...) And exit opportunities, when we conduct our investment analysis, as I am doing now for a company, we list exit opportunities and potential options. I personally don't believe companies that don't have a sustainability agenda will have it easy onwards. Currently, with an unstable market, you have to be prudent and sharpen your competitive edge, and I believe sustainable companies are at the forefront and will have it easier. That is my personal opinion.” (Amanda Lindqvist, Investment Manager at Spintop Ventures, 04.03.2022)

Sustainability is not only important to ensure that companies are competitive and attractive targets in the long-term. Close to all of a company's stakeholders are considering sustainability, and there are two stakeholder groups that are of particular importance for both the general partners and their portfolio companies: investors and employees. Both are required for a company to grow as a new venture needs capital to finance its growth and talented employees to take the venture to the next level. General partners might be the ones deciding which companies get funding and which do not, but the capital they are investing originates from limited partners managing state, pension, or private capital. The larger, institutional LPs in general are particularly concerned with sustainability and will favor GPs with a sustainability agenda. Moreover, growing startups are in need of talented employees. People on the job market have over the years become increasingly concerned with the sustainability efforts of their future employer, and sustainable companies can more easily attract the best talent on the

job market. 64 percent of surveyed millennials have said that they will not accept a job offer if the employer does not have strong values relating to corporate social responsibility (Cone Communication, 2016), meaning that a company with strong sustainability values has a unique selling point in the hunt for the best talent.

"There are two things I usually highlight. The first is that people looking for employment today care about this [sustainability]. The second is that if you are to grow large and attract talented investors, regardless of whether you are issuing new shares or selling existing shares, this [sustainability] will be important to them. So, the large investors so to speak are driven by this [sustainability]." (Hjalmar Didrikson, Partner at Alfvén & Didrikson, 01.04.2022)

Key Takeaways:

- Entrepreneurs and venture capitalists alike are recognizing that there are sustainable business opportunities to capitalize on.
- As venture capitalists invest in companies at the early stages of their life cycles, they can implement sustainability as a core part of their business models from the start. Several of the interviewees refer to this as future-proofing the company and making sure that attractive exit routes are available in the future.
- Also related to future-proofing is that having a sustainable business model facilitates fundraising and recruiting for startups as investors and employees are increasingly emphasizing the importance of sustainability as a factor in their decision-making process.

5.5. The Relationship Between Sustainability and Financial Return

Despite the promising opportunities that come with an emerging sustainability transition in the industry, GPs are still investors with a fiduciary duty to provide adequate returns to their LPs. If the financial returns of sustainable investments aren't sufficient, the LPs will not be able to meet the requirements of their beneficiaries. As such, all the interviewees said that they are not willing to sacrifice financial return for the potential of having net positive impact. In the meantime, the importance of investing responsibly and the pressure on both GPs and LPs to incorporate sustainability considerations into their investment decisions are increasing. Whether or not there is a trade-off between maximizing financial return and investing

sustainably, how to balance between the two, and how to mitigate a possible trade-off, are important topics to discuss in the industry. As a starting point, one general partner mentions that the two must go hand-in-hand. Without economic viability, building a sustainable business model and reaching sustainability targets will not be possible.

“It is sometimes easy to forget when discussing sustainability that having an economic viability is very important.” (Hjalmar Didrikson, Partner at Alfvén & Didrikson, 01.04.2022)

Despite the historical discussion regarding a potential trade-off between sustainability and financial return, all of the interviewed GPs and LPs alike agree that, in the long-term, such a trade-off does not exist and the two have to go hand-in-hand.

“No, I don’t think so [that there is a trade-off], and most people have started to let go of these thoughts once they have seen more data on it. There was a lot of talk about it 3-4 years ago, and we received some questions about it during our last fundraising. (...) I think most people have bought into sustainability as a must and a hygiene-factor, it’s not a choice that comes with a trade-off.” (Finn Persson, Partner & Co-founder at Spintop Ventures, 17.03.2022)

“No [there is no trade-off], I think that if you’re looking to make profitable, long-term investments, they have to be sustainable.” (Åsa Knutsson, CIO Direct Investments at Saminvest, 30.03.2022)

What is mentioned by a couple of the interviewees is that even though there is a strong belief that financial return and sustainability go hand-in-hand in the long-term, there is a possibility that there could be a trade-off between the two in the short-term. Some business models that have not yet become sustainable are still profitable, and companies that are not compliant with E, S, and G aspects can still generate positive bottom-line results. For a venture capital firm, excluding companies from certain sectors could mean missing out on potential attractive returns in the short-term. However, a belief that the interviewees have a unified view on is that the future for businesses that aren’t considering sustainability and incorporating it into their everyday operations could become difficult.

“A company that cannot show that it has a positive sustainability impact will have a very hard time being successful in the long-term.” (Finn Persson, Partner & Co-founder at Spintop Ventures, 17.03.2022)

Related to the debated trade-off between financial return and sustainability is the notion that sustainability can function as a value-adding factor when making investments. The strong demand for sustainable businesses in today's market exceeds the supply, which has led to a valuation premium for impact startups. Thus, the discussion has for some reached a point where it is not only about whether venture capital firms can generate just as good returns through sustainability investments, but whether they might be able to generate superior returns.

“That's what the current data shows, the valuations of successful startups within sustainability developed faster, attracted more financing on higher valuations than tech startups on average. So there currently seems to be a green premium in the market. For instance, Climate Tech such as electrification is a sector that VC is investing in currently. There also seems to be a consumer premium for climate positive products. We see many factors that push for a paradigm shift; policy (regulation), consumers, industry and shareowners demand sustainable alternatives, and successful experienced startup founders and talent are increasingly mission and value driven.” (Katja Bergman, Co-Founder, General Partner at Brightly Ventures, 29.03.2022)

As sustainability becomes mainstream and the supply of sustainable investments increases to the point where it meets the demand, the expectation is that the sustainability premium in the market will fade away.

“I believe that we are now in a paradigm where the demand for sustainable businesses exceeds the supply, and therefore there is a premium, which I think will fade away over time. When one says that sustainability creates value, I think that will be transient. I can't say anything about at what point in time that will happen, but at the moment a company can attract talent and customers because they are better than their competitors, take a premium pricing position, or get access to more capital thanks to standing out from the crowd. I believe that at some point this will even out, and it won't be as much of a clear differentiation.” (Hanna Ideström, Senior Portfolio Manager at AP4, 29.03.2022)

Key Takeaways:

- All of the interviewed stakeholders firmly believe that financial return and sustainability go hand-in-hand in the long-term.
 - In the short-term, some interviewees believe that attractive financial returns can be generated from unsustainable investments. As such, venture capitalists could potentially be missing out on some attractive returns by excluding certain industries.
 - A couple of the interviewed stakeholders recognize that there is currently a valuation premium on impact startups. They highlight that we are currently in a paradigm and that, with time, this premium will fade away.
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6. Case Background: Introduction to Spintop and Worldfavor

Spintop invested in ESG SaaS company Worldfavor in 2019. At the time, Worldfavor was an early player in a market where growth had just started to take off. Now, more than two years later, Worldfavor is raising a Series A round in a market where competition as well as investor attention has increased due to the rising demand for companies trying to solve sustainability challenges. In 2019, Spintop had a strong conviction that this space and company would only grow, now, ahead of the series A, they need to reconfirm their investment thesis and Worldfavor's prospects for future growth. Unless otherwise stated, all information below has been obtained through interviews with Spintop and Worldfavor.

6.1. Introduction to Spintop

6.1.1. The History of Spintop

Spintop was co-founded in 2009 by Finn Persson, Erik Wenngren and Mats Johansson. At the time of founding, all three had been working with ventures for a few years and despite the recent global financial crisis and the uncertainty facing the world's financial markets they all saw an exciting future ahead for early-stage technology companies in the Nordics. The three co-founders had diverse business backgrounds, global networks, and skill sets that complemented each other well, along with a wish to establish a firm together with others rather than each on their own. The trio were introduced by a mutual contact, and after having spent some time discussing their ideas, they decided to start Spintop together.

What started out as a pilot fund with just a few investments, is now a full-fledged venture capital firm with a strong base of investors and a track record of more than 35 investments. While the three founding partners raised and managed the first two funds, Johansson decided to step down after fund II. Two new partners, Sami Niemi and Peter Carlsson joined the firm in 2016 and 2017 respectively. The founders and the new partners already knew each other well, as both Niemi and Carlsson had previously invested in Spintop's funds and been a part of the firm's network of advisors, which today consists of more than 50 successful entrepreneurs and executives from the technology sector. As Spintop's portfolio has continued to grow, so has also the team. Amanda Lindqvist and Isabel Nilson joined the firm as investment managers in 2019 and 2021 respectively. See appendix figure 11.7.1 and appendix table 11.7.1 for a full overview of the Spintop team and a timeline of the firm's major milestones from 2009 up until today.

Spintop is now investing out of its third fund which is approaching the end of its investment period. In early 2022 a fourth fund was established. Fund I is fully divested with the exception of one portfolio company. Fund II is partly divested and on track to deliver a net IRR above 25 percent, and fund III consists predominantly of active investments. Please refer to appendix figure 11.7.2 for Spintop's fund history and appendix table 11.7.2 for an overview of Spintop's third fund including what SDGs each portfolio company contributes to.

6.1.2. Spintop's Investment Process

Spintop's investment process can be summarized in five stages: screening, due diligence, entry, ownership, and exit. As a first step, Spintop encourages entrepreneurs to get acquainted with Spintop, and make sure that there's a good fit between their needs and Spintop's focus and capabilities. Spintop would also like to have been in contact with the entrepreneurs in advance of a potential investment in order to truly get to know the founders. Once the foundation for a good partnership has been established, Spintop evaluates the startup's business plan, including the product or service, market, and financial projections. As part of the screening phase, Spintop also evaluates the sustainability aspects of the venture, including the ventures' potential for positive impact and possible ESG risk factors. If the potential investment, as well as the sustainability evaluation, is deemed to be attractive, Spintop will proceed to give the venture a non-binding offer in the form of a term sheet, which outlines all the terms and conditions of the investment.

Having gone through the steps in the screening phase, along with getting the term sheet signed by both Spintop and the venture, Spintop then proceeds to due diligence. In this part of

the investment process, Spintop confirms that all of the information provided by the venture is correct. As part of the due diligence process, Spintop also further assesses the sustainability aspects of the venture, as that is an important part of the final investment decision. After concluding the due diligence phase a final investment decision is made. The decision is made by Spintop's Investment Committee and must be unanimous.

Once the investment is made, Spintop enters the ownership stage. As an active owner they help the venture to pounce on their opportunities for growth and expansion which includes optimizing the business model and building a company ready to scale domestically and internationally. Growing businesses often need further external financing, and it is part of Spintop's business model to participate in subsequent financing rounds for startups they see a bright future for, typically alongside other co-investors. Although Spintop invests for the long-term, and often remains an active owner for five to eight years, they ultimately want to exit their investments. Typically, the venture is sold to a strategic buyer, acquired by a later stage investor, or listed on the stock market through an IPO. Please refer to appendix section 11.8 for an overview of Spintop's investment process.

6.1.3. Spintop's Sustainability Policy

Sustainability is a core component of the Spintop investment process today and has been on the agenda ever since the first investment was made in 2010. However, the focus on sustainability has increased in the last few years and Spintop's sustainability practices have been formalized following the launch of the third fund in 2018. The investment team at Spintop believes that value creation and sustainability go hand-in-hand and therefore assessing companies from a sustainability perspective is an integral part of evaluating a potential investment. In addition, the team emphasizes the importance of measuring, tracking, and following up on sustainability KPIs as well as financial KPIs for all portfolio companies as well as for their internal business.

"A strength of ours is that we measure a lot, and you could say that our internal mantra is that "what you measure you can change and improve"." (Amanda Lindqvist, Investment Manager at Spintop Ventures, 04.03.2022)

Spintop's sustainability policy is informed by, and supportive of, the UN PRI, the EU SFDR, and the 17 SDGs. The SDGs are an integral part of Spintop's sustainability practices, and the company has decided to focus on three key SDGs where Spintop and its portfolio companies

together can have the most impact. These SDGs are number 5 Gender Equality, number 8 Decent Work and Economic Growth, and number 13 Climate Action. Several parameters related to each of the three goals are evaluated pre-investment and measured and reported on post-investment. Further details on Spintop's chosen SDGs can be found in appendix figure 11.9.1. How Spintop integrates sustainability in the investment and value creation process is further outlined in appendix figure 11.9.2.

The sustainability data is since late 2019 reported through the portfolio company Worldfavor's sustainability platform. The investment in Worldfavor induced Spintop to start using its sustainability data reporting software which has contributed to a more formal and structured data collection and reporting process. The sustainability data the portfolio companies are reporting quarterly is compiled into a quarterly sustainability report and shared with all portfolio companies. This transparent use of data allows for benchmarking over time as well as peer reviews. Any deviations in the data are addressed and followed up on. Through facilitating sustainability data reporting and sharing, Spintop aims to increase transparency.

"We want to drive change and facilitate driving change (...). I believe that finding ways to follow up on our own operations and the operations of our portfolio companies provides transparency, and I believe that this transparency is what eventually will drive change." (Peter Carlsson, Partner at Spintop Ventures, 08.03.2022)

6.2. Introduction to Worldfavor

6.2.1. The History of Worldfavor

Worldfavor's story started more than ten years ago but as a different idea than the business it is today. The first iteration of Worldfavor was in fact CEO Andreas Liljendahl's university thesis, which focused on exploring helping individuals make more sustainable choices. Liljendahl teamed up with Lars-Peter Eriksson, who he knew well from his hometown Bollnäs, and Pär Gustafsson, who was regarded as the best coder in his class at university. Not long thereafter, Frida Emilsson was added to the team and the founding quartet was complete. Worldfavor started out as a fun, exploratory project, which later led the founding team to the business idea that is the company today. Please refer to appendix section 11.10 for the founding team's biographies.

An early iteration of the business was launched in 2013 and was a website where consumers could search for companies and review their sustainability profile. Many people

signed up to follow companies on the website, and a few companies started uploading their sustainability profiles, but most importantly companies started requesting help from Worldfavor to get the data they needed to create their sustainability profile. This made the founders arrive at an important insight. The companies did not have, or know how to get, the required sustainability data which meant that it was too early to create a meeting point for sustainability data sharing. This realization made the founders pivot from a consumer focus to a company focus, and the team started building solutions for individual companies. One of the first companies Worldfavor started working with was Folksam. After building a few individual company solutions the founders started seeing that these were solutions needed by the many, and they started exploring a software as a service solution. After deciding to go all in on the SaaS business idea the founders rented a two-room apartment in Råcksta outside of Stockholm which was both the founders' office and home for about two years. In 2016, the first version of the Worldfavor platform was launched.

6.2.2. The Worldfavor Product Offering

The two main parties on Worldfavor's platform are called accessors and providers. In exchange for a fixed, annual fee the accessors get access to ESG data uploaded on the platform by their selected stakeholders, the providers. Uploading data is free. The main principles of Worldfavor's two-sided platform approach are to make reporting standardized and simple for providers, reduce reporting fatigue, and to make ESG data as easy as possible to access, manage, and compare for accessors. At the time of Spintop's investment in 2019, Worldfavor's offering was mainly focused on supply chain and internal sustainability management, and the platform showed early, promising signs of network effects.

Today, Worldfavor has increased its product offering to include five separate solutions, which all aim to support different types of companies with their ESG data tracking needs. The solutions Supply Chain Visibility, Sustainable Sourcing, and Sustainability Management have been optimized throughout the years from both a usability and a framework applicability standpoint. Added to the mix in more recent years are the Sustainable Investments and Sustainable Finance solutions, which aim to help investors track the ESG aspects of their portfolio companies and banks track their clients' ESG data.

Worldfavor's platform is also consistent with many of the sustainability regulations and frameworks that have been introduced in recent years, such as the SFDR and the UN SDGs. This means that the reporting company can quickly assess where they currently stand in terms of being compliant with regulations and frameworks. In 2021, a new service and platform

called Worldfavor Transparency was launched. The platform allows companies to report and upload their ESG data in a standardized, comparable way for free, but also to invite other stakeholders from their ecosystem such as investors, clients, or suppliers to access the data and upload their own. The solution is one of, if not the first network for sustainability data sharing and can best be described as a “*LinkedIn for sustainability data*”. Please see appendix section 11.11 for more details on Worldfavor’s solutions.

6.2.3. The Software as a Service Business Model

The software as a service business model has been flourishing in recent years and the market has seen intense M&A activity with capital flooding in from both strategic and financial investors (Kengelbach et al., 2021). The business model is based on a cloud provider offering an application as a service over the internet, instead of installing and storing it locally on a machine. Thanks to the ongoing digitalization, the industry at large has displayed double digit growth rate, which is expected to continue. Moreover, the service offered by SaaS providers features favorable economics (Kengelbach et al., 2021). Customers sign up for a subscription and pay an annual fee, which translates into recurring revenue streams. Once a customer has signed up for a SaaS provider’s service, switching costs are usually high which means that the business model features customer stickiness and low churn rates. Once the software platform has been developed the company can increase sales without seeing an incremental increase in costs, which means that the business model is easily scalable. Due to the attractive business model, the software industry has shown signs of resilience in times of economic downturn such as the recent pandemic (Kengelbach et al., 2021).

6.2.4. Market Outlook and Competitive Position

Defining which market Worldfavor operates in is a complex task as, unlike many of its competitors, its sustainability software tool covers all three aspects of E, S, and G. However, as a significant part of Worldfavor’s platform is related to emissions tracking and management, the emissions management software market will be further analyzed.

In 2020 the global emissions management software market size was estimated at about \$10.4B (Allied Market Research, 2021), and the market was growing at a double-digit rate. The market has seen significant growth in the past year and with a forecasted compound annual growth rate (CAGR) of some 16 percent over the period 2021 to 2030 the momentum is estimated to continue. By 2030, the market is projected to reach \$43.6B. During the early days of the Covid-19 pandemic many companies experienced a decrease in operations and had to

slow down external spending which had a negative effect on the emissions management software market. However, throughout the pandemic many companies have become increasingly conscious of their carbon footprint which in turn has affected market growth in a positive way (Allied Market Research, 2021).

The market is fragmented, and many startups with emissions management SaaS offerings have been founded in 2020 and 2021. Companies in the market can be divided into three sub-groups depending on whether their solution is focused on measuring, reducing, or offsetting, and an overview of Worldfavor's competitors can be found in appendix figure 11.12.1. Moreover, fundraising by carbon accounting startups exploded in 2021. Close to \$300M had been raised, year to date, by the end of October last year, a sixfold increase compared to 2020 fundraising (Lee, 2021; Appendix figure 11.12.2). Further details on selected deals can be found in appendix table 11.12.1. Despite being a fragmented market there has been recent signs of initial consolidation where large SaaS companies acquire ESG-focused startups to further their sustainability offering. One example of such a deal was completed in January 2022 when IBM acquired Australian ESG software startup Envizi (IBM, 2022). The industry is not only attracting strategic buyers, but financial buyers are also showing interest in the market. For instance, private equity firm Blackstone recently acquired Sphera for \$1.4B (Blackstone, 2021).

Competition has intensified over the last year. One of Worldfavor's unique selling points is that it is very early in offering a network for sustainability data sharing, and no company has the exact same product offering as Worldfavor. Two peers that Worldfavor is often compared to are French EcoVadis and Swedish Normative. EcoVadis provides company sustainability ratings and an important distinction from Worldfavor is that while the Worldfavor platform is free of charge for data providers, that is not the case for EcoVadis. Normative is a pure play carbon accounting company which calculates the customer's carbon footprint. Although the industry incumbents are not necessarily competing with substitutable products, they are competing for the same investor capital needed to fuel future growth.

7. The Case: Spintop's Investment in Worldfavor

7.1. From a 2016 Pitch Event to a 2019 Investment

Spintop's first contact with Worldfavor dates back to 2016, when the firm's founding partner Finn Persson attended the pitch event Sting Day in Stockholm. At the event, selected startups got the chance to pitch their ideas and network with Swedish and international investors. The

two parties had already found each other interesting beforehand, and Persson and Frida Emilsson, co-founder of Worldfavor, decided to meet for a speed meeting during the event. Although Worldfavor was still at an early stage of its development, Persson quickly took a liking to their idea. At the time, Worldfavor was still working on more of a project-to-project basis. Even though the idea to build a platform, full of rich sustainability data from businesses across the globe had already been born, the product at the time was far from the advanced platform that Worldfavor has managed to build today. Persson was clear in his communication, as he expressed his liking of their idea of a sustainability data platform, but also that it was too early for Spintop to invest. For an investment to become feasible, Spintop needed to see Worldfavor develop from working on a project basis to turn into a more scalable software solution, and in the meantime showcase growth and reach their targets. As Persson and Emilsson parted ways, a first connection had been formed, and the two decided to stay in touch for an annual check-in moving forward.

Before meeting Spintop, Worldfavor had already managed to raise a pre-seed round amounting to a total of 5.3 MSEK in April 2016. The same year, it also closed impressive deals with some well-renowned Swedish companies, including Folksam, HSB and Länsförsäkringar (Sting.co, 2016). As the wish to raise additional expansion capital was still there, in 2017 Worldfavor managed to raise a further 6.5 MSEK in a second pre-seed round led by a 4.5 MSEK investment by Norrskén, one of the most prominent impact investors in the Nordics (appendix table 11.13.1). The ambitious growth plan now had the capital it needed to continue, and it all seemed to turn into fruition, as Worldfavor managed to increase its end-of-year revenue by 470% from 2017 to 2018 (Appendix section 11.13).

Fast forward to 2019, three years from the initial contact at Sting Day and Worldfavor had now been able to further develop its sustainability SaaS platform and showcase impressive growth, not just in terms of revenue but also in terms of expanding the team. In the second half of 2019 Worldfavor was looking to raise additional capital in a seed round. During this time, the company reached a major milestone as it managed to close an important deal with the Swedish liquor monopoly chain Systembolaget.

“It was a very big win when we won Systembolaget as a customer, now we were up there, and it felt like we got a green light to sell to similar companies.” (Andreas Liljendahl, Co-founder & CEO Worldfavor, 30.03.2020)

In the seed round, Worldfavor was looking for further capital to expand their business and the team, as well as an investor with SaaS competence that could help scale the platform. Enter Spintop, with its experienced partner team, technology focus, and a sustainability toolbox that had recently started to materialize.

“With Spintop, it was mainly about the fact that we were looking for SaaS competence. (...) I think they also shared much of our analysis on sustainability.” (Andreas Liljendahl, Co-founder & CEO Worldfavor, 30.03.2022)

7.2. Worldfavor’s Fit with Spintop’s Investment Criteria

Worldfavor was not only identified as an attractive investment by Finn Persson, but also when analyzed through the lens of Spintop’s investment criteria. A first part of Spintop’s investment criteria is that there has to be a strong foundation for a potential long-term partnership between Spintop and the portfolio company. Both parties agreed that one of the main selling-points of Spintop as the right partner for Worldfavor, was their team’s extensive knowledge of SaaS business models, along with Spintop’s early sustainability focus.

“We are one of the older players in the Nordics, and we have several partners in the team that are very knowledgeable within SaaS. We were also early in terms of our sustainability focus, so we have an understanding of that and a belief that it is important.” (Amanda Lindqvist, Investment Manager at Spintop, 04.03.2022)

As a second part of the puzzle, Spintop puts a lot of emphasis on evaluating the team. Not only did they learn a lot through the many interactions that Persson had with the team throughout the years, but Spintop also collected testimonials of the team through reference calls and conversations with mutual connections. What ended up assuring them of the team’s competence was their knowledge of sustainability, their hunger to grow the business, and their complementary skill sets.

Typically, Spintop invests as one of the first, if not the first venture capital firm, right as a first product or service has been launched by the venture and they have started to gain some commercial traction. At the time of Worldfavor’s seed round, the Swedish impact investor Norrsken had already invested in the pre-seed round. From Spintop’s point of view

this was only seen as a positive, as Norrskens's presence reassured the team of Worldfavor's attractiveness as well as their potential to have positive impact.

Having gone through the qualitative assessment of the potential investment, Spintop ultimately had a look at Worldfavor's business plan to assess the business model and the venture's road ahead more thoroughly. Spintop liked Worldfavor's SaaS platform as it came with an inherent potential to scale and the company had already started to display early signs of network effects. The fact that the Worldfavor team had extensive knowledge of sustainability and had managed to package the reporting in a way that was consistent with ESG frameworks and regulations only further strengthened the case. Besides the fundamental characteristics of the business model, Spintop's investment team was also fond of the market. Spintop had a strong belief in the future potential of the market that Worldfavor was operating in, and that Worldfavor was well positioned to become a leading player in this industry. Altogether, Spintop saw potential to scale Worldfavor's platform and accelerate growth, partly fueled by the market growth alone.

"When I started [at Spintop] I met them [Worldfavor] quite early because this was a space that we believed in. In their case, we might have invested slightly earlier than what we might have done in other companies with similar business models, based on a conviction that this space will grow." (Peter Carlsson, Partner at Spintop Ventures, 08.03.2022)

In their sustainability assessment Spintop came to find that Worldfavor, due to its business model being centered around ESG data reporting, could be regarded as a very attractive investment from a sustainability perspective. The Spintop team had a strong conviction that since Worldfavor aims to increase transparency and standardize reporting connected to ESG aspects, more Worldfavor means doing more good. If more companies collect and report their data through Worldfavor, that will lead to increased transparency and more opportunities for businesses to change for the better. See appendix section 11.14 for more details on Worldfavor's fit with Spintop's investment criteria.

"They [Worldfavor] do a lot of good by increasing the transparency around sustainability data, and generally increase transparency connected to several sustainability aspects which we believe contributes to a better world. It is the ultimate sustainability investment quite frankly." (Amanda Lindqvist, Investment Manager at Spintop Ventures, 04.03.2022)

Ultimately, Spintop decided to syndicate an investment in Worldfavor's seed round together with Brightly Ventures and existing investor Norrsken. The round closed at 30 MSEK in November 2019, and a partnership between Spintop and Worldfavor had now been formed.

7.3. Worldfavor's Growth Journey Under Spintop's Ownership

Just about three months after Spintop's investment in Worldfavor's seed round, the Covid-19 pandemic struck and forced businesses to rethink their operations. For Worldfavor, this came as a huge blow, as many businesses shifted their focus from sustainability to cost reduction and thus suspended some potential investments. As such, many deals that Worldfavor expected would go through were pushed into a more uncertain future.

"Looking back at it now, there were many months without any sales, primarily because we target large firms, and it's quite a large investment for them. When Corona hit, many thought that they might as well postpone that investment, and it possibly also wasn't as business critical then as it is now, so they could wait it out." (Andreas Liljendahl, Co-founder & CEO at Worldfavor, 30.03.2022)

While the early months of the pandemic were certainly tough for Worldfavor, the change in customer behavior that occurred during the pandemic turned out to benefit the company. Once the first shock of the pandemic had settled, Worldfavor and their investors started to notice a change in the market. Businesses were now prioritizing their sustainability agenda to a larger extent and measuring and re-thinking their supply chains and environmental impact. Sustainability could now be regarded as having shifted from something of a nice-to-have to a need-to-have. As 2020 turned into 2021 and working from home became the new normal, investments started to rebound, sales shifted from face-to-face to digital channels, and Worldfavor could quickly increase their global sales presence. Although the focus was still on Europe, Worldfavor was now able to sell to customers in countries such as Singapore, Canada, and the United States, which served as a further proof point of the scalability of the business model. As sales started to ramp up, the need for Worldfavor to recruit more people increased at a rapid pace. Due to their sustainability focus and strong prospects for future growth, Worldfavor found themselves in a unique position to attract bright talents from well-renowned technology companies. In 2021, the team grew from 23 employees to more than 50, and several new functions, needed to further scale the organization and support future growth, were put

into place. Worldfavor also reached a major milestone in 2021 as they hired an employee in the United Kingdom, their first employee based outside of Sweden. In addition, Worldfavor used the days of the pandemic to further strengthen their product offering through launching additional solutions targeting financial investors and banks. In late 2021, another solution was introduced, as the Transparency Initiative and platform were launched to support Worldfavor's vision of making sustainability mainstream and as a means of moving toward more standardized sustainability reporting.

Spintop has also actively supported Worldfavor's growth journey. Initially Spintop focused on governance, as they supported Worldfavor with professionalizing their board of directors and their governance structure. In the process of doing this, Spintop appointed Peter Carlsson as a board member and Amanda Lindqvist as a board observer. Ultimately, professionalizing the board opened up for more discussion between the management team and the board members regarding Worldfavor's potential roadblocks and path forward. Carlsson, with his vast experience of building online platforms, also acted as a sounding board for the management team and the CEO. Moreover, Spintop discussed recruitments with Worldfavor and introduced them to potential customers and investors from their network. As 2021 reached its end, extensive recruitment, international expansion, and a strengthened product offering meant that momentum had really started to pick back up for Worldfavor.

7.4. Series A

Worldfavor is operating in a rapidly growing market and several of Worldfavor's peers raised substantial funding rounds in 2021. A little over two years after closing the seed round and after reaching several important milestones, Worldfavor launched a new funding round, looking to raise a series A during the first half of 2022.

An important distinction from the seed round in 2019 is that investors are now more aware of, and hungry for, sustainable investments. In the seed round Worldfavor was mainly evaluated as a SaaS investment, and that is naturally still a key selling point in 2022, together with the network effects it has proven to possess. However, the investment thesis today is much more focused on the sustainability aspects of Worldfavor, as being a sustainability-focused company has become a key selling point to attract investors.

Spintop will likely reinvest in the series A as they see a bright future for Worldfavor. The firm generally invests a smaller ticket during the first financing round it participates in for

a new portfolio company and later reinvests in follow-on rounds to support and stay part of the venture's growth journey.

"We will probably invest our pro rata. That is part of our business model, we want to keep reinvesting in the companies that are performing well." (Peter Carlsson, Partner at Spintop Ventures, 08.03.2022)

7.5. Illustrative Valuation Exercise

When Spintop, together with Brightly Ventures and existing investor Norrsken, invested 30 MSEK in Worldfavor in the 2019 seed round the valuation and deal terms were not disclosed (Worldfavor, 2019). However, since part of the purpose of this thesis is to contribute to the teaching at the Stockholm School of Economics an illustrative, assumption-based valuation exercise is included. This is done to highlight how a SaaS business can be valued using a multiple approach, which is commonly used by venture capitalists in startup valuations (Wright & Robbie, 1996), as well as to attempt to indicate how Spintop's investment in the seed round has performed to date. A commonly used valuation multiple for SaaS companies is the TEV/ARR multiple (True Blue Partners, 2021), which is total enterprise value divided by annual recurring revenues. Since all Worldfavor's closest competitors are private companies, valuations and multiples from comparable transactions are not available. As such, this valuation exercise is based on the authors' assumptions.

Lead investors Spintop and Brightly Ventures, together with existing investor Norrsken, syndicated a 30 MSEK investment in Worldfavor (Worldfavor, 2019). Since no information is available regarding how the investment was split between the three, the following assumptions have been made by the authors. First, Norrsken is assumed to have invested an additional 8 MSEK which is assumed to be up to but no more than their pro rata. That is, Norrsken has not been assumed to increase their equity stake, but they might have become diluted in the seed round. Second, Spintop and Brightly Ventures are assumed to have invested 11 MSEK each. Third, the two firms are assumed to have received an equity stake each in the range of 10 percent to 20 percent. In the series A round, and potential later stage funding rounds, the investors' ownership stakes will become diluted (Stevens, 2012), unless they reinvest their pro rata. Based on the previous assumption, Worldfavor's post-money valuation in November 2019 is estimated within the range of 55 MSEK to 110 MSEK. By dividing the valuation by 2019 revenue we get a TEV/ARR LTM multiple range of 5.9x to

11.8x (appendix section 11.15.1). The series A valuation will not be decided until Worldfavor has a signed term sheet on the table, however, Spintop has indicated that they expect to see a slight multiple expansion compared to the seed round. Moreover, since the valuation is the product of two factors, ARR and multiple, and both factors have grown to some extent since 2019, the conclusion that Worldfavor's valuation has increased can be drawn.

To estimate how much unrealized return Spintop has from the Worldfavor investment an additional analysis was performed in appendix section 11.15.1. Worldfavor has grown its top line at an impressive rate over the last two years, and 2021 closed with approximately 20 MSEK in ARR. Now, a few months later, aggregate ARR is approaching 25 MSEK. Assuming no multiple expansion from 2019 and an ARR of 20 MSEK Worldfavor's post-money valuation would be within the range of 118 MSEK to 236 MSEK today. Since the multiple is unchanged the increase in valuation is simply equal to the increase in sales, 2.1x. In May 2022, this translates into an unrealized gross IRR of some 36 percent. Including multiple expansion in the analysis will only boost Spintop's unrealized return from the investment. Appendix section 11.15.2 further extends the analysis, holding Spintop's assumed ownership stake fixed at 15 percent and looking at scenarios with multiple expansion and contraction. This analysis generates a May 2022 valuation range of 120 MSEK to 200 MSEK which translates to an unrealized MoM and IRR in the ranges of 1.6x to 2.7x and 22 percent to 49 percent respectively. The analysis has thus far based the 2022 valuation on the end of 2021 ARR of some 20 MSEK. However, ARR is now approaching 25 MSEK and basing the valuation on this number would translate into even greater unrealized returns (appendix section 11.15.2). The economics of the analysis above indicate that due to the attractive revenue growth Worldfavor has delivered and the potential for multiple expansion in the series A round Spintop currently stands to realize an attractive return on investment.

7.6. Future Outlook

Following the series A, the next growth phase for Worldfavor will focus even more on research and development, sales and marketing, and hiring. The company is going through a phase of rapid development and is facing both opportunities and challenges on its continued growth journey. Starting with opportunities, the market is estimated to continue to grow at a double-digit growth rate as sustainability is only expected to become ever more important. Moreover, Worldfavor is expected to benefit from the maturing regulatory environment. More regulations relating to environmental, social, and governance matters are entering into force, which further

increases companies' need to report ESG data in a structured way to stay compliant. In addition, companies of all sizes need to start tracking their sustainability data in a consistent way. Worldfavor has set the breakthrough objective of having one million companies on the platform in five years. Previously the company has targeted tier 1 customers, but Worldfavor has an opportunity to also target smaller companies looking for more standardized solutions. The company wants to lower the threshold for companies to start measuring their sustainability data, and work toward a more standardized approach to data tracking. To do that, Worldfavor Transparency was launched, which aims to enable further standardization and comparison of ESG data. Looking at challenges they can be summarized in one word, competition. The number of competitors in the market has increased over the last couple of years, and even though no current offering is equivalent to Worldfavor's, the market incumbents are competing for customers, employees, and investor capital.

To conclude, the future undeniably looks interesting for Worldfavor as there are many opportunities ahead, but to continue the current momentum the company also needs to manage the rising competition in the market. From Spintop's point of view, Worldfavor's continued growth journey is looked at with excitement.

"I think that it is perhaps even more exciting now than when we invested. They [Worldfavor] have several large clients that are really making an impact by asking lots of additional companies to report different things. Lots of companies need to do something and they need to do it in a structured way." (Peter Carlsson, Partner at Spintop Ventures, 08.03.2022)

8. Discussion

8.1. How is Sustainability Viewed by Stakeholders in the Nordic Venture Capital Industry, and Who is Pushing the Sustainability Agenda?

The first research question asked relates to how various stakeholders in the venture capital industry perceive sustainability. Previous research has pointed to the fact that the global venture capital sector has been slow when it comes to the incorporation of sustainability practices. However, all interviewees, representing various stakeholders in the Nordic venture capital industry, have emphasized that a clear shift has occurred in the industry over the last couple of years, and that sustainability practices are now incorporated not only by institutional LPs but also by GPs to a larger extent. This view expressed by the stakeholders is in line with what the industry data presented in section four shows. Not only did Nordic venture capital deal value

reach record levels in 2021, but venture capital allocated to ESG-committed funds globally has also increased substantially in the last three to four years. Even though the consensus among interviewees is that sustainability has increased in importance in the industry in recent years, the analysis is complicated by the fact that sustainability and ESG can be defined and applied in different ways by different stakeholders. As long as there is no standardized framework for how to work with sustainability, the ways in which venture capitalists apply ESG practices when making investments will be diverse.

Limited partners have traditionally been the party pushing the envelope on sustainability incorporation, but over the last few years GPs have started taking a more proactive approach to ESG, extending beyond just screening out companies with ESG risk factors. However, far from all GPs have incorporated sustainability into their investment processes. The available supply of venture capital funds to invest in is heterogeneous when it comes to sustainability. Many institutional LPs, such as pension funds, are limited in their investment decisions by sustainability requirements and could miss out on attractive returns from GPs that do not qualify as sustainability-focused enough. On the one hand, incorporating sustainability practices can be a way for GPs to stand out in the competition for institutional investor capital. On the other hand, many LPs are not necessarily bound by sustainability when allocating their capital between funds. This raises the question of who should be responsible for ensuring that the capital in the venture capital sector is invested in a sustainable way. The GPs are the ones ultimately deciding which ventures receive funding and which do not. However, the LPs are at the same time the ones managing the available capital and deciding which GPs they want to trust to manage their money. Moreover, GPs' fiduciary duty is ultimately to deliver sufficient returns to LPs.

Perhaps putting the sustainability responsibility with all LPs, not just the institutional ones, would accelerate the incorporation of sustainability practices among GPs even further since LPs' sustainability policies and requirements cascade down via the GPs to the portfolio companies. Though, just like GPs, LPs have a fiduciary duty to their beneficiaries to maximize returns, which means that they have an incentive to invest in the top-performing funds whether they are investing according to sustainable investment principles or not. As such, the responsibility to allocate investor capital in a sustainable way should perhaps not belong to the LPs either. At the same time, the definition of what the fiduciary duty of a business or an investor is has evolved since Friedman (1970) said it was simply to maximize profits. The interviewed LPs and GPs believe that investing responsibly is a part of fiduciary duty today, as they believe that sustainability and long-term financial return go together. This is in line with

Lydenberg's (2014) conclusion that rational and reasonable fiduciary duty must coexist to achieve long-term success.

Perhaps it should be in the hands of the regulators to ensure investments are directed toward ventures with positive impact, since industry regulations guide the actions of all stakeholders. Some interviewees believe that regulation is one of the most important factors influencing the sustainability commitments in the region. Another view expressed is that the industry had already started to shift toward incorporating more sustainability practices before the new sustainability regulations were announced. Though, one can ask if the increase in sustainability incorporation in the industry would still be occurring without the changing regulatory environment?

Traditionally, venture capital investments have to a large extent been targeting novel technologies, and technology is typically not top of mind when thinking about which industries are in most need of transitioning toward more sustainable business models. The role of venture capitalists is to fund new businesses. Hence, perhaps the transition in the Nordic venture capital industry is led by the entrepreneurs creating new, sustainable ventures. As Hall (2010) highlights, entrepreneurship is a driver of sustainable development. Ultimately, venture capital follows the available business opportunities, and entrepreneurs in the Nordics have proven that attractive sustainable business opportunities exist.

8.2. What is Driving an Increasing Number of Nordic Venture Capital Firms to Incorporate Sustainability into their Investment Practices?

A baseline for sustainability incorporation in the venture capital sector is to be compliant with the sustainability-related regulations affecting the industry. That is, the regulatory environment is affecting and influencing all stakeholders in the industry. However, in recent years the sector has seen players commit to more than just being compliant with sustainability regulations. As such, there must be more factors at play that are driving stakeholders to incorporate sustainability into their investment practices.

Academics, such as Demirel et al. (2019), have highlighted that in recent years the number of green ventures, which leverage both environmental and economic benefits, have grown rapidly due to the opportunities that arise from a focus on environmental issues. The interviewed industry stakeholders solidified that the available business opportunities are a major reason for why venture capitalists are incorporating sustainability into their investment processes. What was also recognized as a key driver behind the sustainability momentum in

the industry was the concept of future-proofing the ventures for future success and attractive exit routes. This future-proofing aspect can be compared to previous research outside of the venture capital field, such as that of Karwowski & Raulinajtys-Grzybek (2021) which showed that CSR action can be used to mitigate ESG and reputational risk. Similarly, research by Crifo et al. (2015) showed that companies with bad ESG disclosure were less attractive to private capital. This view is shared by the interviewees who believe sustainability will be needed if a venture is to attract capital and talented employees.

When asked about whether they believe that there is a trade-off between sustainability and financial return, the interviewees answered with a resounding no, at least when looking at it from a long-term perspective. Although previous literature on the relationship between sustainability and financial performance is ambiguous, there are a large number of studies, such as Friede et al.'s (2015) meta study, which do point to there being a positive relationship between the two. Moreover, McGrath (2020) found that even though ESG-committed private capital funds do not necessarily generate higher returns than generalist funds, they do display a better risk-reward relationship. This again leads to the topic of future-proofing and suggests that by incorporating sustainability practices, GPs can lower the risk of their own and their portfolio companies' operations.

Some stakeholders highlight that impact startups are currently valued at a premium due to the industry's increased interest in, and demand for, sustainable investments. As such, one can wonder whether venture capitalists are directing more capital to ESG-committed startups because they believe in the business or because they think they stand to generate superior returns from investing in an area that is hot and trendy, and does the motivation matter as long as the outcome is the same? Bocken (2015) found that ventures receive triple bottom line business advice from ESG-focused venture capitalists, suggesting that investors who are knowledgeable about ESG have an important role to play in the development of tomorrow's companies in addition to just providing capital. As such, it seems that the motivation to invest in sustainable startups could matter.

Nordic venture capitalists' incorporation of sustainability does not come without challenges. Developing a standardized way to measure ESG across the venture capital industry has not been possible yet, and a challenge for the industry is that there are no scientifically correct measurements available. As long as the view of sustainability is going through such a rapid phase of evolution, one can therefore question whether or not ESG aspects need to be measured in as granular a way as other aspects of a firm such as financial data. At the same time, if not measured and compared across firms within the industry, will sustainability ever

become as important as many stakeholders think it should be? Moreover, do the metrics have to be 100 percent scientifically correct in order to provide valuable insights? As Cheng et al. (2014) argues, CSR reporting can go a long way toward reducing information asymmetries between a firm and its investors, just by increasing the availability and quality of data. If firms are measuring ESG data in a consistent way and over time, the development can be followed, improvement areas can be recognized, and transparency can be increased. Though, as long as there is no standardized way of measuring, data cannot be compared across firms. Comparing your performance to others is often a way to recognize that you need to improve to keep up with competitors. If ESG transparency was improved through the development of standardized ways to measure and track data, the venture capital industry would likely see even more firms committing to sustainability as they would not only be evaluated and compared based on financial performance but also on ESG performance.

8.3. How are the Industry Sustainability Drivers, Recognized by Stakeholders, at Play in Spintop's Investment in Worldfavor?

The case of Spintop's investment in Worldfavor exemplifies several of the reasons industry stakeholders highlighted when asked why sustainability should be incorporated into venture capital investment practices. As suggested by Bocken (2015), a reason for why venture capitalists are starting to incorporate sustainability into their investment theses is because they believe there are business opportunities arising from the transition toward a green economy. Worldfavor is one example of such an opportunity. Today, reporting your sustainability data is crucial for companies in order to stay compliant with regulations. However, some ten years ago few companies were looking for ways to measure and track their sustainability data.

During the pandemic, sustainability has pivoted from a nice-to-have to a must-have for many companies. This has not least been apparent by looking at the market Worldfavor operates in, where several new startups have appeared, and record amounts of venture capital money has been infused. After the initial drawback from Covid-19, Worldfavor has thrived and grown at an impressive rate. The increase in sales can naturally in part be attributed to Worldfavor's team, but the market is also driving Worldfavor's growth as it is enjoying a double-digit growth rate thanks to customers' increasing willingness and need to invest in sustainability software solutions.

In terms of opportunities that come from the transition toward a green economy several of the interviewed stakeholders talked about how sustainability is something a startup must

consider to attract investor capital and talented employees. During 2021, ESG SaaS companies have certainly proven that these businesses and this market can attract vast amounts of venture capital money as carbon accounting technology fundraising increased sixfold in 2021. Moreover, Worldfavor doubled its number of employees in 2021, and one can assume that recruiting was made easier by the fact that the company is not only growing rapidly but also that it has a sustainability mission.

When discussing the relationship between financial return and sustainability the interviewed industry stakeholders emphasized that the two need to coexist. Without an economically viable business model an investment in a sustainability project would be classified as philanthropy, which is not what the venture capital industry does. This belief is accentuated in the case study. Worldfavor's business idea caught Spintop's interest very early on, however, the firm clearly communicated that it would not be in a position to invest until Worldfavor had proven the scalability and economic viability of its business. Spintop will likely reinvest in Worldfavor's series A fundraising and will remain invested in Worldfavor. Thus, to date there is no return on investment to evaluate. However, using an illustrative multiple-based valuation approach one can indicate how Spintop's investment has performed to date. The conclusion can be drawn that under current circumstances and assumptions Spintop has an attractive, unrealized gross IRR to collect from the Worldfavor investment. Current multiples and ARR is no promise of future returns, and how Spintop's investment will have performed by exit cannot be concluded.

9. Conclusion

9.1. Concluding Remarks

This thesis explores the topic of sustainability within the Nordic venture capital industry. The first research question examines how sustainability is viewed by industry stakeholders and who is pushing the sustainability agenda. The importance and value of sustainability has been gaining momentum in the industry, and industry stakeholders' commitment to and incorporation of sustainability practices has increased considerably in recent years. However, to what extent stakeholders are considering sustainability varies from a more reactive, compliance-focused approach to proactively investing in accordance with ESG principles. Previously, institutional LPs have been the party pushing the sustainability agenda, but that has shifted to the point where many GPs have also started increasing their sustainability efforts.

That many GPs have started to recognize the importance and value of sustainability seems to be a major reason as to why the industry has seen such striking development as of late.

The second research question explores what is driving venture capitalists to incorporate sustainability into their investment practices. Sustainability-related regulations set a baseline for how to consider sustainability in the industry, but industry sustainability commitments exceed simply complying with regulation. Thus, three key drivers behind the industry sustainability momentum have been recognized. First, venture capitalists see sustainability as a means to future-proof the companies that they invest in, and hence their own funds. That is, sustainability incorporation is believed to make a portfolio company more attractive to stakeholders such as employees, customers, and investors. Second, sustainability is not regarded as compromising the investor's financial return but believed to go hand-in-hand with long-term financial return. Third, venture capitalists see business opportunities to capitalize on arising from the transition toward a green economy. Yet, challenges remain relating to sustainability, such as staying up to date with the changing regulatory environment and developing standardized tools to measure and compare ESG data.

The third research question investigates how the highlighted industry sustainability drivers can be recognized in an actual investment. The case study of Spintop's investment in Worldfavor exemplifies a business opportunity that has arisen from the transition to a green economy. Furthermore, that sustainability can help future-proof a company is displayed by the extensive fundraising by startups in the market that Worldfavor operates in, and by the company's ability to attract talent and customers. Moreover, despite taking an early interest in the company, market, and potential to have positive impact, Spintop did not invest in Worldfavor until the company had proven the economic viability and scalability of its business model, which solidifies that economic viability and sustainability must go together in venture capital. While it is still too early to say whether Spintop's investment has generated an attractive return, and hence determine whether financial return and sustainability go hand-in-hand in the investment, current performance points to that being the case.

9.2. Limitations and Future Research

As sustainability within a venture capital context is still a novel and complex topic, there are limitations to this thesis. First, the thesis aims to provide insights into how Nordic venture capital firms view sustainability. However, only a small sample of Swedish and Norwegian venture capital stakeholders have been interviewed. Although many Nordic venture capital

firms, including some of those interviewed, invest across the Nordics, there is a possibility that firms based in other Nordic markets could have different opinions on the topic at hand. Moreover, there is a risk that the sample of interviewees is skewed towards having a positive view of sustainability. As such we invite others to further expand the scope of the analysis by including stakeholders from all Nordic countries as well as to attempt to collect a data sample large enough to draw conclusions that are statistically significant and thus generalizable for the industry.

Second, how and to what extent ESG and sustainability is incorporated varies between stakeholders and this thesis does not aim to investigate or compare different ways of working with sustainability. The industry still lacks standardized processes and best practices for how to work with sustainability. Since the spectrum of available investment approaches is large, an area for future research could be to dive deeper into industry stakeholders' ways of defining and incorporating sustainability into their investment processes to better understand which approaches are most prominent and to define industry best practices.

Third, there are limitations to the use of a single case study. The aim of the case study is to showcase how industry stakeholders' view on sustainability can be reflected in an investment. Given the specific circumstances of the investment, it is unlikely that a similar approach to an investment by another GP will generate the same results. There are thus limitations to the conclusions that can be drawn regarding if and how venture capitalists' view of sustainability can be reflected in a single investment, and the case of Spintop and Worldfavor should only be regarded as one example out of many possible ones. In addition, due to being an active investment, no conclusions can be drawn from the case study regarding the relationship between financial return and sustainability. Hence, we encourage students to conduct case studies with greater emphasis on financial return to investigate questions such as whether sustainable investments in venture capital compromise or enhance financial return.

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10.4. Data Providers

Pitchbook

Prequin

S&P Capital IQ

11. Appendix

11.1. Supporting Data for Section 2.2.1 - Sustainable Investments

Figure 11.1.1: The Three Main Approaches to Sustainable Investing

	Socially Responsible Investing (SRI)	Environmental, Social & Governance (ESG) Investing	Impact Investing
Description	By using screening and exclusion, positive reinvestment, divestment, and shareholders activism investors aim to achieve positive environmental and/or social outcomes.	The use of non-financial as well as financial metrics to measure company performance and risk.	The act of investing in funds and companies with the ambition to generate both financial returns and measurable social and/or environmental impact.
Investor type	Commonly used in public markets. All investors can easily access this type of investments.	An increasing number of both public market funds and private market participants are starting to incorporate an ESG framework.	Most common in private market investments, which limits access for smaller investors.

Source: Adapted from Pitchbook (2021, September 1) - *The key differences between SRI, ESG, and impact investing.*

11.2. Supporting Data for Section 3 - Methodology

Table 11.2.1: List of Interviewees

Interviewee	Current title	Company	Focus of the interview	Length of interview	Date of interview
Hilde Støle Pettersen	Managing Partner	Momentum	ESG within VC from the GP perspective	45 min	25.02.2022
Undisclosed	Member of Sustainability Team	Nordic Venture Capital Firm	ESG within VC from the GP perspective	45 min	04.03.2022
Amanda Lindqvist	Investment Manager	Spintop Ventures	ESG within VC from the GP perspective & the Worldfavor investment	1 hour	04.03.2022
Peter Carlsson	Partner	Spintop Ventures	ESG within VC from the GP perspective & the Worldfavor investment	1 hour	08.03.2022
Finn Persson	Partner & Co-founder	Spintop Ventures	ESG within VC from the GP perspective & the Worldfavor investment	30 min	17.03.2022
Sten Tärnbro	Analyst	SVCA	ESG within VC from the perspective of an independent industry organization	45 min	22.03.2022
Hanna Idestrom	Senior Portfolio Manager	AP4	ESG within VC from the LP perspective	45 min	29.03.2022
Katja Bergman	Co-founder, General Partner	Brightly Ventures	ESG within VC from the GP perspective	45 min	29.03.2022
Andreas Liljendahl	Co-founder & CEO	Worldfavor	Worldfavor's history and Spintop's investment in Worldfavor	45 min	30.03.2022
Åsa Knutsson	CIO Direct Investments	Saminvest	ESG within VC from the LP perspective	45 min	31.03.2022
Hjalmar Didrikson	Partner	Alfvén & Didrikson	ESG within VC from the GP perspective	30 min	01.04.2022
Undisclosed	Member of Sales & Growth Team	Worldfavor	Worldfavor's market, product offering, and sales process	30 min	07.04.2022
Lene Elizabeth Hodge	Sustainability Manager	Nysnø Climate Investments	ESG within VC from the GP & LP perspective	45 min	08.04.2022

Table 11.2.2: Interview Script

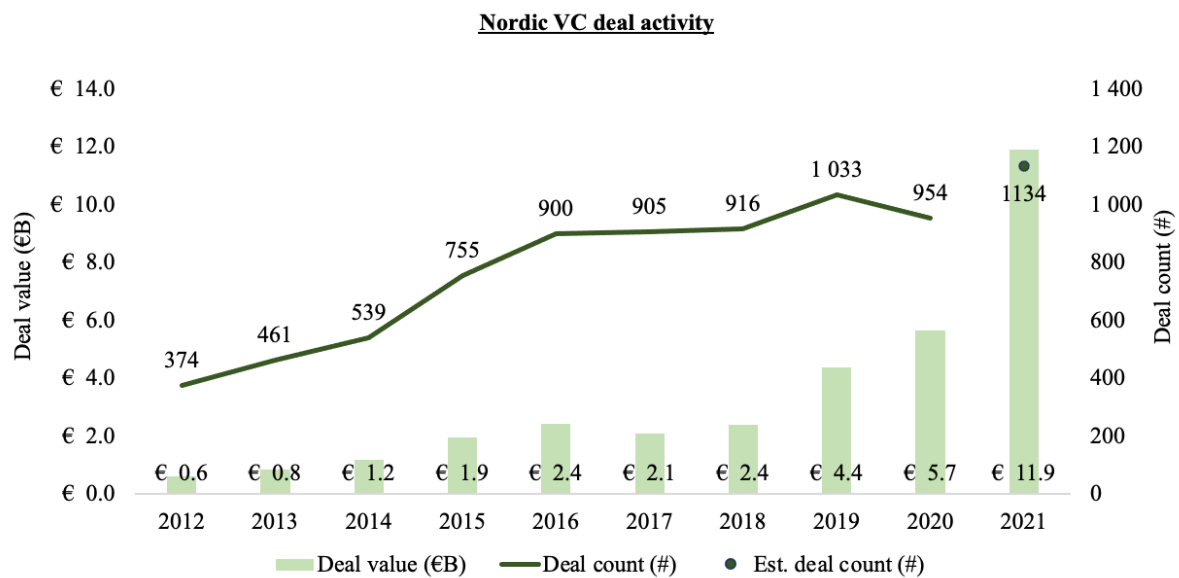
This interview script was the starting point for the semi-structured interviews with GPs, LPs, and SVCA.

Stakeholder Interview Script	
Category	Question
Background	1 What's your business background and how did you end up at your current firm?
	2 Could you introduce the firm that you work for and how you work with sustainability?
	3 Where on the spectrum, ranging from negative screening to impact investing, would you place your firm?
Perspective on sustainability	4 What's your view on ESG within VC, is it important and how has this view changed in recent years?
	5 Do you think sustainability is important because you think companies have an obligation to become more sustainable or because it's a value-creator?
	6 Do you think your fiduciary duty to your investors is to maximize profits or also to invest responsibly?
	7 Is your demand on GPs to maximize returns or also to invest responsibly?**
	8 What are the main opportunities and challenges you as a GP/LP face in trying to incorporate sustainability into your investment process?
	9 What are the main opportunities and challenges the VC industry at large is facing in relation to sustainability?
Investment Criteria	10 How are you using ESG criteria throughout your investment process as a GP/LP?
	11 Who would you say is driving the ESG agenda, LPs, GPs, or entrepreneurs?
	12 Has your investment process changed as you have incorporated ESG requirements?
Returns	13 Do you believe there is a trade-off between financial return and sustainability?
	14 Are you willing to accept a lower rate of return for an investment which has a positive impact?
	15 Have you seen a positive relationship between your sustainability initiatives and your financial return?
Measuring ESG metrics	16 Do you measure ESG metrics? If yes, how?
	17 Do you have a standardized process across portfolio companies/funds?
	18 Do you have ESG reporting requirements on the funds that you are invested in?**
	19 Are you tracking ESG metrics to set a baseline or do you also have ESG related targets?
	20 What happens if a portfolio company/fund does not meet your ESG expectations?
	21 Are industry stakeholders interested in sharing best practices and standardized processes for measuring ESG?
Fundraising and GP/LP relationship	22 How is ESG viewed from a fundraising perspective?*
	23 Do LPs emphasize and value ESG?*
	24 Has your view of sustainability been impacted by LPs and their requirements?*
	25 When evaluating a potential investment in a GP's fund, how do you evaluate sustainability?**

* GPs only; ** LPs only

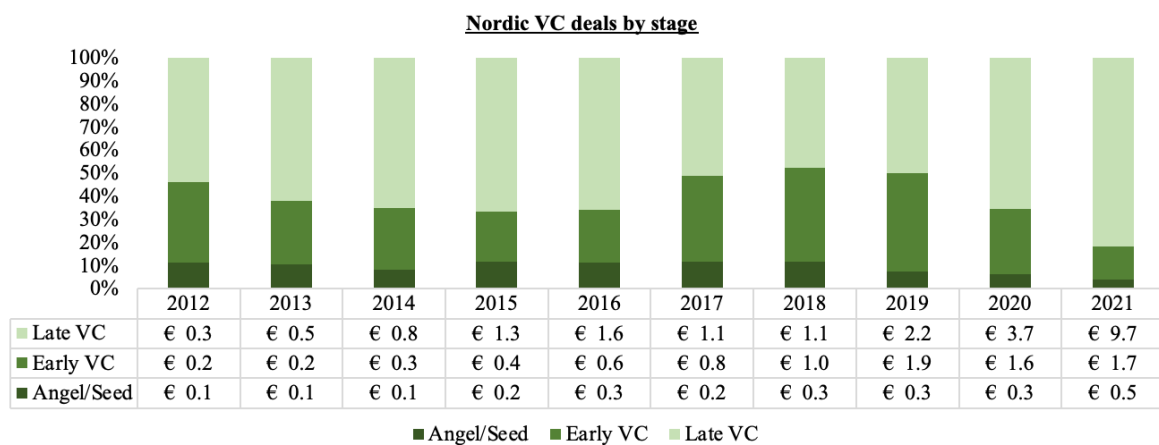
11.3. Supporting Data for Section 4.1 - The Current State of the Nordic Venture Capital Market

Figure 11.3.1: Nordic Venture Capital Deal Activity L10Y



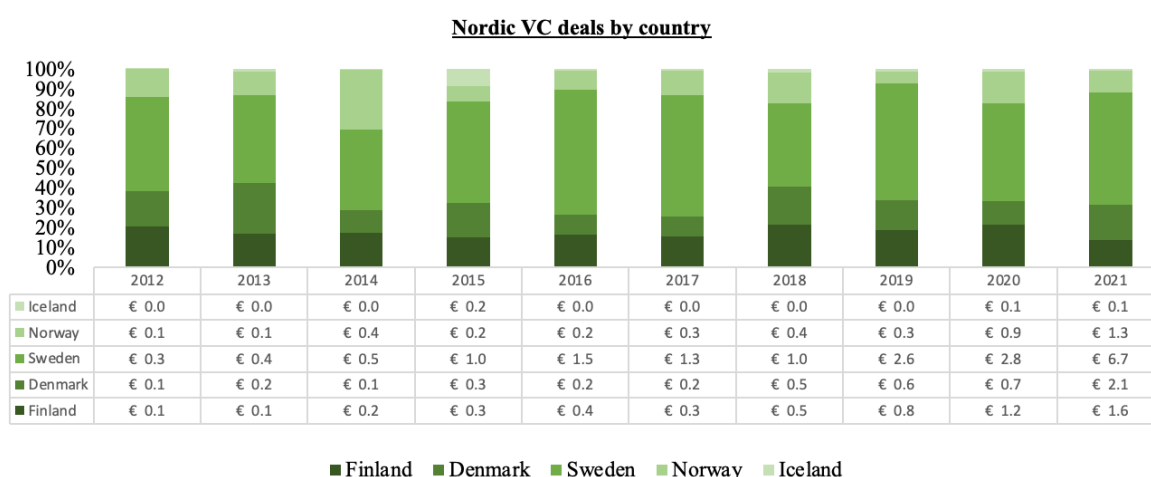
Source: Pitchbook Nordic Private Capital Breakdown 2022

Figure 11.3.2: Nordic Venture Capital Deals by Stage L10Y



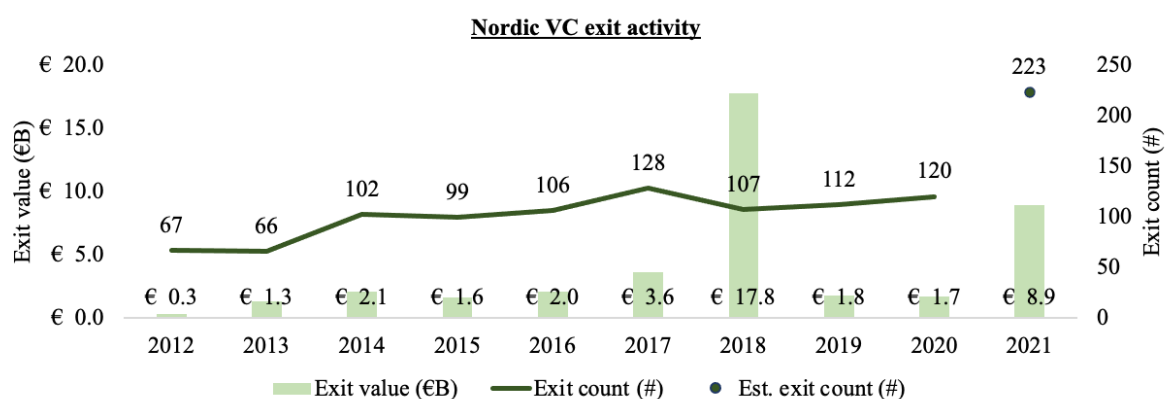
Source: Pitchbook Nordic Private Capital Breakdown 2022

Figure 11.3.3: Nordic Venture Capital Deal Activity per Country L10Y



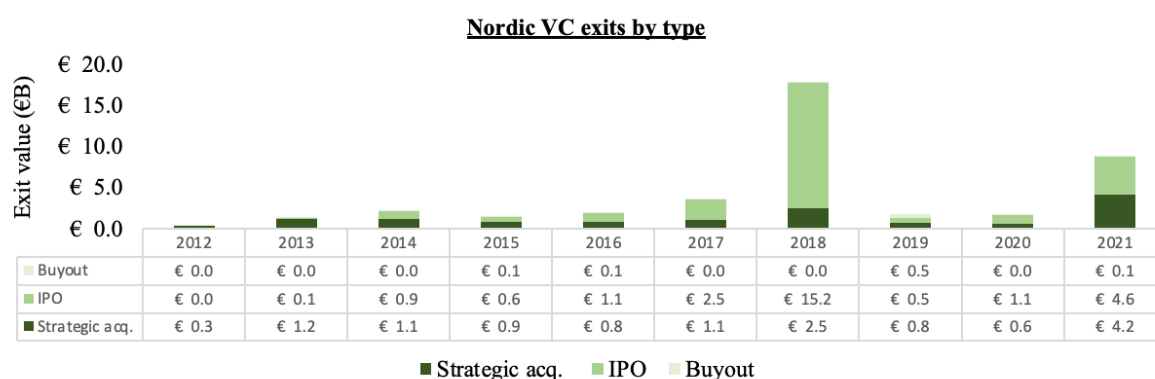
Source: Pitchbook Nordic Private Capital Breakdown 2022

Figure 11.3.4: Nordic Venture Capital Exit activity L10Y



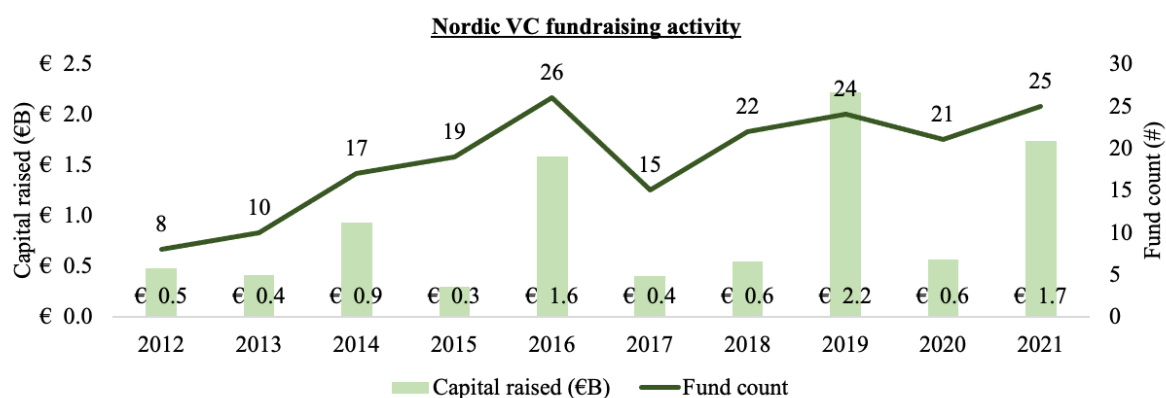
Source: Pitchbook Nordic Private Capital Breakdown 2022

Figure 11.3.5: Nordic Venture Capital Exits by Type L10Y



Source: Pitchbook Nordic Private Capital Breakdown 2022

Figure 11.3.6: Nordic Venture Capital Fundraising L10Y



Source: Pitchbook Nordic Private Capital Breakdown 2022

11.4. Supporting Data for Section 4.2 - A Changing Regulatory Environment

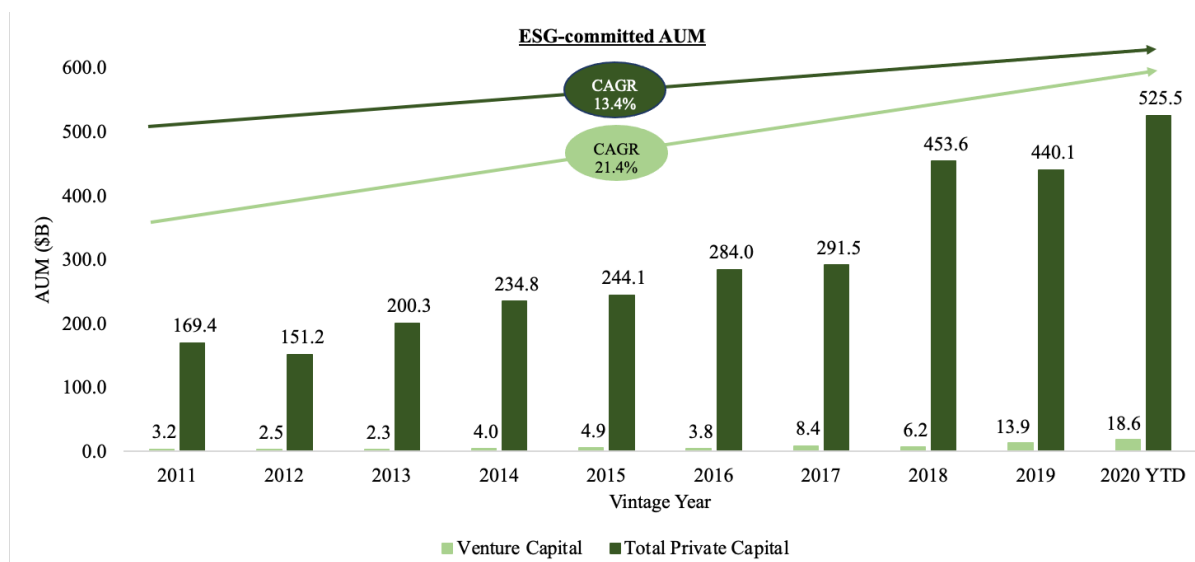
Figure 11.4.1: Distinction Between Article 6, 8, and 9 Funds



Source: SFDR, Adapted from Wright, H., & Hobart, B. (2021, September 1) - *SFDR: A Short Explainer of the New Regulation*.

11.5. Supporting Data for Section 4.3 - Sustainable Investments in Venture Capital

Figure 11.5.1: ESG-Committed Venture and Private Capital AUM



Source: Preqin Impact Report: The Rise of ESG in Alternative Assets. Data as of Sep. 2020.

Table 11.5.1: The Spectrum of Investment Approaches

	Responsible investment			Impact investing		
	Traditional	Screening	ESG integration	ESG themed	Impact-first	Philanthropy
				Targeted measurable social and/or environmental impact		
	Competitive returns					
Description	No, or limited, focus on the ESG characteristics of underlying investments.	Negative screening and positive screening, based on criteria defined by the investor such as for instance excluding investments in certain sectors.	The use of non-financial, qualitative and quantitative, ESG information when evaluating potential investments.	Targeting investments that contribute to addressing sustainability issues and challenges.	Targeting environmental or social impact with some financial returns trade-off.	Focus on one or a few environmental or social matters where a 100% trade-off is required.

Source: Adapted from UN PRI (2013, October 22) - *Understanding the impact of your investments: Measuring environmental and social performance*.

11.6. Supporting Data for Section 5 - Findings from the Industry Stakeholder Interviews

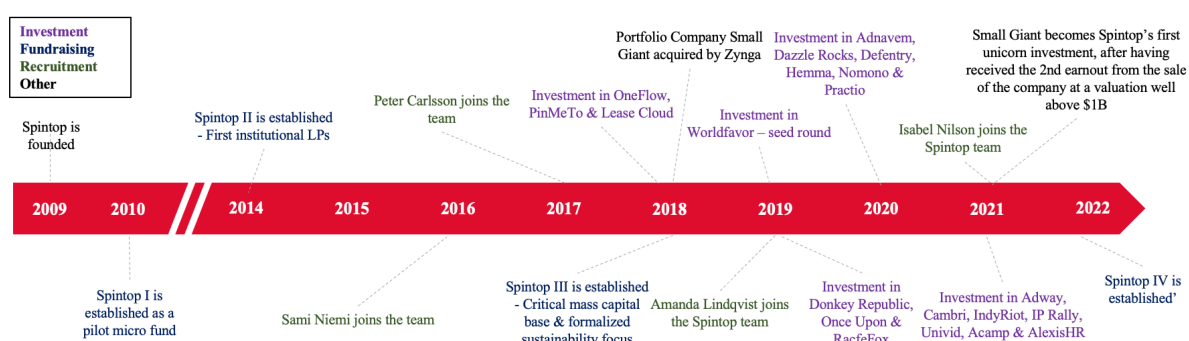
Table 11.6.1: Introduction to the Interviewed Firms

Firm	Role	Year Founded	Description
Spintop Ventures	GP	2009	Spintop is a Swedish early stage investor targeting software-based tech investments in the Nordics. Spintop takes an ESG integrating approach to investing. Currently, Spintop is investing out of its third fund with c. 600 MSEK in committed capital, a fourth fund was established in early 2022.
Momentum	GP	2013	Norwegian Momentum started out as a boutique management consulting firm which pivoted into an early stage VC firm in 2015 and launched its first fund in 2017. Starting with the launch of its second fund, a 2020 vintage with just under 400 MNOK in committed capital, Momentum is now focusing its investments on companies that have positive impact.
Alfvén & Didrikson	GP	2010	The Alfvén & Didrikson set up differs a little from the traditional VC model as the company has four long-term investors instead of a fund structure with a 10-year fund life. The Swedish firm considers sustainability in its investment process which is guided by the mantra Fun-Purpose-Profit.
Brightly Ventures	GP	2019	Brightly is a Swedish VC firm investing in early stage technology companies. The firm is investing out of its first fund, a 2020 vintage with 550 MSEK in committed capital. Brightly does not have sustainability as a focus for its investments.
Nysnø Climate Investments	GP & LP	2018	Nysnø is a climate investment company owned by the Norwegian state and is unique in the sense that it is both a GP and an LP as its investment mandate allows it to invest in funds as well as make direct investments. Nysnø has an ESG-thematic approach to investing and invests in profitable solutions that will have a positive impact on the climate. Nysnø has c. 2.9 BNOK in AUM.
AP4	LP	1974	AP4 manages a part of the Swedish national pension system's buffer capital and its mission is to ensure financial security for pensioners. AP4 has a long-term perspective, is a responsible and active owner and has a strong commitment to sustainability. 15% of AP4's AuM of about 525 BSEK is allocated to alternative assets which, among others, include venture capital.
Saminvest	LP	2016	Saminvest is owned by the Swedish state and has about 6 BSEK in AUM. The company is aiming to stimulate the supply of risk capital available in the market and is investing in privately managed funds. Saminvest considers sustainability when selecting which funds to invest in and is aiming to influence GPs in a positive way and contribute to a sustainable development.
The Swedish Private Equity & Venture Capital Association	n/a	1985	SVCA is a not-for-profit, independent organization for individuals and firms active in the Swedish PE and VC sectors. The organization aims to increase the understanding of the private equity market among the general public and seeks to improve how the market functions.

Source: Company information

11.7. Supporting Data for Section 6.1.1 - The History of Spintop

Figure 11.7.1: Timeline of Spintop's Major Events



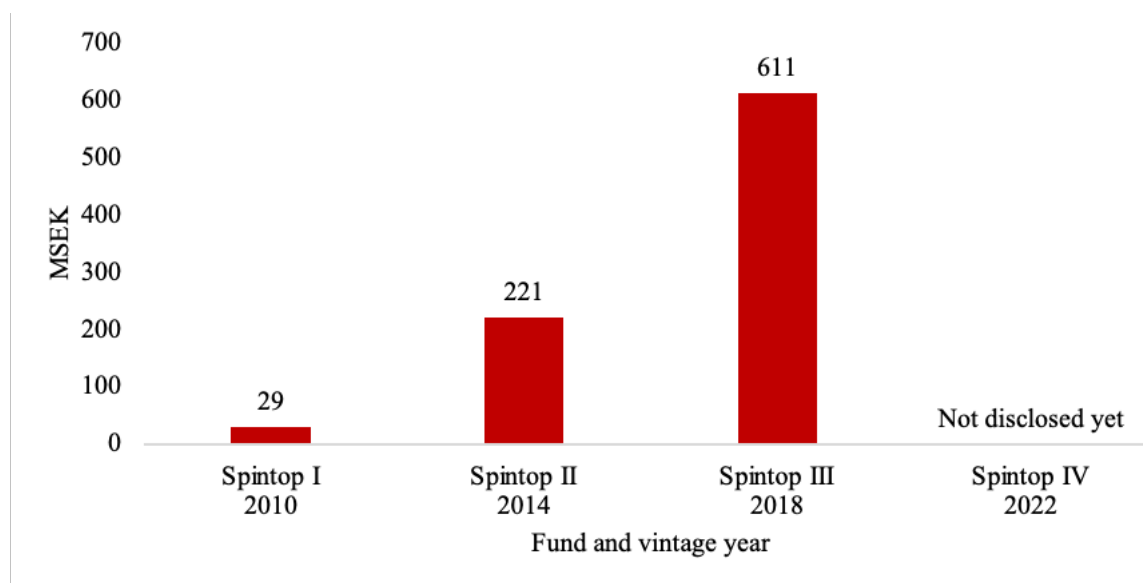
Source: Company information

Table 11.7.1: Spintop Team Biographies

Name	Current title	Biography
Finn Persson	Partner & Co-founder	Persson started his career in 1992 as a management consultant and later on partner at McKinsey & Co. After almost 10 years at the firm, Persson went on to manage a venture portfolio for a couple of years. In 2009, he met Erik Wenngren and Mats Johansson, and the three of them founded Spintop together. Persson holds a MSc in Engineering Physics from Lund University of Technology.
Erik Wenngren	Partner & Co-founder	Wenngren started out his career as a stockbroker for Enskilda Securities (SEB) in London and Tokyo, before moving on to work in ECM at SEB and later co-head the European ECM division at BNP Paribas in London. Then, Wenngren became head of equities at Danske Securities for three years, before becoming head of international listings for NYSE Euronext, where he got the chance to meet many entrepreneurs and VCs. Over the past 15 years Wenngren has worked as an investor in early-stage companies, both as a business angel and with Spintop. Wenngren holds a BSc in Economics from Lund University and a MBA from Columbia Business School.
Peter Carlsson	Partner	Carlsson started his career as a business manager at Unilever in 1996, where he worked for four years before joining Accenture as a CRM Consultant. After two years at Accenture, he went on to work for Antula Healthcare as a Sales and Marketing Manager for two years, before becoming the CEO of PriceRunner. After 10+ years as CEO of PriceRunner, including an impressive growth journey and the company being acquired three times, Carlsson invested in and worked together with a number of start-ups before joining Spintop in 2017. Carlsson is currently also a board member at Worldfavor. He holds a BBA from Jönköping International Business School.
Sami Niemi	Partner	Niemi has been involved in Spintop since the early days as an investor, senior advisor, and member of the investment committee. Before becoming an investor, he was an entrepreneur. In 2000 he founded Scalado, a leading mobile imaging software company. Scalado sold over a billion licences to the global mobile telecom industry. Nokia acquired Scalado in 2012, and Nokia's handset business was subsequently acquired by Microsoft where Niemi was the global Director of Photography in the Windows group until joining Spintop full-time in 2016. Niemi is also co-founder of creative startup workspace The Ground in Malmö. He holds a M.Sc. In Electrical Engineering from Lund Institute of Technology.
Amanda Lindqvist	Investment Manager	Prior to joining Spintop Lindqvist was working for the Nordic software company Visma where she worked with corporate M&A and business development. She also has experience from working for a Nordic Investment Bank and from an internship at the UN in New York City. Lindqvist holds a degree in M.Sc. of Economics and Business Administration from Hanken School of Economics.
Isabel Nilson	Investment Manager	Nilson started her career as a consultant for a Fintech firm in London. She later moved on to Investment Banking and worked with early-stage growth companies at a boutique firm in Stockholm. Prior to joining Spintop she also worked in real estate M&A at a global investment bank. Nilson holds a Bachelor of Laws with Honors (LLB) from the University of Kent and a MA from BPP Law School.

Source: Company information

Figure 11.7.2: Spintop Fund History



Source: Company data

Table 11.7.2: Overview of Spintop Fund III Portfolio Companies

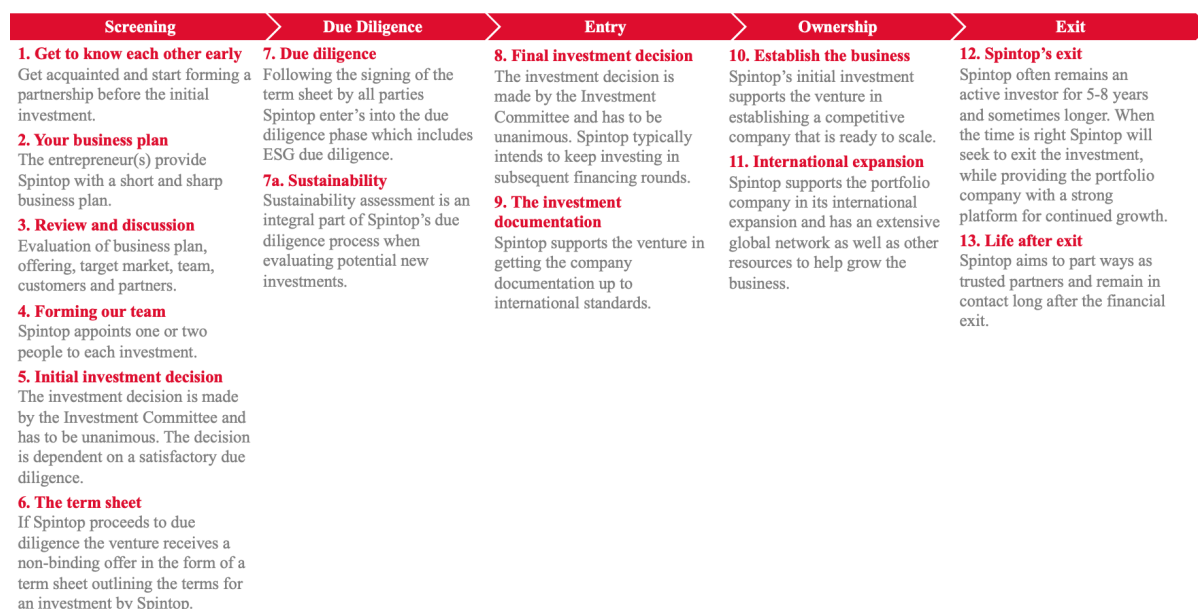
Portfolio Company	Description	Investment Date	Exit	Contributes to SDG:		
				5. Gender Diversity	8. Decent Work & Economic Growth	13. Climate Action
Acamp	Platform connecting landowners with campers	Dec '21				●
ADNAVEM	B2B marketplace for E2E container logistics	Aug '20				●
ADWAY	HR tech company using AI to find passive candidates	Jun '21		●	●	
AlexisHR	Simplifies and automates human resources management	Dec '21		*	*	*
CAMBRI	Plug-and-play consumer insights and concept testing tool	Mar '21		●		●
Dazzle Rocks	Social Massive Multiplayer On-line game development studio	May '20		●		
Defentry	Platform for proactive personal data protection	Oct '20			●	
Donkey Republic	Sustainable micro-mobility company with European reach	Feb '19	IPO			●
Hemma	Digital platform for green mortgages	Oct '20				●
IndyRIOT	Provider of white-labeled SaaS for community platforms	Sep '21		●	●	
IPRally	AI-powered patent search software	Jan '21			●	●
LeaseCloud	Enabling leasing as a payment method for B2B e-commerce	Dec '18				●
NOMONO	Disruptive audio technology company	Sep '20				●
OneFlow	SaaS solution for digital contracts	Sep '18	IPO	●		●
Once Upon	Smartphone app for designing photobooks	Jun '19		●		
PinMeTo	Marketing technology for multi-location brands and companies	Nov '18				●
Practio	Digital healthcare platform	Aug '20				●
Racefox	World's first real time digital coach	May '19	Acq.	*	*	*
Univid	Interactive web meeting platform	Oct '21				●
Worldfavor	Sustainability data SaaS platform	Nov '19		●	●	●

*Not available

Source: Company information

11.8. Supporting Data for Section 6.1.2 - Spintop's Investment Process

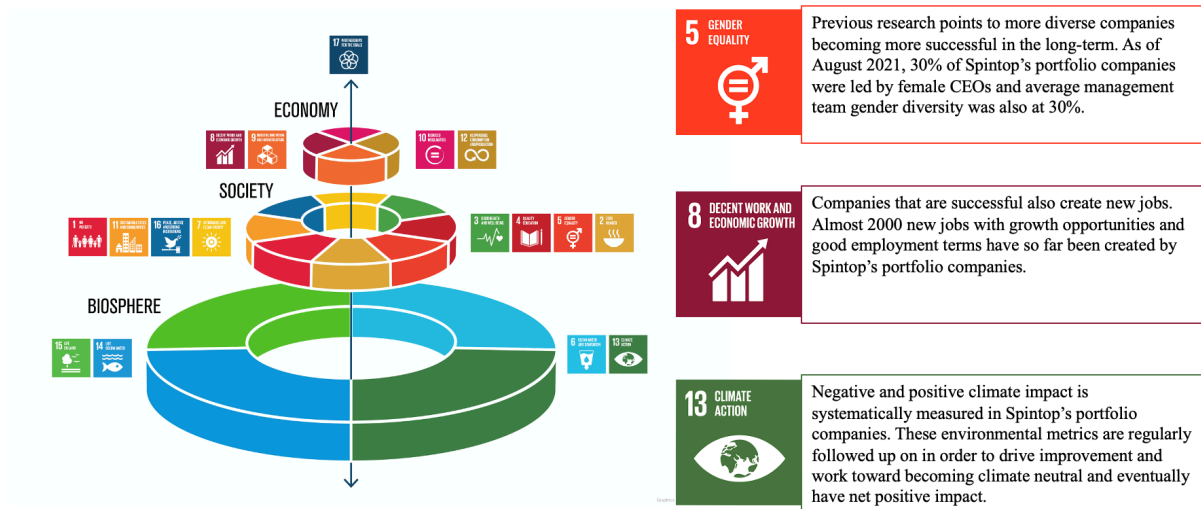
Figure 11.8.1: Overview of Spintop's Investment Process



Source: Company information

11.9. Supporting Data for Section 6.1.3 - Spintop's Sustainability Policy

Figure 11.9.1: Spintop's Three Key SDGs



Source: Company information, UN SDGs

Figure 11.9.2: Sustainability Considerations in Spintop's Investment Process

Pre-Investment				Post-Investment	
Sourcing	Screening	Evaluation	Due Diligence	Value Creation	ESG-Reporting
Sourcing of companies with tech-enabled positive impact.	Verifying the potential for positive sustainability impact and that there are no significant sustainability risk factors.	A sustainability assessment is an integral part of the early stage assessment of a potential investment.	Sustainability is a key component of the due diligence process just like finance, technology and legal aspects.	Spintop drives a sustainability agenda as an integrated part of interactions and work with its portfolio companies.	All portfolio companies are required to report sustainability data quarterly and Spintop provides a report over all portfolio companies.

Source: Company information

11.10. Supporting Data for Section 6.2.1 - The History of Worldfavor

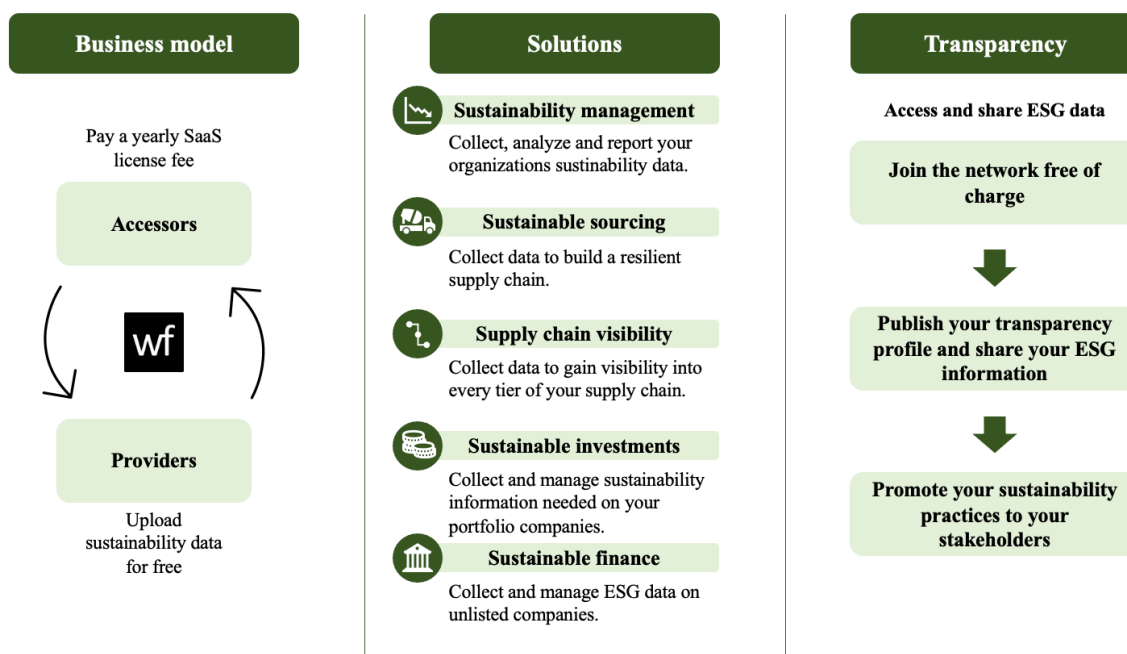
Table 11.10.1: Worldfavor Founding Team Biographies

Name	Current title	Biography
Lars-Peter Eriksson	Co-founder & CDO	Eriksson, with 10 years of experience in sustainability and a deep technical background, focuses on optimizing customer experiences.
Frida Emilsson	Co-founder & COO	Emilsson carries experience from impact, sustainability and ventures, and is mainly responsible for Worldfavor's growth and expansion.
Pär Gustafsson	Co-founder & CTO	Gustafsson leads the technical development of Worldfavor and is responsible for making sure that the platform is always cutting-edge.
Andreas Liljendahl	Co-founder & CEO	Liljendahl, with experience from consultancy and management, is responsible for creating, planning and implementing Worldfavor's strategic direction.

Source: Company information

11.11. Supporting Data for Section 6.2.2 - The Worldfavor Product Offering

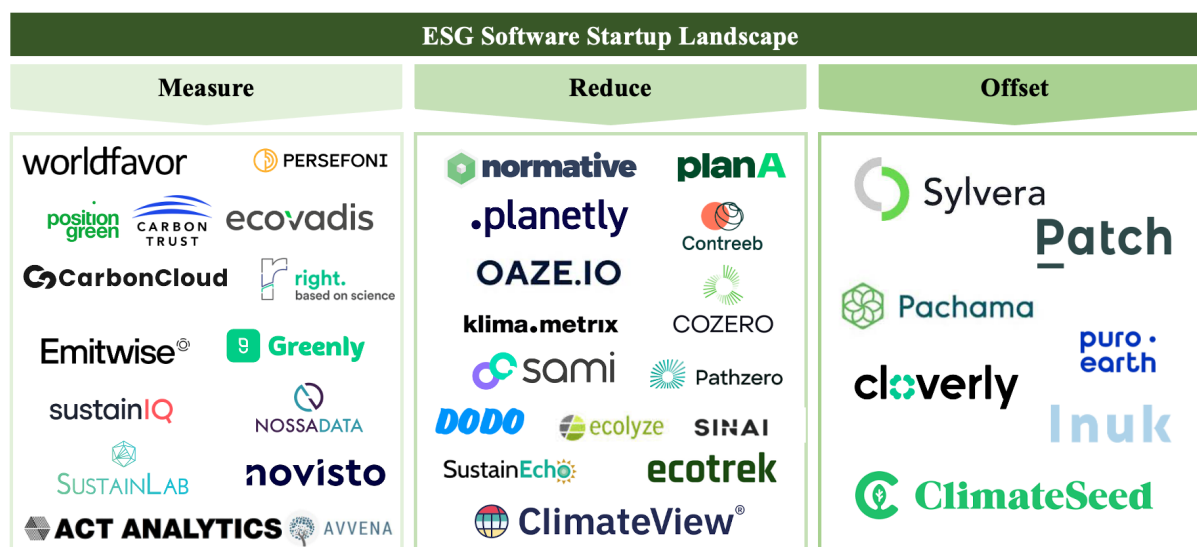
Table 11.11.1: The Worldfavor Product Offering



Source: Company information

11.12. Supporting Data for Section 6.2.4 – Market Outlook and Competitive Position

Figure 11.12.1: Worldfavor Competitive Landscape



Source: Aster

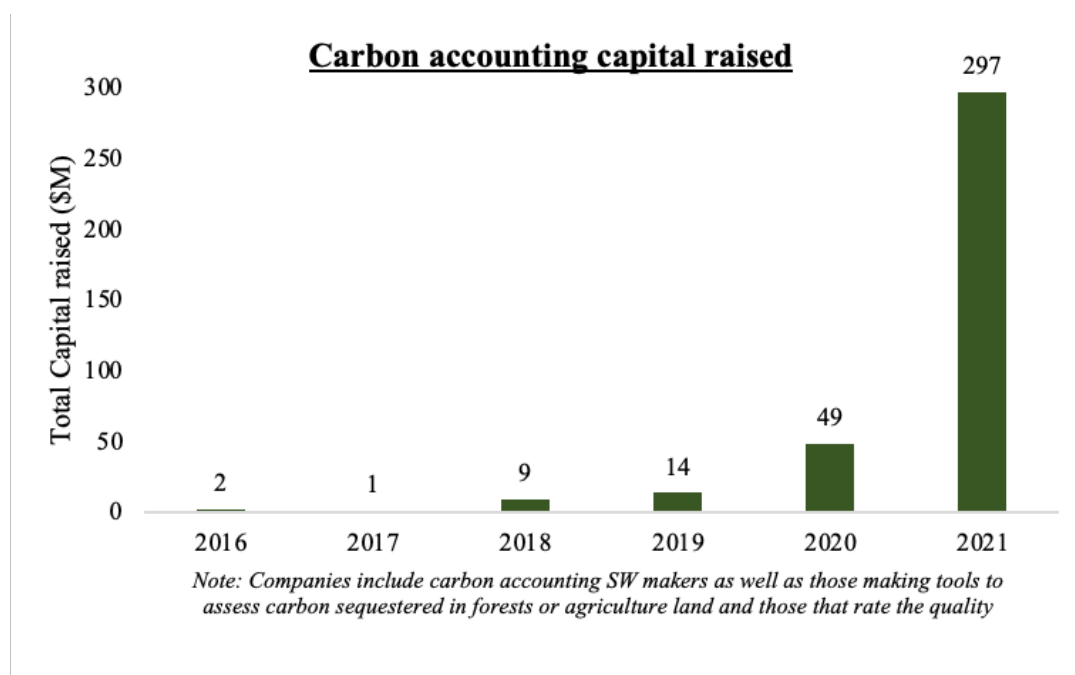
Table 11.12.1: Selected Transactions in the ESG Data Software Market

Company	Date	Stage	Round Size (€M)	Investors	Year Founded	Country
Sylvera	Mar '21	Seed	€ 4.9	Index Ventures, Revent Capital, Seedcamp Investments, Speedinvest	2020	UK
Plan A	Mar '21	Seed	€ 2.6	SoftBank, Demeter IM	2017	Germany
Persefoni	Apr '21	Series A	€ 8.1	NGP ETP, Sallyfort Investment	2020	USA
Sweep	Apr '21	Seed	€ 4.2	2050, New Wave VC	2020	France
Supercritical	Apr '21	Pre-seed	€ 2.4	LocalGlobe Venture	2021	UK
Position Green	Jul '21	Pre-seed	€ 0.6	Angel Investors	2015	Sweden
Greenly	Sep '21	Seed	€ 2.5	French Partners VC, BPI	2019	France
Climatiq	Sep '21	Pre-seed	€ 1.7	Cherry Ventures, angel investors	2021	Germany
Normative	Oct '21	Series A	€ 10.0	ETF Partners, 2150	2014	Sweden
Persefoni	Oct '21	Series B	€ 87.4	Clearvision Ventures, Bain&Co	2020	USA
Plan A	Nov '21	Series A	€ 8.6	HV Capital, Keen	2017	Germany
Sweep	Dec '21	Series A	€ 19.4	Balderton	2020	France
Watershed	Feb '22	Series B	€ 62.4	Sequoia Capital, Kleiner Perkins	2019	USA
Sweep	Apr '22	Series B	€ 66.5	Coatue, Balderton, 2050, New Wave, La Famiglia	2020	France

Note: Round size presented in € based on FX rate as per EOM the month the fundraising occurred

Source: S&P Capital IQ, Company and investor press releases

Figure 11.12.2: Carbon Accounting Tech Global Capital Raised L6Y



Source: Reuters, Climate Tech VC, Pitchbook

11.13. Supporting Data for Section 7.1 - From a 2016 Pitch Event to a 2019 Investment

Table 11.13.1: Worldfavor Previous Funding Rounds

Date	Round	Round size (MSEK)	Aggregate capital (MSEK)	Investors
Apr-16	Pre-seed	5.3	5.3	Axsu Ventures, Vinnova, EU
Jun-17	Pre-seed	6.5	11.8	Norrskén, Soläng Invest, Axsu Ventures, Ludvig Linge
Nov-19	Seed	30.0	41.8	Spintop Ventures, Brightly Ventures, Norrskén

Source: S&P Capital IQ, Company information

Table 11.13.2: Worldfavor Income Statement 2016–2020

Income Statement - Worldfavor AB (SEK)					
	2016	2017	2018	2019	2020
Revenue					
Total revenue	1 775 047	1 081 434	6 166 511	9 336 226	13 356 682
<i>Revenue growth rate</i>	<i>n.a.</i>	<i>(39.1%)</i>	<i>470.2%</i>	<i>51.4%</i>	<i>43.1%</i>
Operating expenses					
Raw materials & consumables	(120 628)	(63 993)	(4 960)	(122 600)	-
Other external costs	(602 947)	(979 897)	(1 744 460)	(2 736 242)	(4 174 595)
Personnel expenses	(3 197 174)	(4 546 798)	(6 477 982)	(8 323 531)	(14 835 675)
Depreciation & amortization	-	(1 196)	(226 990)	(751 420)	(1 532 873)
Other operating expenses	-	00	00	(8 746)	(317)
Total operating expenses	(3 920 749)	(5 591 884)	(8 454 392)	(11 942 539)	(20 543 460)
EBIT	(2 145 702)	(4 510 450)	(2 287 881)	(2 606 313)	(7 186 778)
<i>Operating margins</i>	<i>(120.9%)</i>	<i>(417.1%)</i>	<i>(37.1%)</i>	<i>(27.9%)</i>	<i>(53.8%)</i>
Financial income/(expenses)					
Financial income	139	321	-	-	-
Financial expenses	(44 988)	(43 946)	(42 554)	(39 897)	(35 367)
Total financial income/(expenses)	(44 849)	(43 625)	(42 554)	(39 897)	(35 367)
EBT	(2 190 551)	(4 554 075)	(2 330 435)	(2 646 210)	(7 222 145)
Net income	(2 190 551)	(4 554 075)	(2 330 435)	(2 646 210)	(7 222 145)
<i>Profit margin</i>	<i>(123.4%)</i>	<i>(421.1%)</i>	<i>(37.8%)</i>	<i>(28.3%)</i>	<i>(54.1%)</i>

Source: Worldfavor Annual Reports 2016–2020

Table 11.13.3: Worldfavor Balance Sheet 2016–2020

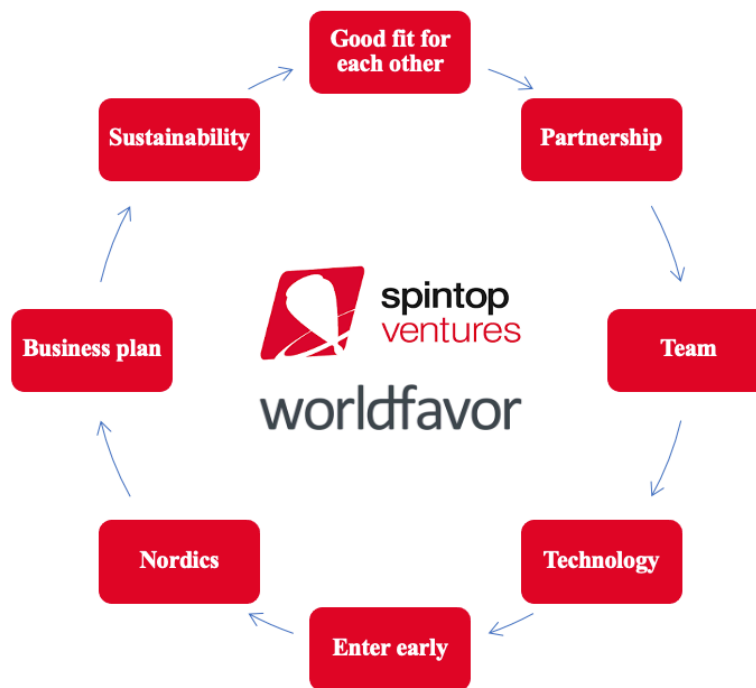
Balance Sheet - Worldfavor AB (SEK)					
	2016	2017	2018	2019	2020
Assets					
Alloted uncalled share capital	-	-	-	-	13 749 441
Fixed assets					
<i>Intangible assets</i>					
Capitalized expenses for development	-	-	2 009 643	4 066 162	7 176 891
Total intangible fixed assets	-	-	2 009 643	4 066 162	7 176 891
Tangible fixed assets					
Inventories, tools and installations	-	34 684	27 508	64 465	245 635
Total tangible fixed assets	-	34 684	27 508	64 465	245 635
Financial assets					
Other long-term receivables	-	280 500	280 500	280 500	1 010 483
Total financial assets	-	280 500	280 500	280 500	1 010 483
Total fixed assets	-	315 184	2 317 651	4 411 127	8 433 009
Current assets					
<i>Receivables</i>					
Accounts receivables	474 625	1 338 854	700 275	1 871 810	4 667 411
Other receivables	30 382	5 500	584	-	687 485
Prepayments and accrued income	996 170	186 753	176 138	168 711	-
Total current assets	1 501 177	1 531 107	876 997	2 040 521	5 354 896
Cash and bank balances					
Cash and bank balances	2 037 237	5 135 099	2 560 387	15 260 473	3 116 461
Total cash and bank balances	2 037 237	5 135 099	2 560 387	15 260 473	3 116 461
Total current assets	3 538 414	6 666 206	3 437 384	17 300 994	8 471 357
Total assets	3 538 414	6 981 390	5 755 035	21 712 121	30 653 807

Equity and liabilities					
Shareholders' equity					
<i>Restricted equity</i>					
Equity capital	124 400	151 300	151 300	163 500	200 966
Unregistered share capital	-	-	-	13 750 022	24 979
Fund for development expenditure	-	-	2 009 654	4 066 162	7 176 891
Total restricted equity	124 400	151 300	2 160 954	17 979 684	7 402 836
Unrestricted equity					
Share premium reserve	3 981 248	10 441 552	10 441 552	13 654 788	41 091 805
Retained earnings	(133 403)	(2 323 955)	(8 887 684)	(13 274 627)	(19 031 565)
Net income	(2 190 551)	(4 554 075)	(2 330 435)	(2 646 210)	(7 222 145)
Total unrestricted equity	1 657 294	3 563 522	(776 568)	(2 266 049)	14 838 095
Total equity	1 781 694	3 714 822	1 384 386	15 713 635	22 240 931
Long-term liabilities					
Other debt	1 200 000	1 200 000	914 286	742 857	571 429
Total long-term liabilities	1 200 000	1 200 000	914 286	742 857	571 429
Short-term liabilities					
Other debt	-	-	171 429	171 429	171 429
Unearned income	-	-	-	48	-
Accounts payable	91 227	2 295	22 560	839 191	499 299
Taxes payable	23 474	7 665	28 514	53 769	138 419
Other liabilities	285 183	402 028	489 152	508 868	1 224 936
Accrued expenses and prepaid income	156 836	1 654 580	2 744 708	3 682 324	5 807 364
Total short-term liabilities	556 720	2 066 568	3 456 363	5 255 629	7 841 447
Total equity and liabilities	3 538 414	6 981 390	5 755 035	21 712 121	30 653 807

Source: Worldfavor Annual Reports 2016–2020

11.14. Supporting Data for Section 7.2 - Worldfavor's Fit with Spintop's Investment Criteria

Figure 11.14.1: Worldfavor's Fit with Spintop's Investment Criteria



Worldfavor's Fit With Spintop's Investment Criteria	
Good fit for each other	Spintop and Worldfavor had been in contact for several years before the actual investment, leaving plenty of time for both parties to assess the fit.
Partnership	Spintop had a major USP compared to other investors due to their experience of SaaS business models and early sustainability focus.
Team	Spintop prefers to work with entrepreneurial teams, and having been in contact with Worldfavor for years assured them of their capabilities.
Technology	Worldfavor's SaaS platform was a good fit for Spintop's technology sector focus.
Enter early	Spintop usually invests in companies as one of the first VC firms, as was the case when they invested in Worldfavor's seed round. The fact that Norrsken was already an investor was viewed as a positive factor.
Nordics	Worldfavor is founded in Sweden and headquartered in Stockholm.
Business plan	Spintop really liked the potential scalability, the fundamentals of the business model and had strong belief in the market overall.
Sustainability	The Worldfavor platform aims to increase sustainability data transparency. With increased transparency comes opportunities to drive positive impact.

Source: Company information

11.15. Supporting Data for Section 7.5 - Illustrative Valuation Exercise

Table 11.15.1: Illustrative Valuation and Unrealized Return Analysis I

Illustrative valuation and unrealized return analysis assuming no multiple expansion from 2019 to 2022 and looking at Spintop ownership stakes of 10% to 20%.

2019 seed investment					
Inputs & assumptions					
Total amount raised (MSEK)	30.0				
Norrskan (MSEK)	8.0 <i>assumption</i>				
Spintop investment (MSEK)	11.0 <i>assumption</i>				
Spintop ownership %	15.0% <i>assumption</i>				
Brightly investment (MSEK)	11.0 <i>assumption</i>				
Brightly ownership %	15.0% <i>assumption</i>				
Implied post-money val. (MSEK)	73.3				
Implied pre-money val. (MSEK)	43.3				
ARR 2019 (MSEK)	9.3				
Implied TEV/ARR multiple	7.9x				
ARR 2021 (MSEK)	20.0 <i>Company info.</i>				
ARR Q2 2022 (MSEK)	25.0 <i>Company info.</i>				
Valuation Q2 2022 (MSEK)	157.1				
Value of Spintop's stake (MSEK)	23.6				
Spintop MoM	2.1x				
Spintop IRR	35.6%				

2019 valuation range					
Spintop ownership %	20.0%	17.5%	15.0%	12.5%	10.0%
Post-money valuation (MSEK)	55.0	62.9	73.3	88.0	110.0
Pre-money valuation (MSEK)	25.0	32.9	43.3	58.0	80.0
TEV/ARR LTM multiple	5.9x	6.7x	7.9x	9.4x	11.8x

Q2'22 valuation and unrealized return range assuming no multiple expansion					
Spintop ownership %	20.0%	17.5%	15.0%	12.5%	10.0%
Post-money valuation (MSEK)	117.8	134.7	157.1	188.5	235.6
TEV/ARR LTM multiple	5.9x	6.7x	7.9x	9.4x	11.8x
Spintop unrealized MoM	2.1x	2.1x	2.1x	2.1x	2.1x
Spintop unrealized IRR	35.6%	35.6%	35.6%	35.6%	35.6%

Source: Company and illustrative data based on the authors' assumptions

Table 11.15.2: Illustrative Valuation and Unrealized Return Analysis II

Illustrative valuation and unrealized return analysis assuming 15% Spintop ownership stake and allowing for multiple expansion and contraction from 2019 to 2022

Q2'22 valuation and unrealized return range assuming 15% Spintop ownership stake					
TEV/ARR LTM multiple	6,0x	7,0x	7,9x	9,0x	10,0x
Post-money valuation (MSEK)	120,0	140,0	157,1	180,0	200,0
Spintop unrealized MoM	1,6x	1,9x	2,1x	2,5x	2,7x
Spintop unrealized IRR	21,8%	29,5%	35,6%	43,2%	49,4%

Q2'22 unrealized MoM assuming 15% Spintop ownership stake

ARR as of Q2'22 (MSEK)	TEV/ARR multiple Q2'22					
	6.0x	7.0x	7.9x	9.0x	10.0x	
	20	1.6x	1.9x	2.1x	2.5x	2.7x
	25	2.0x	2.4x	2.1x	3.1x	3.4x

Q2'22 unrealized IRR assuming 15% Spintop ownership stake

ARR as of Q2'22 (MSEK)	TEV/ARR multiple Q2'22					
	6.0x	7.0x	7.9x	9.0x	10.0x	
	20	21.8%	29.5%	35.6%	43.2%	49.4%
	25	33.1%	41.6%	35.6%	56.6%	63.3%

Source: Company and illustrative data based on the authors' assumptions