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The Challenges of Creating Meaningful Impact in Digital Entrepreneurship

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Abstract

Purpose: Recently, global impact investments broke the \$1000-billion barrier and another \$4200 billion are required to tackle the United Nations' Sustainable Development Goals by 2030. Additionally, digital entrepreneurship has been hailed for its ability to usher in a sustainable future. Therefore, this research seeks to uncover common challenges among digital impact ventures regardless of industrial affiliations among impact ventures, which in turn could inform broadly applicable strategies on how to mitigate these challenges.

Methods: This study was conducted through qualitative thematic analysis. A series of interviews with founding entrepreneurs and industry professionals from various impact ventures were conducted, subsequently transcribed, and analysed according to 1st and 2nd order analysis.

Results: The results indicate emerging patterns of challenges between impact ventures, though these occur infrequently and lack sufficient corroborating evidence to be considered definitive proof of specific patterns occurring within impact ventures. Though several individual phenomena and emerging patterns are observed, which warrants its own research that could shed further light on challenges impact ventures face.

Contribution: Prior empirical studies have not attempted to map the unique challenges digital entrepreneurs face in attempting to create meaningful impact. While it is concluded that to get more clarity on broadly manifesting challenges within digital impact ventures, further and more specific research is required. This study contributes by highlighting avenues of further studies pertaining to challenges of creating meaningful impact.

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1. Introduction

In this section, the background, research motivations and research questions of this thesis are introduced, followed by the delimitations.

1.1 Background

Digital entrepreneurship is recognised globally as a pillar for economic development and welfare (Shen, Lindsay & Xu, 2018). Digital entrepreneurship has become important as advancements in technology have impacted and changed the ways businesses operate, creating opportunities for entrepreneurs. Digital entrepreneurship is perceived globally as symbolic of high levels of innovation and disruption (Zaheer, Breyer & Dumay, 2023). The current flexibility, applicability, and omnipresence of digital technology in daily life has changed how we do things, e.g., how innovation is done (Nambisan, 2017a). How people conduct strategy, organisation and combine concepts and components through digital means to create novel products and services has changed innovation fundamentally (Yoo et al., 2012). The development and innovation in digital technologies threatens conventional business models, due to the popularity of models which captivate the value delivery process fit for digital entrepreneurship (Remané, Schneider & Hanelt, 2022). These developments make tech-savvy digital entrepreneurs suited for tackling new opportunities as they arise; one opportunity could be the issue of global sustainability.

Digital entrepreneurship is considered suitable to secure sustainable futures. Furthermore, the seventeen Sustainable Development Goals (SDGs) launched by the UN are considered an indirectly propelling force for digital entrepreneurship. Industry leaders have little incentive in streamlining their businesses, as maintaining the status quo is more profitable (Soltanifar, Hughes & Göcke, 2021). However, entrepreneurial individuals can reap rewards by implementing changes that industry leaders are unwilling or unable to change. Thus, start-ups are incentivised to challenge established structures and organisations; disrupting conventional practices in various industries by implementing superior products and services, regardless whether these changes pertain to environmental, economic or social factors (Schaltegger & Wagner, 2011).

The SDGs bind stakeholders together through a joint understanding “*that business had a crucial role to play in achieving global transformational development*” (Caprani, 2016, p. 103). Recent developments in investing agree with this; last year, global impact investments broke the \$1000-billion barrier. Enormous sums of capital are being invested in “impact” start-ups: businesses which aim to provide a large and meaningful positive impact for the planet. However, the Swedish National Advisory Board for Impact Investing (Lennartsson, 2022) pointed out that “impact” is misunderstood by investors, and misused by entrepreneurs, causing many businesses to unwittingly be greenwashed (Mulligan & Kelly, 2021).

Considering the digital element is vital. While innovation through digital entrepreneurship is recognised for its potential to contribute to sustainable solutions through digitisation, digital innovation is known to create problems where there used to be none (Ljungberg, Stenmark & Staron, 2022).

1.2 Research Motivation

Another approximate \$4200 billion are required in sustainable impact investment to tackle the United Nations’ (UN) SDGs for 2030 and become carbon-neutral by 2050, and stakeholders seem keen to reach these milestones (Lennartsson, 2022). Stockholm single-handedly grew from €1.3bn in impact investment to €3.6bn between 2020-2021, surpassing economies of the UK and Germany (Wakeley, 2022). Furthermore, the impact incubator ‘Norrskén’, launched an initiative compared to a ‘Nobel prize for entrepreneurs’, to push impact through entrepreneurship into mainstream narratives (Ahmadi, 2022).

Despite recent developments in the entrepreneurial impact ecosystem, there is no conclusive definition of the term ‘impact’, and explanations remain ambiguous among researchers (Clarkin & Cangioni, 2016a; Höchstädter & Scheck, 2015a; Jackson, 2013a). Impact themes stated by companies tend to be broad, seldom offering insight on what issues are being tackled. Additionally, with broad definitions for impact, greenwashing tends to arise (McCallum & Viviers, 2021a). The Swedish National Advisory Board for Impact Investing states that organisations and businesses are frequently wrongly categorised as impact-companies, indicating unspecific definitions from organisations are a root problem of greenwashing (Lennartsson, 2022). But how do impact ventures align with definitions? If the understanding

of meaningful impact is absent or misunderstood, insights can be gained on issues with creating it.

Meanwhile, disruption caused by digital ventures can shake up status quo and propel industries forward. However, through this disruption, the economic/environmental/social trade-offs can carry risk of contributing with more negative impacts (Mulligan & Kelly, 2021). How do digital entrepreneurs and industry experts keep this in mind while shaping their start-up? And how do they assess impact? Research on frameworks to facilitate organisational impact assessment exists (Mulligan & Kelly, 2021), but application of frameworks, or understanding utilisation, is unexplored within existing research.

Furthermore, previous research on digital entrepreneurship and digital business models is bountiful, but in context of meaningful impact, these topics are overlooked. This is problematic; as the digital factor within entrepreneurship is not distinguished from conventional entrepreneurship, it becomes difficult to gauge how digital start-ups fail or succeed in contributing with meaningful impact. Thus, through interviews with digital entrepreneurs and industry experts towards issues relating to sustainability trade-offs, challenges with attempting to be disruptive while avoiding negative impact will be identified. If an absence of perceived challenges is discovered, more is learnt about wider entrepreneurial perceptions regarding creating meaningful impact.

1.3 Purpose and Research Question

The aim of this study is to gain a deeper understanding of challenges of creating meaningful impact in digital ventures. Through interviews with entrepreneurs and industry experts within digital ventures, the researchers learn about their understanding of meaningful impact and difficulties of creating it. With digital ventures being a disruptive influence upon global businesses, inquiring about digital entrepreneurs' understanding of disruption and trade-offs because of their ventures aids in gaining further understanding of how impact is approached by digital entrepreneurs and industry professionals. With this, issues with creating meaningful impact are highlighted, and strategies to mitigate them can be uncovered.

As the study aims to shed light on different issues, the researchers aspire to have sufficient data richness and saturation to effectively suggest venues of future research to address related topics

and opportunities to build onto relevant entrepreneurial academia. With this in mind, and through deduction of contemporary literature, a research question has been formulated:

RQ: What do digital entrepreneurs and industry experts perceive as challenges when creating meaningful impact?

1.4 Delimitations

This study is based in the field of entrepreneurship with a focus on digital entrepreneurship and meaningful impact. With the studied subjects being linked to sustainable entrepreneurship, sustainable impact assessment and digital business models, these fields will be related to digital entrepreneurship and meaningful impact. Based on observed relevance, these subjects will be discussed in the analysis/concluding section.

Due to the incongruencies in entrepreneurial academia regarding the definition of “impact”, the researchers constructed the following definition:

“Meaningful impact is an approach of doing business where an organisation intentionally and specifically focuses on creating both measurable environmental and/or societal impact, and economic value for the business owners and/or investors.”

This definition is based off literature from McCallum & Viviers (2021), Agrawal, Atasu & van Ittersum (2015), Capelle-Blancard & Monjon (2012), Harjiw & Jackson (2012), Hebb (2013), Höchstädter & Scheck (2015) and Jackson (2013b).

The researchers elected to limit this study to founders, industry experts and professionals within digital ventures with specifically stated impact goals for two reasons:

1. By focusing on niche entrepreneurial segments, specific results can be achieved.
2. With the rate of global digital transformation, being specific to digital entrepreneurship should provide relevant results, also for the future.

1.5 Thesis Outline

Concluding the introduction, the following chapter elaborates on literature relevant to the research question. Following this, chapter three presents the methodological approach for the thesis. In chapter four, an analysis of the findings is conducted. Subsequently, in chapter five and six, these findings are analysed and discussed with concluding remarks for how future research could be conducted.

2. Theoretical Framework

To understand challenges of creating meaningful impact in digital entrepreneurship, it is vital to grasp the scope of the project. In this section, an academic base is created for defining challenges, their characteristics and impact on the entrepreneurial industry.

2.1 Digital Entrepreneurship

In their study, Hanesch & Schallmo (2022) provide an overview of developments pertaining to digital entrepreneurship as a core concept. Digital entrepreneurship is globally recognised as a crucial pillar for economic development and welfare within countries (Shen, Lindsay & Xu, 2018). Digital entrepreneurship is linked to advancements in technology and is becoming increasingly important as technology has impacted and changed the way businesses operate. This has created opportunities for entrepreneurs (Zaheer, Breyer & Dumay, 2019).

Digital entrepreneurship refers to use of digital technologies to create new and scalable business models. The surge of internet usage and mobile technologies in the 2000s has made it easier to launch new products and/or services. These technological developments have simplified options for organisations and individuals to reach new markets, customers, and disrupt otherwise traditional industries. Digital entrepreneurship is globally symbolised by high levels of innovation, disruption and instability (Zaheer, Breyer & Dumay, 2019). Digital entrepreneurs are utilising surging technologies like artificial intelligence (AI), internet of things (IoT), virtual reality (VR) and blockchain, to disrupt industries and leverage untapped market spaces (Hanesch & Schallmo, 2022b).

Digital entrepreneurship forms a globally competitive industry, with digital businesses able to reach customers worldwide. As a consequence of the changing technological landscape, the failure rate for digital ventures is high. Digital entrepreneurs face high levels of uncertainty and risks, which at times, they need to take to create ‘the next new thing’ and penetrate new markets (Eisenmann, 2014).

Digital technologies are vital for entrepreneurial opportunities in terms of outcome and process (Hanesch & Schallmo, 2022b; Nambisan, 2017a). According to Nambisan (2017) digital technologies manifests within digital entrepreneurship in three manners: digital artifacts,

platforms and infrastructure. Digital artifacts are the addition of digital components to physical devices, e.g., a Wi-Fi connected fridge. The purpose of digital artifacts is to add value to the life of users. These artifacts are frequently part of networks of connected artifacts, creating functioning ecosystems (Hanesch & Schallmo, 2022b). Digital platforms function as a host for digital ecosystems to thrive in. They are defined as jointly used sets of services and architecture, e.g., an operating system (Nambisan, 2017a; Parker, Alstyne & Choudary, 2016). Finally, digital technologies promoting entrepreneurship by enabling communication, collaboration, or computing capabilities, are referred to as digital infrastructures (Nambisan, 2017b). Examples are cloud-based interactions, digital analytics platforms, and social media.

These three elements form the core of digital entrepreneurial ventures globally. Either as standalone, or in combination. In line with this, the definition of digital entrepreneurship chosen to be represented within this study aligns with Davidson & Vaast (2010, p. 7):

“The persuasion of venture opportunities arising from new media and technology through the creation of digital artifacts, digital platforms and digital infrastructures.”

2.2 Digital Business Models

Following the surge in digital ventures, digital business models have emerged. Since the development in digital and mobile technologies, conventional business models are threatened by the rise of business models which captivate the value delivery process in digital entrepreneurship (Remané, Schneider & Hanelt, 2022). A business model describes how an enterprise creates, delivers and captures value for customers (Teece, 2010). The business model has nothing to do with technology provided, but describes mechanisms which allow for exploitation and value-creation of technology for end-consumers and company (Amit & Zott, 2001). Different business models were defined before the digital revolution had commenced, some of which appeared in *Business Model Navigator* as business model innovation pattern cards (Gassman, Frankenberger & Csik, 2020). In Gassman, Frankenberger & Csik (2020) book, versions of digital business models appear, such as ‘freemium’, ‘franchising’ and ‘long-tail’. However, technological change has been the driver for overhauling business models and creating new ones out of them.

The development of technological advancements, such as AI, social media and additive manufacturing led us to the present (D’Aveni, 2018). Several new business models have been defined, including digitally-enabled business model patterns, which extend beyond the original definition of traditional business model patterns.

In their journal, Remané, Schneider & Hanelt (2022) define 49 digital business model types, which are segregated into twelve groups from three categories: *firms that offer, create, deliver and capture value by* – (1) creating and selling digital products and services to customers, (2) delivering digital resources and capabilities that other businesses need and lastly (3) facilitating intermediation.

‘Creating and selling digital products and services’, is divided into two groups. The first group, ‘the provision of digitally enabled products’ features business model types focusing on selling products enabled by digital technologies. Businesses here can sell products connected to the internet and complemented by digital services (Remané, Schneider & Hanelt, 2022). The second group, ‘the provision of digitally enabled services’ are business model archetypes focusing on selling digitally enabled services. Examples are car insurance companies offering fairer insurance rates based on data it collects.

The second category, ‘delivering digital resources and capabilities that businesses need for their activities’ comprises subcategories. These subcategories focus on providing hardware/infrastructure, software or data. Companies offering machines utilising AI to conduct tasks previously performed by employees are an example of hardware delivery. An example of software-focused business models are companies like McAfee, which provide software to increase customers’ cybersecurity (McAfee, 2022; Remané, Schneider & Hanelt, 2022). Lastly, data analytics companies can analyse chunks of user/customer data and sell it to companies.

Lastly, ‘facilitating intermediation’ comprises the most subcategories: seven total. All business model archetypes have to do with platform creation, only changing the user market base over different business models. Examples are consumer-to-business platforms, online-to-online, business-to-business, peer-to-peer, etc. These platforms overlap in their focus on building and leveraging communities (Remané, Schneider & Hanelt, 2022). The facilitating company plays

the role of providing the platform and connecting parties. The cash-generating aspect varies, but can come from ad revenue, paid accounts or commission-based models.

A breakdown of the digital business models can be found in appendix 1.

2.3 Meaningful Impact

Meaningful impact is considered a broad term which does not focus on a singular aspect of creating impact. For this reason, the definition of meaningful impact will be based on a range of articles from different authors (Agrawal & Hockerts, 2021; Capelle-Blancard & Monjon, 2012; Ebrahim & Rangan, 2014; Hebb, 2013; Höchstädter & Scheck, 2015a; Jackson, 2013b; McCallum & Viviers, 2021a). While scholars highlight the lack of a universal definition of (meaningful) impact, the level of agreement amongst them is high (Jackson, 2013b). While the majority of these articles focus on impact investing and considerations within ongoing businesses and industries, the terms *meaningful*, *real* and *lasting* frequent the chosen articles.

Jackson (2013b, p. 97) and McCallum & Viviers (2021b, p. 16) agree on the definition of meaningful impact: the result of an approach of doing business which intentionally focuses on creating a social and/or environmental impact, alongside creating financial returns for business owners (Battilana & Lee, 2014; Harji & Jackson, 2012a; Watts & Scales, 2020).

Höchstädter & Scheck (2015b) argue meaningful impact has two dimensions: a *financial* one and a *non-financial* one. Besides these two elements, it is argued the non-financial aspect of meaningful impact must be intentional; It cannot be an incidental side-effect of commercial deals (Brown & Swersky, 2012; Höchstädter & Scheck, 2015b). Additionally, Höchstädter & Scheck (2015b) argue that environmental/societal impact is viewed to lessen economic impact.

Hebb (2013) involves double- and Triple Bottom Line (TBL), mission-related impact, program-related impact and social finance when discussing meaningful impact. The creation of meaningful impact occurs when there is a deliberate decision to make both long-term financial returns and ancillary social and/or environmental benefits (Choi et al., 2013; Hebb, 2013). Other definitions on creation of meaningful impact are “*the integration of environmental, social or corporate governance considerations into the business process*” (Capelle-Blancard & Monjon, 2012, p. 239).

Agrawal, Atasu & van Ittersum (2015) argue definitions on lasting impact have become more complex post-2007 and feature quantifiable and specific aspects. Recurring themes in definitions they investigate are *social entrepreneur*, *financials* and *venture philanthropists*.

While explanations remain ambiguous among scholars, it is vital for the continuation of research to look at impact from an academic perspective, rather than corporate (Clarkin & Cangioni, 2016b; Höchstädter & Scheck, 2015b; Jackson, 2013b). Impact themes as stated by companies tend to be broad, seldom offering insights of exact issues being challenged by companies. Additionally, with broad definitions of impact by companies, impact-washing arises. As this study focuses on meaningful impact for digital ventures, it is essential the desired impact is specific (McCallum & Viviers, 2021b). The specific impact should be measurable; creation of track records, risk and return profiles, benchmarks and standardised measurement practices aid in this process (Bonsey, Cohen & Noble, 2016; Drexler & Noble, 2014; McCallum & Viviers, 2021b). For meaningful impact, there does not have to be a particular focus on societal- or environmental impact, but the differentiation can be made later. For the sake of creating meaningful impact, companies tend to focus on the SDGs created by the UN (McCallum & Viviers, 2021b; UN, 2022).

To study challenges of creating meaningful impact in digital entrepreneurship, a definition of meaningful impact is formed. This definition considers previously discussed literature and Agrawal, Atasu & van Ittersum's (2015) philosophy on the evolution of definitions of impact, to ensure a specific and quantifiable definition for future research. The following definition of meaningful impact was created from a combination of literature from McCallum & Viviers, (2021b) Agrawal, Atasu & van Ittersum (2015), Capelle-Blancard & Monjon (2012), Harji & Jackson (2012b), Hebb (2013), Höchstädter & Scheck (2015b) and Jackson (2013b):

“Meaningful impact is an approach of doing business where an organisation intentionally and specifically focuses on creating both measurable environmental and/or societal impact, and economic value for the business owners and/or investors.”

2.4 Digital Entrepreneurship and the SDGs

Digital entrepreneurship is often hailed to secure a sustainable future through contributing with sustainable development (Apostolopoulos et al., 2018; Littlewood & Holt, 2018). Sustainable development is described as the following:

“Development that meets the needs of the present generations without compromising the ability of the future generations to meet their own needs” (Keeble, 1988, p. 20).

However, the digitisation of society and introduction of digital technologies can cause unintended effects, particularly when it comes to environmental factors (for example, increased global energy consumption brought on by cryptocurrencies) or social factors (biases within AI). Unforeseen economic, social or environmental consequences such as unemployment, social isolation or increased energy requirements, are examples of potential negative impacts associated with digital innovation (Hund et al., 2021). Furthermore, many digital solutions are greenwashed or impact-washed, meaning products claim to be solutions to social or environmental issues, while their intentions lie with profit-making. With this, Mulligan & Kelly (2021) provide a framework to ensure digital entrepreneurs are delivering upon SDGs. This is done through a literature review to find methods of measuring the TBL and developing a framework which tested 1) Research environments as part of research projects, and 2) Real world environments to solicit feedback and iterate solutions with entrepreneurs through ‘Research in the wild’. This framework aids digital entrepreneurs in assessing impact and improving upon it. The authors state:

“It can also provide a common language for the exchange of ideas and collaboration between projects” (Mulligan & Kelly, 2021, p. 6).

SDGs pertains to seventeen goals set by the UN General Assembly to transform the world for the better. Primary responsibility for delivering upon these goals lies with the national governments, but businesses are recognised to contribute to these goals (Apostolopoulos et al., 2018).

Multiple methods are proposed to aid businesses in contributing toward SDGs, instead of green/impact-washing organisations. These suggestions include integrating SDGs into

reporting for KPI measurement, and integration of TBL values into businesses (Jones, Comfort & Hillier, 2018). The TBL is an approach to sustainability which aims to provide methods of measuring business success in three factors: Economic, Social and Environmental (Elkington, 2004). This is used as a base for Mulligan & Kelly later proposed framework (2021). Through reviews of sustainability literature, research within the subject focuses on environmental and social factors, but seldom the economic one. Mulligan and Kelly's (2021) framework amends this issue by including it in their framework. Their framework is composed of six main factors with four auxiliary parts. The six main factors are: *Type & Scale/Scope*, *Boundary Definition*, *Economic*, *Environmental*, *Social*, and *Unified Impact Assessment*.

Type refers to what kind of project the venture entails. Defining the type is done by *assessing central objectives of the project and what kind of technology will be used*. *Scale* refers to the ability of the project to be reused, whereas *scope* refers to the level of variety in the project. *Boundary definition* refers to geographical boundaries, which is important as digital technologies are unbound by physical limitations.

The *economic* factor refers to economic effects of a venture/project. The *environmental* factor refers to environmental consequences of a venture/project. The *social* factor refers to impact upon social aspects caused by a venture/project. *Unified Impact Assessment* is the final assessment of a venture/project's impact, based on direct, indirect and tertiary impact of the solution.

The auxiliary parts are *direct impact*, *indirect impact*, *tertiary impact*, and *ranking system*.

1. *Direct* impact refers to immediate effects of a business/solution/project. For example, increased revenues or decreased spending.

2. *Indirect* impact refers to impact which is close to direct impact. For example, how local businesses are affected economically by the introduction of a digital service/product in a limited area.

3. *Tertiary* impact refers to third order impacts which are often unintended. For example, when ethical biases affect end users, or when data collection infringes upon end-user privacy.

These three levels are analysed within three factors: economic, environmental and social. The *Ranking System* is a method to make digital entrepreneurs understand where change is needed most. Mulligan and Kelly (2021) suggest their framework could be implemented alongside conventional business model canvases - ensuring entrepreneurs take angles beyond profit into consideration when formulating a business model.

2.5 Sustainable Impact Assessment

Sustainable entrepreneurship is a growingly important field of study not properly explored by scholars (Haldar, 2019). The domain has been shaped by its forebears, but theoretical and empirical developments within the domain are slowed by various approaches to interacting with sustainability-oriented entrepreneurs (Di Vaio et al., 2022). Multiple scholars (Omri, 2018; Schaltegger & Hörisch, 2017) state research within ‘impact on sustainability’ is the primary focus within entrepreneurial studies. However, while focus within entrepreneurial academia lies within this field, impact assessment issues, in conjunction with entrepreneurial contexts, is a topic lacking understanding (Ramani, SadreGhazi & Duysters, 2012; Trautwein, 2020a).

Despite this, plentiful literature has been published on sustainability and impact assessment, which have been increasingly connected over the years (Ness, 2007). These studies consider sustainability assessment as any process that directs decision-making towards sustainability (Waas et al., 2014). On the other hand, a definition for impact assessment is the ‘process of identifying future consequences of current and proposed actions’ (IAIA, 2023; Trautwein, 2020b). Both types of assessment show similarities. Trautwein (2020b, p. 3) creates a definition for the two types of assessments, under the Sustainable Impact Assessment (SIA) typology:

“Any process aiming to achieve sustainability goals and to make sustainability issues tangible and understandable based on a decision-guiding approach that helps to identify, structure and evaluate the sustainability impact of past, current and/or planned actions
(Bond, 2012; IAIA, 2023; Trautwein, 2020b; Visser et al., 2009; Waas et al., 2014).

Trautwein (2020b) explores how approaches to assess the sustainability impact of start-ups need to be designed to serve stakeholders. She creates an overview of relevant literature based on predetermined research questions. With her paper, she creates impact on four fronts.

First, it provides insights into different start-ups and how they create challenges for SIA. Her paper reflects on requirements for successful SIA in start-ups and provides an overview of SIA approaches among existing start-ups in the literature review, which are categorised based on criteria. By including applied literature, Trautwein's (2020b) paper makes SIA solutions implementable for start-ups. The research highlights solutions for SIA challenges and provides a base for future research. While the paper focuses on assessing sustainability impact among start-ups, shortcomings of current sustainability assessment tools must also be taken into consideration.

Trautwein (2020b) utilises Sala, Ciuffo & Nijkamp's (2015) framework on sustainability assessment as a theoretical base for her assessment tool. This framework is based on sustainability assessment principles and sustainability assessment procedure for its two pillars. It offers holistic perspectives on assessment procedures by addressing underlying sustainability approaches (Sala, Ciuffo & Nijkamp, 2015; Trautwein, 2020b). The tables related to Sala, Ciuffo & Nijkamp's (2015) approach are found in appendix 2. This framework is then blended with 23 different SIA tools found using her literature study. These tools were ranked by three criteria: applicability to the stage of the business, the size of the business, and the business model. Since Sala, Ciuffo & Nijkamp's (2015) study focuses on finding SIA tools applicable to start-ups, these criteria are deemed most important. After applying these criteria, Trautwein, (2020b) finds seven SIA tools most applicable for start-ups to assess their sustainability and impact (please see appendix 3).

Moreover, prior to the surge of sustainable development, small businesses focused on the profit paradigm of the TBL (Elkington, 2004). However, it is accepted entrepreneurship can be a driving force of sustainable development through entrepreneurial processes (Johnson & Schaltegger, 2020). The SDGs bind stakeholders together through an understanding “*that business had a crucial role to play in achieving global transformational development*” (Caprani, 2016, p. 103). Research indicates integration of SDGs into a venture incentivises competition and contributes with creating sentiments of responsibility towards communities (Neumeyer & Santos, 2018). Furthermore, factors propelling entrepreneurial individuals towards sustainable ventures have been identified: knowledge management, the ethical conscience of entrepreneurs, exploitation of new technologies, and creation of business models which take TBL concerns in mind (Di Vaio et al., 2022).

It is imperative to shape business models to integrate sustainability assessment, to ensure contribution to the SDGs (Di Vaio et al., 2022). Therefore, in a 2022 study, Di Vaio et al. (2022) developed a conceptual framework, identifying issues of sustainability assessment, which entrepreneurs must tackle while building a start-up. Further putting into context how ventures pursuing SDGs can enter new marketplaces and gain stronger potential with customers and stakeholders.

2.6 The Sustainable Development Goals Connectedness

SDGs were introduced by the UN in 2015 as a unifying call to action to protect the planet, end poverty, and create peace by 2030 (UN, 2022). The goals have been amended over time to better fit the challenges, though there have always been seventeen SDGs with targets and indicators to measure progress.

The SDGs are interconnected, addressing ranges of issues including poverty, health, education, gender equality, climate change, etc. The SDGs aim to ensure all people have basic needs, rights and opportunities met, while protecting the planet. To understand interconnectivity between SDGs and possible negative consequences of this interconnectedness, literature involving SDG trade-offs is examined (Boar, Palau & Oliveras-Villanueva, 2021; Raimbault & Pumain, 2022; Singh et al., 2018).

To gauge progress, the UN formalised 169 different goals. While these goals are presented independently, they are interrelated in social-ecological systems, meaning one can progress and impact others (Singh et al., 2018). At times, acquiring an SDG target has the prerequisite of acquiring another SDG as well. An example of this is SDG 2.4 *achieving sustainability of food production systems* would require elimination of harmful fishing practices – SDG 14.4 (Singh et al., 2018; UN, 2022). In other cases, SDGs can lead to imbalances in the goals it is trying to achieve. For example, there is a trade-off between SDG 7 *affordable and clean energy* and SDG 12 *responsible consumption and production*. Some renewable energies require significant amounts of material and land. Therefore, scaling up renewable energy potentially requires a shift towards responsible consumption and production patterns, before both goals can be realised without negatively impacting the other (Boar, Palau & Oliveras-Villanueva, 2021).

Understanding interdependencies is important, as it allows executors to determine which goals they deem more valuable (Raimbault & Pumain, 2022). Singh et al. (2018) developed a framework displaying relationships, showing the co-dependencies and trade-offs between SDGs.

While a definition of meaningful impact has been provided earlier in this theoretical framework, a two-way split is found in whether impact is environmental or societal. Digital entrepreneurship potentially creates impact on several different SDGs, namely SDG 8 *economic growth*, SDG 9 *industry, innovation and infrastructure* or SDG 4 *promoting education* (Moallemi et al., 2022). However, these SDGs possibly impact other SDGs, too. Digital entrepreneurship could encourage non-sustainable consumption, if it encourages throwaway habits, and the continuous efforts from digital companies to exclude certain groups further pushes for inequalities between different groups in society (Kuc-Czarnecka, Markowicz & Sompolska-Rzechuła, 2023).

Therefore, to create meaningful impact within digital entrepreneurship, it is vital to consider interlinkages of SDGs, as no singular goal solves all issues or benefits all of mankind (Singh et al., 2018). Companies require holistic approaches to consider interconnectedness of SDGs and minimise trade-offs (Boar, Palau & Oliveras-Villanueva, 2021; Kuc-Czarnecka, Markowicz & Sompolska-Rzechuła, 2023; Singh et al., 2018).

3. Research Methodology

This chapter gives an overview of research methodology, including techniques and procedures used to identify, select, and analyse information regarding ‘the challenges of creating meaningful impact in digital entrepreneurship’. The methodology incorporates data collection, data sampling, analysis and interpretation for the research theme at hand. The methodology is concluded with a discussion on ethical considerations made.

3.1 Epistemology and Ontology

When conducting research, hypotheses are created, guiding what methodology to use. Hypotheses made based on something existing are called ‘ontology’, while ‘epistemological’ hypotheses are terms and conditions for this reality to exist (Moon & Blackman, 2017). This essay aims to identify what challenges come into play when creating meaningful impact in digital entrepreneurship. Considering the meaningful impact perspective of the research theme, it is proposed certain phenomena are understood by analysing personal views and behaviours of industry experts and digital entrepreneurs. Given the explorative goal of research and aim to gain insights from interviews, a qualitative study will be performed (Bryman, Bell & Harley, 2019; Scotland, 2012). As the research is dependent on perspectives and experiences of interviewees, the ontology, epistemology and methodology are based on an interpretative methodology (Scotland, 2012).

For the ontological hypotheses, three assumptions are created in line with the theoretical framework. To start, assumed is that meaningful impact is a social construct. Additionally, the researchers assume challenges of digital entrepreneurship to create meaningful impact to be comparable among the types of digital businesses following Davidson & Vaast's (2010) definition of digital entrepreneurship. Lastly, the team assumes correlation between types of SDGs the digital business impacts and challenges it perceives in creating meaningful impact.

As mentioned, conceptualisations by McCallum & Viviers (2021), Agrawal et al., (2015) Capelle-Blancard & Monjon (2012), Harji & Jackson (2012), Hebb (2013), Höchstädter & Scheck (2015b) and Jackson (2013b) expand understanding of phenomena and form a hypothesis on meaningful impact which aids in grasping the results of research. For epistemological hypotheses, assumed is a better understanding is possible of how and why challenges occur in creating meaningful impact for digital entrepreneurs. This understanding

is created together with interviewees who are guided in making sense of challenges and describe their reality as digital entrepreneurs (Choy, 2014). With entrepreneurial journeys being different, the team needs to consider these challenges and the interviewee's interpretation of why and how challenges occur per person. Thus, the aspect of the research theme is approached from an ontologically relativistic view. Indicating the research assumes no further meaning of challenges of creating meaningful impact, aside from what is mentioned by interviewees (Mason, 2017). Generally, an epistemological standpoint is taken, meaning that individuals build their own perception of things based on experience and cultural upbringing (Ospina, 2004). Since the concept of meaningful impact is ever-changing and viewed as a social construct, it can be studied through experiences and perspectives of digital entrepreneurs and industry experts. Considering the study's qualitative nature and objectives, the data gathered from interviews will form the starting point for analysis (Bryman, Bell & Harley, 2019).

3.2 Research Design

This research aims to contribute to earlier literature on impact created by digital entrepreneurial ventures. The research theme consists of identifying and conquering challenges when creating meaningful impact as a digital venture. Since there is little applicable literature available, an inductive research approach is taken alongside the qualitative study (Bryman, Bell & Harley, 2019). Throughout the study, an iterative approach is taken, allowing the researchers to swap comfortably between found data and theory gathered. This way, contents of discussion, stimulus and methodology are always appropriate for the course of research. Additionally, an iterative approach would imply the purpose is gaining understanding of challenges of creating meaningful impact in digital entrepreneurship. Lastly, as argued by Bryman, Bell & Harley (2019) an inductive approach would include elements from a deductive approach, too – like building on existing literature.

As there is little literature available on meaningful impact among digital entrepreneurial ventures, an explorative manner of research was utilised. To gather plentiful data and apply the explorative approach, data is collected using semi-structured interviews with digital entrepreneurs and industry experts. These interviews are based on challenges individual (digital) entrepreneurs encounter when creating impact. Since each entrepreneur's journey is different, as explained, it is essential that primary research data is collected in semi-structured

interviews, as it gives interviewees ample opportunity to add, correct and summarise their experiences (Kallio et al., 2016). By semi-structuring the interviews, the team can guide interviewees into the direction of research questions uncovered.

Consequently, an idiographic approach is taken. This study looks at experiences of digital entrepreneurs and industry professionals and examines their stories and perspectives to find answers to the research question. Interviewees with varying industry experiences were selected on the theory that each person would create different insights on the perceived challenges (Flyvbjerg, 2006).

3.3 Sampling

It is vital for the research that interviewees possess experiences concerning digital entrepreneurship. This includes digital entrepreneurs directly – individuals running or participating closely in the leadership team of a venture arising from new media and technology through the creation of digital artifacts, digital platforms and digital infrastructures (Davidson & Vaast, 2010).

Another selection criterion for interviewees is the minimum age of 30. This falls in line with the norm of selecting experienced individuals in the field of digital entrepreneurship or impact creation. A balanced mix of female and male interviewees could lead to different insights (Kallio et al., 2016).

A convenience sampling approach is taken. Convenient individuals in the sampling universe are located, and analysed based on whether they meet the criteria (Robinson, 2014). Those who meet the criteria are interviewed like normal. Convenience sampling is applicable as the sample universe and scope of research are clearly defined. This means there is a strong link between the final convenience sample and the target population. Generalisation is overall narrow (Robinson, 2014).

Interviewees were approached via LinkedIn or email. Ten participants agreed on an interview. An overview of interviewees can be found in appendix 4. The overview has been anonymised by not including names, but rather by assigning numbers at random ranging from 1-10.

3.4 Data Collection

The semi-structured interviews allow for interviewer freedom, to ask additional questions for better understanding, or to guide the interviewee back in a relevant direction (Kallio et al., 2016). Semi-structured interviews produce expansive sets of data, which is useful due to the missing definition of meaningful impact (Jackson, 2013b). The ambition to create relevant and applicable research pushed the team to opt for various interviews to create a more in-depth database for analysis (Kallio et al., 2016). A total of ten interviews were conducted throughout March, April and May.

All interviews were conducted in English. Both researchers participated in the interviewing process. The semi-structured interview questions were prepared with open questions and assembled in a framework. These open questions enforced the researchers as interview-lead and enabled them to push the interview into a certain direction if needed. The questions are assembled based on the found gap in the theoretical framework and research theme. The semi-structured interviews are made of three sections. The first section focuses on introducing the research topic at hand, the interviewers and the interviewee. It is vital the research question remains unknown to the interviewee. The second section features the main body of the interview and data collection. Here, the interviewee gets asked questions on (digital) entrepreneurship, meaningful impact and SDG trade-offs, in dialogue form. Lastly, the final section includes a goodbye and allows the interviewee to say anything left unsaid. The interview framework (please see appendix 5) is approached chronologically, meaning themes on digital entrepreneurship, meaningful impact and SDG trade-offs are tackled broadly, to eventually be made more specific to answer the research question (Bryman, Bell & Harley, 2019).

All interviews were conducted online. When possible, both researchers were present throughout the interview process. The interviews lasted between 40 and 90 minutes. All interviewees gave permission for the conversations to be recorded.

3.5 Data Analysis

Since the definition of meaningful impact is not a widespread phenomenon, the perceptions, insights and comments from the interviewees aided to develop understanding of meaningful impact in the eyes of interviewees. This meant the base of data interpretation was driven by the

participants (Bryman, Bell & Harley, 2019). To identify and analyse patterns, a thematic analysis approach was applied. This method is optimal for allowing researchers to familiarise themselves with collected data and generate appropriate coding which can unveil patterns within the data (Bryman, Bell & Harley, 2019). In line with what is argued by Gioia, Corley & Hamilton (2013) data collection and data analysis occurred parallel to each other.

With the thematic analysis approach, the interviewees' answers were approached as general statements from the industry. The research objective was highlighting challenges when creating meaningful impact as a digital venture and suggesting approaches to amend these issues. Thus, creating collective sets of knowledge among the interviewees' answers was emphasised (Côté et al., 1993). The data analysis followed an evolution of the grounded theory by Glaser & Strauss (2017) called the constructivist grounded theory (Charmaz, 2006). Charmaz (2006) views research as a collective process, involving both researchers and participants. She argues reality is dynamic and people construct meaning of concepts based on personal experiences (Singh & Estefan, 2018). Lastly, Charmaz' (2006) interpretative approach to grounded theory benefits themes which change rapidly over time, and it allows for the researchers' to form their own inquiry based on personal insights and experiences (Singh & Estefan, 2018).

All interviews were divided between the researchers and fully transcribed. Transcriptions aid the researchers in revisiting the collected data and is part of the parallel collection and analysis procedure (Gioia, Corley & Hamilton, 2013). Data retrieved from interviews was divided into different themes – emphasising words and statements deemed significant to researched phenomena. The transcriptions are analysed on overlapping themes and patterns in data using an inductive approach (Kiger & Varpio, 2020). This enabled the researchers to identify linkages and dependencies between emerged themes and theoretical framework (Bryman, Bell & Harley, 2019).

Following this, strategies described by Gioia, Corley & Hamilton (2013) for '1st and 2nd order analyses were utilised. This led to a synopsis of 1st order elements that came forward during the interviews. To avoid biased analyses, both researchers coded transcriptions independently. The results were cross referenced and analysed patterns were discussed. With 91% agreement percentage, the reliability of the analysis was confirmed (Bryman, Bell & Harley, 2019; Charmaz, 2006; O'Connor & Joffe, 2020).

Then, the data was iteratively refined relating to theory, to ensure identified themes could benefit answering the research question. Based on this iteration, aggregated dimensions were determined. Lastly, the aggregated themes were iterated with the theoretical framework, to discover whether the interviewee data confirms what is said in the theory, or whether new concepts were present. Six aggregated dimensions were identified: *‘Digital Business Start-Ups’*, *‘Meaningful Impact’*, *‘Evaluation of Impacts’*, *‘SDG Interlinkage’*, *‘Challenges of Creating Impact’* and *‘Solutions for Creating Impact’*.

The table with 1st, 2nd order dimensions and the following aggregated dimensions can be found in appendix 7.

3.6 Limitations

3.6.1 Qualitative Research

The chosen research method allows for creation of different insights (Flyvbjerg, 2006). Bryman, Bell & Harley, (2019) argue qualitative research methods are subject to personal biases, limitations in generalisation and replicability, and lack transparency. The researchers aim to tackle the subjectivity of the study by interviewing individuals priorly unknown to the researchers. Additionally, to increase generalisation and replicability of the study, interviewees were selected based on Davidson & Vaast (2010) definition of digital entrepreneurship, deriving from the literature. To add, patterns and aggregated dimensions derived from the interviews and the theoretical framework, further limiting own interpretations and biases (Gioia, Corley & Hamilton, 2013).

Otherwise, with a universe definition for meaningful impact missing and the leading definition for this research being formed based on the researchers' interpretation and a combination of different authors, the study features a unique aspect which limits replicability of findings. Additionally, other than what is mentioned by Flyvbjerg (2006) the team has personal ambitions for the recommendation of this research to be universally applicable within Sweden.

Lastly, while transparency can never be fully expressed, the set-up criteria for the selection of interviewees are detailed throughout the chapters of the methodology.

3.6.2 Interviewee Selection Approach

For selection of interviewees, convenience sampling was used. Since samples are drawn based on availability, and not equal probability, observer bias occurs (Nagappan, 2001; Robinson, 2014). By setting up criteria for the interviewees' selection, the replicability of research increases. However, since participants are not randomly selected, generalisations among digital entrepreneurs remain. Additionally, demographic factors, such as age and gender cannot be controlled, since participants are sourced within the researchers' networks (Robinson, 2014).

3.6.3 Data Collection

As the interviews are foremost reliant on personal experiences from the participants, there is a possibility interviewees narrate past behaviour in ways - elevating individual perceptions and

accounts of experience and position them as authentic (Atkinson & Silverman, 1997). This is combated by not introducing the research question on hand prior to the start of the interview, and by having the interviewers present it throughout the interviews. Lastly, the academic framework requires the research to be completed by a set date. This limits the researchers in terms of scope, time and acquiring resources for data collection.

3.6.4 Ethical Considerations

To give a feeling of safety and security among interviewees, each interview confirmed verbally on whether they agree having the conversation recorded. All interviewees were confirmed and guaranteed on their anonymous participation. In case the interviewee required it, a written consent form for the use of the empirical data was acquired during the interviews.

4. Findings

In the Findings chapter, the findings from the semi-structured interviews will be presented. The findings are structured according to their aggregated dimensions as presented in chapter 3.5.

4.1 Digital Business Start-Ups

To investigate the understanding and perception of digital businesses, participants were asked on their definition of **digital entrepreneurship** and relate it to their companies. Among interviewees, the definition of digital entrepreneurship was largely connected to the creation and usage of digital platforms as the core of the business model (all interviewees).

"I think digital entrepreneurship has to do with creating, developing, and expanding a company or endeavour while utilising digital technologies like the internet, social media, and software platforms is what I interpret by the term "digital entrepreneurship." (interviewee 3).

The relation between digital entrepreneurship and social media was frequented by interviewees, too (interviewees 2, 3, 4 & 5).

Different interviewees highlighted flexibility among digital entrepreneurs (interviewees 1, 3 & 5), mentioning examples of catering more easily to specific groups in society (interviewee 1), or digital companies' abilities to pivot business models easily to specific needs (interviewee 3). Otherwise, the findings suggest scepticism among participants regarding digital entrepreneurship's competence to create more meaningful impact compared to traditional entrepreneurship (interviewees 1 & 5). In relation to this, **competition** among digital impact ventures is often brought up. Some participants perceived lack of competition (interviewee 2), but sometimes saw companies operating in the same space (interviewees 1, 3 & 4). One participant mentioned they do not find comparable companies 'competitors', since they are working towards similar goals (interviewee 5). In other cases, potential competition was perceived, but not recognised to threaten their business (interviewee 4). Moreover, competition is observably growing in impact spaces due to the flexibility digital offers (interviewees 1 & 2), and since digital technology allows organisations for global outreach, niche solutions to niche sustainability issues are emerging (interviewees 1, 2 & 3). Some of these ventures' **competitive advantages** were accredited to digital elements of individual ventures

(interviewees 1, 2, 3, 4, 5, 7, 8, 9 & 10). Other competitive advantages which stemmed from the digital element pertained to being able to provide services faster (interviewee 9), cheaper, (interviewees 1, 2, 3, 4 & 8) or better (interviewees 5 & 7).

Interviewees responded mixed to questions regarding **business models**. Different interviewees claimed a “*generalising approach*” to handling customers is a must for digital businesses (interviewee 1 & 4), while other participants vouched for need-specific approaches, depending on needs of specific customers, or customer bases (interviewee 2, 3 & 5). Each business believed their business model had unique offerings due to the way digital entrepreneurial practices allowed them to do something different. Interviewees described their company to be a connecting platform (interviewee 2 and 3), a matchmaker (interviewee 4) or a provider (interviewee 1, 7, 8, 9 & 10).

Moreover, the relation between ventures and **digital innovation** is a common theme. All interviewees mentioned digital innovation as vital component or heavily incorporated within each business (interviewees 1-10). There seems to be natural inclination towards embracing new technologies, by incorporating them in current business models, or for other utilisations. Multiple interviewees disclosed their ventures were considering implementing, aiming to implement, or had active implementation of AI as a core in their venture (interviewees 1, 2, 3 & 10). Interviewee 1 elaborates:

“So that is one way we are kind of optimising how our customer service teams sort of operate. It is the same way from the sales perspective as well. Specifically talking to, for example, ChatGPT or such a service, we are looking into where does it make sense to introduce AI or other innovations.”

In addressing the issues with digital innovation, the biggest issues among ventures seem to come from the customer side:

“The people who use the tech are very happy with it and really see the value of it. They just need a lot of educating on how to use our technology and whatnot.” (interviewee 7).

“Even the diaspora where you would think they are actually a little bit reluctant, they vary very quickly in becoming comfortable with such technologies, from what we have seen. I

mean, they did not have a bank account, and now they are literally going over to Walmart, handing over cash at the cashier on the counter and they see the money appear on their app. Which, if you realise that they did not have a bank account before, is a pretty big leap for a lot of people.” (interviewee 1).

4.2 Meaningful Impact

As a core part of the research theme, **meaningful impact** was a recurring subject. Frequently, interviewees shed light on their perception of **environmentalism** as a part of meaningful impact. Interviewee 3 highlighted efforts made in “*implementing sustainability projects that reduce waste and energy use*”. This participant and interviewee 4 agreed on their companies’ efforts of making quantifiable meaningful impact, such as “*reducing CO2 emissions*” and “*repurposing materials*”. Interviewee 4 stressed the company’s “tech-driven approach” to be vital for the impact it creates. On a similar note, interviewees 6 and 7 highlighted tech-driven approaches regarding environmental meaningful impact:

“We want to work with data of carbon footprint” (interviewee 6), and “*With the use of [COMPANY] (’s satellite images red.) last season, some farmers were able to spot forest fires that were starting at the edge of their land and put them out before they could spread.”* (interviewee 7).

Interviewee 5 offered other perceptions of environmentalism regarding meaningful impact, such as “*repairing damaged landscapes and mitigating climate change*”, while interviewee 8 emphasised “*knowledge sharing and collaboration among stakeholders*” to be vital in fostering environmentally sustainable practices.

Since a mix of impact companies were approached, different perspectives on impact were perceived. Eight interviewees perceived increased **social justice** to be a consequence of the impact their companies make. Interviewee 1 perceived to create social justice by “*providing for marginalised communities and addressing essential needs*”. Interviewee 5 and 7 perceived social justice as secondary effects from environmental impact, describing situations where they provided “*greater food security, income and health*” and “*prevent casualties by accurately predicting where the landslides were going to take place*”. Interviewee 2, 9 and 10 highlighted

direct social impacts their companies make via core business practices, either in abstract manners or specific perceptions:

“(...) by incorporating technology both internally and externally to achieve authentic and effective social sustainability.” (interviewee 2, 9 & 10).

“(...)to ensure that people are trained on their basic rights, at least in factories, and that they also can go to work feeling more motivated and feeling that this is something that generates value (...)” (interviewee 9).

Ethical practices was another 2nd order theme emerging from the interviews. The interviewees highlighted the importance of *“addressing problems in a sustainable manner”* (interviewee 4) and *“integrating sustainability into the core values of the business”* (interviewee 6). Interviewee 5 described meaningful impact as *“creating measurable improvements on people’s lives, promoting environmental health and building a more sustainable future”*. Both interviewee 6 and 7 agreed on the need to *“prioritise sustainability, even in industries where it may not be a top priority”*. Interviewee 7 elaborated further, stating the significance of making a positive impact, believing that financial success will follow suit. Otherwise, interviewee 10 expressed beliefs *“technology has benefits across various domains”*, emphasising a broader view of how technology contributes to ethical practices.

While not perceived frequently by interviewees, two mentioned **employee well-being** as part of meaningful impact in their companies. While lacking concrete examples, interviewee 4 perceived employee well-being to be a part of the meaningful impact their company makes. Otherwise, interviewee 6 stated he saw *“a lot of innovative companies like working with, for example, mental health, or kind of the well-being of employees being (...)”*.

Interviewee 1 was first to bring up **collaboration with stakeholders** efforts, highlighting collaborations with the UN to create meaningful impact. While this interviewee might be alone in collaborating with the UN, interviewee 1 and 7 emphasised their collaborative efforts with *“communities’ leaders”*. Most frequently, *“communities”* were mentioned as stakeholders to keep into account when creating meaningful impact. Interviewees 1, 4, 5, 7 and 8 mention *“the specific involvement of local communities in creating meaningful impact”*. Interviewee 9’s interpretation of community involvement has more to do with *“trying to meet people like*

yourself, spreading the word about social sustainability and the importance of it.” One other collaboration was shared among interviewees 3 and 6, mentioning their collaboration with different companies, where they either *“help firms transition to more sustainable business models”* or facilitate *“a one hour one and a half hour of discussion around this, like the impact and the sustainability around the company”*.

Lastly, interviewees shared perceptions on how **responsible production and consumption** influences creation of meaningful impact. Interviewees 2 and 3 agree in their perception that *“people are getting more and more aware of this (meaningful impact)”*. Both perceived individuals to be less satisfied with minimal impact efforts by companies. Interviewees 4, 5 and 7 emphasised the growing significance of sustainability among customers, highlighting *“growing demand for responsible consumption and production practices”*. Additionally, interviewees 7 and 8 overlap in statements on *“increased efforts to make internal practices fully sustainable”*, with interviewee 5 claiming its company is already there and *“creating impactful change aligned with the core practices”*.

4.3 Evaluation of Impacts

After having discussed participants’ perception of meaningful impact within the company, the business’ efforts on evaluation of impact were questioned. All interviewees shone light on their perception on **evaluation of impacts**. To start, all but interviewee 2 saw **quantitative measurement metrics** in place at their place of employment to measure the impact made through core practices. One prevalent theme was the consideration of financial indicators for impact measurement. For example, interviewee 1 stressed a business-oriented approach:

“How much money do people move through our platform? (...) What they are very interested in, is seeing how many people actually set up bill payments, for example. Like, how many people start paying for migration services and even their migration expenses through a bank account.” (interviewee 1).

Interviewee 8 and 10 shared this perception of financial metrics being used as quantitative measures, but also mentioned topics like *“customer acquisition costs”*, *“customer loyalty”* and *“Net Promoter Score”*. Similarly, interviewees covered quantitative metrics on environmental impact. Interviewee 3 and 5 mentioned the importance of KPIs related to *“recycling”*, *“landfill*

waste”, “carbon emissions”. “vegetation cover” and “social effects” in evaluating their impacts (interviewees 3 & 5). Otherwise, the “use of third-party companies” (interviewee 9) and the ease of “achieving goals through an app” (interviewee 8).

Additionally, participants highlighted companies’ efforts to measure impact over **qualitative methods**. Interviewee 3 reported on its push “to collaboratively monitor and report on results from circular projects”, emphasising engagement of stakeholders in qualitatively assessing impact. By “speaking to stakeholders”, interviewee 5 “assesses the impact on livelihood and security”, following impact efforts. Interviewee 7 agreed on the usage of customer-centric indicators, and retrieved factors like “clientele happiness” from measures like “interviews or calls”. Interviewees 2 and 6 perceived efforts of their companies to understand individuals’ perspectives and experiences.

Four interviewees highlighted the importance of **stakeholders’ perspectives** in impact measurements. Interviewees 9 and 10 agree on their need for “data transparency”, both internally and externally to validate impact for stakeholders. Both interviewees agree on “engaging the stakeholders” and aligning metrics set by the company with the goals made by the stakeholders. Otherwise, interviewee 4 mentioned “communicating metrics in line with the SDGs” to stakeholders, which falls in line with what is said by interviewee 8:

“We focus on accessibility and easiness to review our product – for both our customers and partners.”

While not as prevalent as other topics, three interviewees mentioned the existence of **long-term analysis** within their company. Interviewee 4 mentioned the usage of “impact reports” and “certifications” in measuring their impact - mentioning “this is something they should have done earlier, but at least they are doing it now”. There is a “comprehensive monitoring and evaluation system” established at interviewee 5’s working place, which “collects impact efforts over a long-term in both qualitative and quantitative fashion.” Interviewees 9 and 10 overlapped saying that “transparent data sharing”, “indicating a commitment to accountable evaluation” and “following-up on long-term outcomes with customers” demonstrate their companies’ focus for measuring impacts over longer durations.

The importance of **comparative analysis** was highlighted by different participants. Four participants emphasised challenges of “*considering different frame of references among user groups and stakeholders*” (interviewee 1, 3, 9 & 10). Interviewee 5 highlighted the company’s efforts to first analyse data and compare it on historical results, which is similar to interviewee 9’s perception:

“(...) this is the level of knowledge in the factory when we came in, and this is the level of knowledge when we exit or at the end of that training.”

Lastly, interviewees provided insights into **challenges** perceived during impact evaluation. Interviewee 2 acknowledged complexities involved in quantifying impact, emphasising specific industry challenges. Additionally, interviewee 7 expressed uncertainty regarding the exact perspective on impact measurement from the company’s board:

“I am not sure what our head office or like, the top of the company would exactly think of when trying to measure impact.”

Otherwise, both interviewees 8 and 10 mention their impact measurement efforts are “*still work in progress*”, with interviewee 10 mentioning it would be beneficial for the company to figure it out soon, since they “*are struggling with increased costs and clinician burnout.*”

4.4 SDG Interlinkage

To start, all but one interviewee spoke about SDG Interlinkage related topics. Frequently, participants started off regarding this theme **denying** the existence of SDG Interlinkage with the work they are doing:

“I do not think they necessarily have an effect on each other” (interviewee 2), “*We think that earning economic value and making a significant influence on the world are not incompatible goals.*” (interviewee 3).

“I think that we kind of include that within the risks or the threats or whatever you had you say like the like what kind of risks are there involved in your company.” (interviewee 6).

“I would like to think that we do not harm the rest of the industry in any way.” (interviewee 8).

Interviewee 2, 3, 6, 8, 9 and 10 initially displayed denial towards the existence of trade-offs in core business practices, but later reflected on this and came up with different statements.

After reflecting, interviewees 1, 2, 4, 5, 8 and 10 perceive a linkage to more **socially oriented SDGs** (UN, 2022). Interviewee 1 mentioned a linkage between SDGs in core business practices instantly. The interviewee described societal trade-offs due to the business’ core practices:

“(...) it is not solving the core problems in Venezuela and it is causing a kind of a secondary economy that [COMPANY] facilitates.” (interviewee 1).

In this situation, the company focuses on making banking accessible in the US, but as a by-product, creates secondary economies in Venezuela. Interviewee 2 mentioned negative social impacts as part of the company’s practices:

“I think that when something is very accessible, and it is almost too easy to use, (...). I think a lot of people use [COMPANY] one or two times and then they think that they have solved their inner issues or whatever.”

Following this, interviewees 4 and 10 mentioned a negative societal link between SDGs they are trying to impact and the reduced need of human participation in the form of work - in their words:

“But that also means that we do not need as many people as before potentially.” (interviewee 4).

Otherwise, interviewees 5 and 8 perceived linkages in their companies’ actions and SDGs with regards to exclusion of communities, or simply impacting communities’ lives in general:

“it is possible that these projects will have unintended consequences for nearby communities’ livelihoods and social structures.” (interviewee 5).

“This might have a significant impact on the communities who rely on these resources for a living.” (interviewee 5).

“I can imagine that some of our customers would not visit the local markets so often anymore – since the local market is available on their digital device.” (interviewee 8).

“This could indeed end up harming some of the farmers who do not work with us unfortunately.” (interviewee 8).

Furthermore, several interviewees explained that links they saw in the business’ core practices and SDGs were more **environmentally-oriented**. Interviewees 3, 4, 5 and 10 perceived similar links. Two interviewees overlap in perceptions that postage and transportation impact other SDGs than intended with the core business concept:

“One of the compromises we have had to make is transportation. (...) We still need to transfer goods and materials around various sites in order to achieve our goal of reducing carbon emissions.” (interviewee 3).

“People can criticise that we are shipping products by post and this creates CO2.” (interviewee 4).

An example of an environmental sustainability link was given by interviewee 5, who explained direct negative impacts perceived during work abroad:

“Otherwise, the introduction of new plant species into a restored landscape can have unintended consequences on local ecosystems, potentially leading to the extinction of native plant and animal species.” (interviewee 5).

Quotes by interviewee 3 provide additional insights:

“If they think it would lead to more profits, they could be ready to tolerate a certain amount of environmental trade-offs. (...) The environmental and social effects of [COMPANY] business practices and products, on the other hand, could be of more importance to customers and consumers.” (interviewee 3).

Lastly, interviewee 10 provided details on another issue for digital entrepreneurs:

“We need energy to be able to deliver our service. What comes to mind is energy use, I mean, as we scale we will use a lot of servers and they need to be powered.” (interviewee 10).

When looking at **ethical** links made to SDGs, interviewees 4, 6 and 10 perceived these in the impact their company is trying to make. Interviewee 4 spoke about the conflict the company constantly has regarding its assortment of items - whether offering alcoholic or sugary items is responsible considering their impact on individuals' health:

“And for instance, a good example is also the question if alcohol should be in the assortment, it's always like a pro and con thing of would you/would you is this in line with a sustainable business because of course, this would be thrown away, however, alcohol is harmful. (...) You could also argue, what are you selling consumers like sugary goods and stuff like that. It is not good for them either.”

Two more concepts highlighted by interviewees had to do with data handling and use of AI in digital business:

“But it could also get in the hands of the wrong people or the data for example, like a cybersecurity thing. I think the companies are not quite aware of what the risks or trade-offs there might be (...)” (interviewee 6).

“If you are the devil's advocate, you could ask whether it is reasonable to have AI sit in on humans in decision-making at all, is it ethical?” (interviewee 10).

In **other** general quotes on SDG Interlinkage, interviewees agree companies in similar sectors will also *“have to make overlapping sustainability trade-offs”* (interviewees 1, 3, 4, 8 & 10). Another consensus among interviewees is the perception that SDG interlinkage, and especially negative impacts, can or are already mitigated:

“They are interrelated and crucial parts of a sustainable company strategy, in our opinion.”
(interviewee 3).

“I think people will not be fully reliant on our product like that and this is not something we have to really worry on in the short-term. But it is indeed something we should certainly monitor and keep an eye on.” (interviewee 10).

One last interviewee proposed that while the company is aware of SDG trade-offs they are experiencing, the combatant process is slow:

“The main trade off here is that everything goes a bit slower. (...) I think the major trade-off is deciding on what to focus on first while making conscious decisions that some topics are left for later stages.” (interviewee 8).

4.5 Challenges of Creating Impact

In speaking with ventures, it became clear challenges of creating impact are varied, diverse and interlinked. One factor of challenges were **regulations** (interviewee 1, 2, & 10). For interviewee 2, their business model is interlinked to governments regulations, as they limit in developing their business to achieve growth:

“We are tied behind our backs by the region.”

Interviewee 1, faced issues finding collaborators due to internal company policies:

“Those regulatory compliance issues have been very challenging.”

For interviewee 10, FDA approval was vital for their venture to function. However, they were not worried about achieving this:

“The limitations are that we need to be approved in each market. I think this will not really be an issue in all honesty.”

The nature of their venture was dependent on complying with regulations; thus, this was not viewed as a challenge, but more like a necessity to conduct business.

A source of challenges pertained to **resources**, such as products, staff, tech, equipment, or finances. These are common challenges for impact businesses (interviewees 2, 4, 5, 8, 9 & 10). Interviewee 2 perceived difficulties keeping up with demand for their provided services due to a lack of qualified staff:

“Our biggest challenge is that we don't have enough psychologists. We can't even meet the demand at the moment.”

Similarly, interviewee 4 perceived a continuous mismatch between supply and demand, though with little expressed concern for this challenge:

“So, there is certainly an excess of some products. But since there is like the standard demand for products, also leads to the fact that the standard products are potentially harder to get. So of course, there can be a mismatch between supply and demand.”

Interviewee 5 highlights increasing demands for technical systems, which in turn raised other issues within data security:

“We must ensure that we have the necessary systems and processes in place to manage expansion and that our impact is both meaningful and measurable. We also confront data privacy and security problems, particularly as we rely more on digital tools and platforms to run our operations and communicate with stakeholders. We take these problems extremely seriously and have implemented stringent data management and privacy policies to guarantee that we comply with all applicable rules and standards.” (interviewee 5).

Financial challenges for impact ventures stem from within the organisation in relation to stakeholders, such as investors. However, according to interviewees, these challenges are concerned with appeasing financiers, and less about current monetary resources:

“I think that the challenge for us has been to create meaningful economic impact in the balance sheet for the investors that we have in the company. I think it is taking way too long in terms for social sustainability to become viable. So I think that it's taking a long time for us to kind of prove our business case.” (interviewee 9).

“Some investors will value the opportunity of working with start-ups and scale ups that do good that bring products that can improve or have some type of societal benefits. And I think that is the case for one of our investors. At the same time, they are always going to want to have a return on investment. And there it is all about the financials. So, it is important for us, just as any company, to be able to demonstrate that we have a viable business model. And if that is linked to creating impact, that is great. But you cannot have the impact as a standalone factor.” (interviewee 10).

This raises challenges of **balancing impact and economic gain**. Interviewees 2, 3, 4, 5 and 8 reported on situations in which they experienced issues with balancing goals. For interviewee 2, this stemmed from issues with regulations and resource management, which obstructed their ability to provide impactful services while maintaining financial prosperity. Interviewee 5 was confident their company’s mission was branded upon their ability to balance needs, but emphasised being able to observe competitors and comparable businesses not doing the same:

“Many businesses prioritise economic growth and profit over environmental concerns, resulting in negative environmental consequences.”

For interviewee 8, the need to balance needs is recognised as difficult, and addressed that some sustainability areas might be focused on, to the detriment of other areas getting less attention:

“Balancing sustainability in a business that aims to grow can be difficult at times, but also difficult to properly measure. Implementing sustainability practices across a business comes with time and I think the major trade-off is deciding on what to focus first while making conscious decisions that some topics are left for later stages.”

Moreover, **external cooperation** presented challenges for ventures. Finding appropriate partners who can handle scale, live up to requirements, or are willing to cooperate proves difficult in cases (interviewees 1, 3, 4 & 9). Interviewee 3 disclosed that, due to their criteria for sustainability, it was not uncommon for them to cancel collaborative efforts:

“Complex social and environmental issues frequently call for cooperation and partnership across many sectors and stakeholders. Finding the proper partners and collaborators who share your beliefs and objectives can be challenging, but it is essential to making a real

difference. When we discover that our current suppliers are not upholding our sustainability criteria, we may need to change our business procedures or even locate new suppliers.”

Reliance on external collaborators presented social challenges. **Human factors**, like attitudes, prejudices, cultural differences, lack of knowledge are recurring themes:

“They were all like: “people are going to defraud us, because you are working with Nigerians” - everybody has this stereotype of like, the Nigerian prince. So they did not want to do business with us.” (interviewee 1).

In this example, these prejudices manifested consequences for the venture:

They kicked us out, because they were like: “Oh, you are opening bank accounts, sending money from one bank account to another, and your main customer groups are Nigerians?” So, they did not want to do any business with us anymore.” (interviewee 1).

Similarly, other ventures noted scepticism which impeded abilities to pursue creation of impact:

“I have seen suppliers cheat, going through their workforce way too quickly. If they are doing this, we simply stop the collaboration. But usually it goes well, it really is our core product that we improve the lives of workers, so if that is not possible – then we simply end the collaboration. It is not what we want to be used as some sort of greenwashing tool.” (interviewee 9).

Several challenges with creating impact originate from the **business model** of ventures. Interviewee 2’s business model is tied to local government, which due to the context of their business gives miniscule opportunities to develop their business and provide customers with required services:

“This is not a high margin business like you need big volumes for this business to be sustainable. So, I mean, from a business perspective, that's not a great model, because usually you want a business model where you can sell more things to your current customers and cross sell upsell, which is not the case for us. So, we want to treat as many people as

possible as quickly as possible. So we are always going to be dependent on large volumes of incoming patients. It is a tricky business.” (interviewee 2).

Interviewee 5 perceives issues with sustainably scaling its business, and ensuring consistent impact:

“One of the most difficult difficulties we have is ensuring that the effect we make is consistent with the values and needs of the communities with whom we engage.”

Interviewee 1 cannot gain partners, due to how radically different they are from industry peers regarding their core offering:

“One of the issues was that in the beginning no one wanted to work with us, so we basically started off without being able to offer a bank account to people without social security numbers. Even though that is something we always wanted.”

4.6 Solutions for Creating Impact

Business’ solutions for overcoming challenges of creating impact are evidently varied. Some ventures are aware of challenges posed before them and are already working to solve these challenges. Others do not have clear answers for how to approach these challenges. **Lack of solutions** to overcome challenges was a small theme. Interviewees 1 and 2 perceived struggles with attitudes and regulations hindering them from creating impact. Interviewee 1 elaborated that their only solution is persistency to be able to proceed with their mission:

“Trying to solve it: I think that is a question for the regulators mostly. I think we are a bit like: “You know what? As long as it is allowed and what we are doing is legal, we are going to continue doing it.”

Interviewee 2 saw raising their prices as a potential solution to their issues, to the detriment of their mission. Thus, this solution was not viewed favourably:

“So we can, we could- you know... In the future, maybe we're gonna offer private sessions. But then it's going to be a different price tag for them. So I mean, that's always an option but it's going to cost more as well.”

In addressing how companies can approach challenges of creating impact, **business developments** within or without individual organisations are considered a vital area of being able to create impact. Interviewees 1, 2, 3, 4, 8 and 9 reported on ways in which this could be done, with methods ranging from between altering how to address customer pain points (interviewee 2), changing supply chains (interviewee 4) or continuously conversing on balancing meeting financial and impact-goals (interviewee 8). One way interviewee 9 was solving creating impact is by not adhering to their mission, but further expanding upon it:

“So I mean, we are moving from kind of being a blue collar only tool to becoming also a white collar tool.”

According to interviewees, a large factor of solving creating impact were **collaborative efforts** between individuals and organisations (interviewees 2, 3, 5 & 9).

“Complex social and environmental issues frequently call for cooperation and partnership across many sectors and stakeholders. Finding the proper partners and collaborators who share your beliefs and objectives can be challenging, but it is essential to making a real difference.” (interviewee 3).

Interviewee 5 elaborates on how digital entrepreneurs should be doing this to solve impact issues:

“I think that this collective mindset should be utilised to its fullest extent among digital entrepreneurs. Like, individuals should reach out amongst each other and speak about what they think are the best methods on creating meaningful impact. Improve upon these methods together and build the world of the future together, truly. I think this is the tactic that digital entrepreneurs should use to create meaningful impact.”

Interviewee 5 underlines the importance for them to collaborate with their target groups and external stakeholders to reach maximum impact:

“We always take a community-driven strategy, which includes active involvement with local communities, as well as governments and other stakeholders. This helps to guarantee that our work is linked with the values and requirements of local communities, allowing us to produce sustainable and locally-led landscape restoration solutions.”

Furthermore, opportunities for external stakeholder collaborations may be growing, as it has been observed that collaborators are becoming increasingly interested in working towards impact:

“We have also seen that suppliers want to take this kind of responsibility. These are businesswomen and businessmen who are willing to do whatever they can in order to secure better business and a stable business coming in.” (Interviewee 9).

Most ventures emphasise that to solve creating impact, businesses should look for **specific solutions** to specific problems (interviewees 5, 6, 7, 8, 9, & 10):

“Start with the problem. Do your best to understand who has the problem, and look at the solutions that are out there and investigate if you can find some improvement that can be improved.” (interviewee 10).

There are contradictions to former aims towards specificity: interviewee 9 believes while companies should find specific solutions, companies also need to go broader, not only working with certain impacts, instead opting for holistic approaches towards impact:

“So, we were seeing that so many companies were focusing the majority of their efforts on the environment. You cannot only work with environmental issues, you have to do that and social compliance.”

This holistic sentiment is agreed upon by other interviewees:

“I believe that many of our competitors chose their “battles” based on what is important to their specific target audience – but there is no player looking at the end-to-end

process/experience – which is something we are slowly but surely tapping into.” (interviewee 8).

Furthermore, it is addressed if new ventures are serious about creating impact, steering towards **more impact** and impact-specific goals, this will bring impact and reward:

“I think new start-up companies are more often much more high-level and want to make an impact. It's kind of part of their core business.” (interviewee 6).

“If the impact is good, the money will always follow later.” (interviewee 7).

“And the team is extremely mission driven. I would say rather mission driven than actually real. So, I think we have a good, and honest approach to what we want to do, and I think impact comes naturally.” (interviewee 10).

Other solutions addressing impact challenges pertain to embracing new digital technologies or implementing stringent measuring processes to ensure compliance with set impact-goals. Interviewee 3 elaborates how they are proceeding with technology implementations:

“We also utilise technology and this helps us in expanding impact projects and contacting more people. For example, some of our competitors utilise data analytics and artificial intelligence to pinpoint areas for enhancement and optimise processes to lessen their impact on the environment. We are working on that as well, haha. But we are not that far yet, sadly.”

Interviewee 2 speculates on the possibilities AI can bring to their venture, but is also cautious of how its effects might come with negative trade-offs for his industry:

We are not using AI today, but I mean, who knows in the future perhaps... I saw this article somewhere that perhaps AI can help patients more efficiently than psychologists themselves. That will, of course, have a negative impact on psychologists.”

Interviewee 5 explains being aware of trade-offs and taking holistic approaches to sustainability:

“I think all businesses must be aware of these trade-offs and take a comprehensive approach to sustainability that takes into account the long-term effects of their activities on the environment, society, and economy.”

5. Analysis and Discussion

The Analysis and Discussion chapter lays out the presented findings and elaborates on them with found patterns, while comparing it to literature found in the theoretical framework. These patterns and themes eventually answer the research question, namely what digital entrepreneurs and industry experts perceive as challenges when creating meaningful impact.

5.1 Business Specific Challenges

Based on Davidson & Vaast (2010) definition of digital entrepreneurship, multiple types of digital businesses were identified - using digital artifacts, platforms and infrastructures. Assumed was that challenges of digital entrepreneurship to create meaningful impact are comparable among these types of digital businesses. Depending on the scope of the organisation, the type of business and business model, different challenges occur, when creating meaningful impact.

Two businesses were categorised as digital artifacts businesses, five as digital platforms and two as digital infrastructures. Interviewees 1 and 9 feature businesses providing digital infrastructures. Overlapping challenges came from the regulatory landscape, as their products are easy to scale, but need approval from authorities to operate within marketplaces. This is time consuming (interviewee 1). Both interviewees mention the lack of regulatory frameworks when it comes to their operational field as a challenge. They also deal with a human factor. They perceived suspicion and scepticism among customers upon approach. These suspicions ranged from 'fear of being defrauded' to scepticisms on their ability to create impact, be it environmental, societal or economic.

For businesses operating via digital platforms, overlapping challenges were identified as well. A returning topic is the issue of digital businesses finding reliable partners or collaborators who are in a similar manner invested in sustainable processes (interviewee 3, 5 & 6). As these businesses are reliant on collaboration, this is vital to make a meaningful impact (Nambisan et al., 2017). Owners of digital platforms perceived challenges in balancing the need to create economic value and meaningful impact, too (interviewee 3, 5 & 8).

“Many businesses prioritise economic growth and profit over environmental concerns, resulting in negative environmental consequences.” (interviewee 5).

“Creating meaningful impact can be challenging at times, because as I said before, you need to make sure that economic value is well considered.” (interviewee 8).

Another overlapping challenge for this group pertains to end-user needs. Several interviewees highlight difficulties with scaling and catering to users’ needs (interviewee 5, 6 & 8).

“One of the most difficult difficulties we have is ensuring that the effect we make is staying consistent with the values and needs of the communities with whom we engage.” (interviewee 5).

“I believe that many of our competitors chose their “battles” based on what is important to their specific target audience – but there is no player looking at the end-to-end process/experience – which is something we are slowly but surely tapping into.” (interviewee 8).

For businesses operating in digital artifacts, no overlapping challenges were observed. Interviewee 10 perceived heightened pressure in creating return on investment for investors regarding challenges for the company to create impact. On the other hand, interviewee 7 perceived thresholds for customer bases to start utilising digital artifacts. While the interviewee mentioned a higher tech savviness in this area than others tackled by the company - this was perceived as the largest challenge in creating meaningful impact.

Two of three digital business types have overlapping challenges when creating meaningful impact. Identifying these challenges per type of business could aid in creating general solutions for overcoming hurdles. For the digital artifacts business, further research is needed to identify these overlapping challenges. This could be done by conducting more interviews solely with digital artifacts businesses. The assumption that challenges within digital entrepreneurship of creating meaningful impact are comparable among types of digital businesses was not confirmed. While some comparisons can be made, challenges are deemed contextually unique. Lack of corroborating patterns to strengthen the notion that observed challenges are shared

broadly across industrial affiliations for impact ventures makes this hypothesis impossible to affirm.

5.2 SDG Specific Challenges

The researchers assumed a correlation between pursuing specific SDGs by companies, and the challenges they perceive by doing so. Concretely, this means that if two companies were to impact the same SDGs, they would also perceive similar challenges in creating impact.

It can be deduced that interviewees 1 and 9 overlap on seven SDGs, with a mix of direct, indirect and tertiary impacts as described by Mulligan & Kelly (2021). Interviewees from both companies highlight legal hurdles and human factors as primary challenges in creating meaningful impact. On the other hand, interviewees 4 and 8 overlap on five SDGs. However, interviewees do not frequently perceive comparable challenges. While there are evidently specific challenges pertaining to individual SDGs, and patterns of shared challenges depending on SDG-aim across ventures, these patterns are few, inconsistent, and predominantly exist in isolation. From the research conducted here, no direct correlation can be found between SDGs targeted and challenges in doing so. Further research is needed, specifically targeting companies pursuing similar SDGs and deducing the challenges they perceive in doing so, to confirm or reject the assumption.

5.3 Supply-Demand, Digitalisation and Impact Aim

In observing various ventures, it becomes evident that some ventures have an easier time managing supply and demand than others. Interviewees 2, 4, and 9; a telehealth provider, online grocer, and H&R training company, handle their supply and demands with varying success. Their struggles are contextually unique due to the services or products they provide, though not completely dissimilar.

Interviewee 2's venture is labour intensive and requires large amounts of staff to operate optimally. Due to restraints placed upon them by government regulations (see 4.1.5) they find themselves unable to initiate growth and improvement in quality of service, which would subsequently create a larger impact. Interviewee 4 is dependent on its supply chains to be able to provide customers with desired products. However, because of their business model, they are unable to control exactly what they can acquire and subsequently sell (see 4.1.5). Thus,

there is a continuous shortage of desirable products and a demand which is difficult to satisfy, producing a challenge in consistently creating meaningful impact. Interviewee 9 has a greater ease of handling supply and demand and has reported having no issues taking on more customers. It was stated that there is virtually no issue scaling their business or meeting demand due to the way they have shaped their services in line with creating their venture:

“We can bring on board, you know, 100 factories per day more or less. So we do not see any challenges in growing our business model or supporting many brands and manufacturers.”

On the surface, it is natural to assume that the disparity between these companies' ability to manage supply and demand is determined by the industry these ventures operate within, and the unique services they provide. However, one can also examine other factors at play. The ability to handle supply and demand can to some degree be traced to the digital element of their individual ventures. In the case of interviewee 9, who provides a fully digitised service, handles large demand with ease. Comparatively, interviewees 2 and 4 whose ventures display a lower incorporation of digital technology (Hund et al, 2021), have larger issues with keeping up with supply and demand.

Additionally, when analysing the business model types to the three categories of digital business models provided by Remané, Schneider & Hanelt (2022) interviewee 2 employs a *facilitating intermediation* model, interviewee 4 *creates and sells products complemented by digitally enabled services*, while interviewee 9 *delivers digital resources and capabilities* to clients. With interviewee 2 and 4 struggling with labour and product demands respectively, and interviewee 9 displaying no such challenges, specifically mentioning its ability to “*bring on board (...) 100 factories per day more or less*”, it is to be discussed whether a business model surrounding the delivery of digital resources and capabilities is most fit to eliminate supply and demand challenges for creating impact.

It is arguable that industrial affiliation and business model type are larger indicators of ventures' abilities to keep up with supply and demand than digitisation; this would not be a completely inaccurate observation, though there are further nuances to this phenomenon. Namely, impact focus and mission. Interviewee 2 openly discusses how their service may have some impact-inadequacies but are not able to adjust their business model to meet customer needs for

providing meaningful impact. One solution which they speculated upon was the implementation of AI:

“We are not using AI today, but I mean, who knows in the future perhaps? I saw this article somewhere that perhaps AI can help patients more efficiently than psychologists themselves.”

Interviewee 4 explicitly stated that the founders were not aiming to create impact when creating their venture:

“Yeah, also with the sourcing topic, and I think, for a huge difference for [COMPANY] is that... I think, in my understanding, the idea was not that we are an impact company, it was just three guys that thought, hey, we have this that is going to be thrown away, why not use it?”

Furthermore, inquiries about challenges of sustainability trade-offs when creating impact, the representative for this venture dismissed negative trade-offs as a necessity to disrupt industries.

“There are always trade-offs, as you mentioned. And I think the nature of changing something is also creating stirrups and changes in other parts.”

Comparatively, interviewee 8, whose venture is also based in online groceries, takes continuous and active measures to ensure sustainable practices and always maximising impact. Supply and demand is not raised as an issue for them, as the way their business model is shaped ensures lean and sustainable production and consumption.

“We have very long conversations on how to balance our sustainability goals and programs with growth focused initiatives. When setting goals and looking at the strategy, we always, as I mentioned before, take everything in phases or steps. For example: we only set fair sustainability goals in equilibrium with profit.”

This approach to shaping their service may have created precedent for them to be equipped for handling supply and demand better than companies with seemingly larger focus on commercial goals, such as interviewee 4. The case of interviewee 9 seems to reinforce this, as they state

that for the decisions made in the journey of their venture, the road to impact was always at the forefront of their goals:

“So for example, and make sure that in any case, whatever that you are creating, that you truly understand the needs of the end user, what is the real value that you are going to bring to the client and then how do you ensure that this is taken care of in the right way before we spend one dime on creating any of it you know, structures or back end or anything. We went on six trips to Bangladesh and China just with clickable keynotes to understand how to create a service that was, you know, good enough for global buyers and beautiful enough for them to kind of see that yes, this looks great.” (interviewee 9).

“No, it has been a lot of hard work. It has been a lot of late hours. It has been you know, the first two years we did not earn a penny, me and the co-founder Sophie. We were just you know, working in silence trying to create a minimum viable product, and then we started to kind of bring in investors. But I do not see that we have any challenges proving our case and becoming impactful and making money. This goes hand in hand for us. I think that the key for us was to create something that was truly valuable to the end user.” (interviewee 9).

The conflicting interests between financial gains and creating meaningful impact could be a source of challenges other than supply and demand for impact ventures. Observing these cases leads to speculation on whether interviewees 2 and 4 are involved in businesses which may face more difficulties in creating impact, though solving such challenges are considered less important so long as financial goals are met. When speaking to other impact ventures, this seems to be aligned with their line of thought. In inquiry about how to solve issues of creating impact, a common sentiment among half of the interviewees (5, 6, 7, 8, 9 & 10) was that if impact comes first, pursuing that goal will lead to challenges of whatever nature being eventually resolved. Thus, by having a genuine priority of creating a functional product/service which provides impact in the most effective and efficient way, this approach naturally creates solutions to rising challenges.

“And the team is extremely mission driven. I would say rather mission driven than actually real. So, I think we have a good, and honest approach to what we want to do, and I think impact comes naturally.” (interviewee 10).

“If the impact is good, the money will always follow later.” (interviewee 7).

Furthermore, to maximise impact, specific solutions should be created for specific problems. Understanding the problem and doing everything to solve that problem is key to building a venture which is impactful.

“So, for example, and make sure that in any case, whatever that you are creating, that you truly understand the needs of the end user, what is the real value that you are going to bring to the client and then how do you ensure that this is taken care of in the right way before we spend one dime on creating any of it.” (interviewee 9).

“Start with the problem. Do your best to understand who has the problem and look at the solutions that are out there and investigate if you can find some improvement that can be improved.” (interviewee 10).

This approach of ‘aiming for impact to solve impact challenges’ is unspecific and does not provide any decisive solutions on solving any emerging challenges of creating impact. However, this sentiment does align with previous literature. Höchstädter & Scheck (2015b) mention meaningful impact has two dimensions, a *financial* one and a *non-financial* one. It is argued that the non-financial aspect of meaningful impact must be intentional, it cannot be an incidental side-effect of commercial deals. Meaning that businesses cannot create meaningful impact by prioritising monetary rewards prior to impact. By observing the cases of interviewees, it seems this approach of prioritising impact over financial gains have been effective in mitigating overall challenges for these interviewees. The implications for what this could mean for impact ventures are many. If such approaches could be quantitatively proved to be more effective in creating meaningful impact, while lessening overall organisational challenges and increasing financial rewards, frameworks for ensuring such operational approaches could be immensely valuable.

To conclude: There is an implication that impact ventures whose goals are primarily commercially aligned since their conception are less equipped to solve challenges of creating impact. The issue of supply and demand could be considered a consequence of industrial affiliations and services/goods provided. However, there are indicators pointing to causation by a longer series of decisions, influenced by aims besides maximising impact. The chosen

digital business model could display the supply and demand challenges the company will encounter in creating meaningful impact. The way in which businesses are founded with an approach towards opportunities with either financial or impactful goals in mind could be an indicator of general organisational challenges with creating meaningful impact within impact companies. In-depth research of founder's intent and entrepreneurial decision making during initial start up processes within impact ventures could provide more decisive evidence on this phenomenon.

5.4 Misconceptions on Impact, Metrics and Trade-offs

Upon introducing a broad definition of meaningful impact among interviewees, they commented upon perceptions of impact which align with this definition, offering environmental and societal perspectives:

“We provide for marginalised communities and address essential needs”. (interviewee 1).

“With the use of [COMPANY]’s (satellite images red.) last season, some farmers were able to spot forest fires that were starting at the edge of their land and put them out before they could spread.” (interviewee 7).

For impact to be meaningful, it needs to be measurable, intentional and create economic value for owners and/or investors. The interviewees did not consider the monetary perspective frequently in their answers on questions regarding meaningful impact. Instead, they opted to focus on the environmental and societal aspect of the triple bottom line (Elkington, 2004). From 90% of interviews however, the value for the owners and investors could still be deduced from other parts of the conversation - leaving merely interviewee 5 without any impression of how the organisation creates value for the owners. This initial negligence of the economic aspect of meaningful impact, aligns with statements by interviewee 4 and 6:

“There are a lot of buzzwords surrounding impact and sustainability” (interviewee 4).

“It is quite a fluffy thing.” (- relating to impact, interviewee 6).

These statements, and the interviewees' responses to only mention environmental/societal impact when talking meaningful impact, goes against descriptions by Hebb (2013), requiring these two run parallel to each other. This could indicate knowledge gaps among impact companies and the definition of meaningful impact. It could also indicate a focus on the planet and people aspect of the TBL (Elkington, 2004). On the other hand, these statements strengthen Höchstädter & Scheck's (2015b) theory that individuals see environmental/societal impact as something that takes away from economic impact. In sharp contrast to this however, two interviewees perceived this different:

“Just make sure you make an impact and then from there on, the financial success will also follow.” (interviewee 7).

“We founded the company with this mission of making this impact.” (interviewee 10).

These statements strengthen Hebb's (2013) theory on environmental/societal impact going together with economic impact - as interviewees stated their impact mission goes together with monetary value created. Especially interviewee 10, claiming their company was specifically founded on impact beliefs, is an example of a company who makes meaningful impact. On the other hand, interviewee 4, who mentioned the company being founded without impact in mind, but that it later 'simply turned out this way'. It is to be contested whether this company features implications of green washing or impact washing, as suggested by McCallum & Viviers (2021b), who suggest desired impact should be specific. Additionally, interviewee 10 highlighted the following:

“What is meaningful and who makes the judgement right? When we see many companies that speak about impact, that are dedicated to what they call impact I believe that maybe a portion here of like impact washing.” (interviewee 10).

While impact washing is not out of the question, further research is required to determine if this is the case, or if environmental impact occurred unintentionally, and later transformed into an intentional objective. This is to be determined on a company-by-company basis.

Parallel to this are two interviewees, claiming impact is perceived differently per individual (interviewee 1 & 4). Considering this and looking at measurement metrics used by interviewees

to measure impact, it is hard to believe that nine out of ten interviewees focus on quantitative metrics to measure their impact. While this is arguably the simplest manner to measure impact, individuals' perspectives on meaningful impact are not considered in-depth. Trautwein's (2020b) seven SIA approaches do not offer suitable solutions for considering qualitative data - creating a gap in the challenges of creating meaningful impact. Four interviewees mention a qualitative approach incorporated in their impact assessment, but none emphasise examples of how this qualitative approach works (interviewees 2, 3, 5 & 7). With the lack of qualitative metrics and measurement approaches, the companies are potentially missing out on individuals' perspectives on impact created. Further desk research on qualitative impact metrics is needed to create recommendations on qualitative SIA tools (Trautwein, 2020b). Additionally, more in-depth conversations with interviewees 2, 3, 5 and 7 could lead to further insights on their qualitative methods of impact measurement.

Another gap is formed with the SDG trade-offs. Out of nine interviews where SDG interlinkage came up, 66% of interviewees denied any linkage to their work. After consideration however, all nine interviewees came up with trade-offs or perceptions of negative impact as a consequence of impact they were trying to create, displaying lacking understanding regarding SDG trade-offs. Looking at interlinkages between perceived SDGs, most trade-offs are of societal nature, such as creating unhealthy secondary economies (interviewee 1), putting people out of jobs (interviewee 10), or creating overreliance on their services without solving core issues (interviewee 2). While environmental trade-offs are highlighted by interviewees 3, 4, 5 and 10, these trade-offs predominantly relate to resource use, in the form of electricity (interviewee 10) or transportation and postage (interviewees 3 & 4), during the production process, having little relation to trade-offs pertaining to meaningful impact. Only interviewee 5 perceived an environmental trade-off related to their created impact:

“The introduction of new plant species into a restored landscape may have unintended consequences on local ecosystems, potentially leading to the extinction of native plant and animal species.” (interviewee 5).

When attempting to mitigate SDG trade-offs for digital impact entrepreneurs, it could be more valuable to create solutions focused on mitigating societal trade-offs, since they are perceived to be more plentiful among the interviewees. Going together with the statement that impact perception is different per individual, it is questionable whether trade-offs surrounding impact

can be mitigated completely, as also stated by interviewee 4. While *direct impact* from trade-offs as mentioned in the framework by Mulligan & Kelly (2021) can possibly be decreased to a minimum, *indirect* and *tertiary impacts* would likely prove more difficult to mitigate, as the company will be required to make continuous economic value too. Field research and further observations in the core practices of impact companies could aid in answering this question.

To conclude, the term impact can be considered *too fluffy and surrounded by buzzwords*. Meaningful impact is here confirmed as a social construct. Most interviewees had varying understandings of what constitutes meaningful impact, and sometimes outright questioned terminology, its relevance, and who determined what is meaningful. The monetary aspect of meaningful impact is considered last by most interviewees, implying they rarely see environmental and/or societal impact go together with monetary value. Another challenge in creating meaningful impact, while potentially underlying, is the impact-washing phenomenon. Not all featured companies had meaningful impact as a core pillar in their business' origin story, and it is thus questionable whether creating impact was always part of their business activities, or simply promoted as part of an initiative to create sympathy. This further complicates the perception of meaningful impact. Conflicting statements arose regarding impact, too. Several interviewees perceived impact to be individual-specific and *everyone perceives it differently*, but there are hardly any specific qualitative metrics in place to measure impact. This way, they miss out on further specifics of the perception of their impact. Lastly, a general denial or unawareness regarding SDG linkages is observable among interviewees, displaying general ignorance of potential trade-offs they cause in creating impact. Otherwise, trade-offs that are perceived are generally socially oriented, leaning towards specific sets of SDGs. When attempting to mitigate these trade-offs, it could be valuable to look at the social trade-offs first, since they are considered plentiful.

As such, based on the analysis, the answer to the question of *what digital entrepreneurs and industry experts perceive as challenges in creating meaningful impact*, remains inconclusive. While minor patterns and themes regarding challenges can be highlighted, most challenges remain business specific.

6. Conclusions

This study aimed to explore how digital entrepreneurs and industry professionals perceive challenges related to creating meaningful impact within impact ventures. The objective was to gain a deeper understanding of these challenges by identifying recurring themes and patterns across digital ventures from various industries, all unified by their mission to create social, economic or environmental impact. A theoretical framework was built, providing literature on digital entrepreneurship, while involving digital business aspects and the SDGs. A leading definition for *meaningful impact* was created, built on foundations from several academia. Ten qualitative interviews with individuals revolving impact businesses were conducted to investigate how meaningful impact was conceived, understood, and engaged with. The interviewees were questioned on meaningful impact, their digital businesses, SDG trade-offs and occurring challenges. Transcripts from these interviews were coded to reveal patterns and commonalities in statements made by interviewees.

The findings revealed emerging themes and patterns of challenges among digital ventures. Frequented are business-specific challenges, supply and demand issues, misconceptions on meaningful impact as a whole and SDG trade-offs during the creation of impact. However, the observed patterns are circumstantial or displayed within a small minority of the observed ventures, which diminishes the strength of these found patterns. Individually, and sometimes within spans of a few other ventures, challenges such as regulations, balancing impact and financial goals, measuring or evaluating impact, were among challenges which were brought to attention. However, the individual challenges were not of similar nature, nor reoccurring in significant volumes to determine a common pattern for impact ventures.

Due to the inability to identify recurring patterns of a common, or commonly perceived challenges in creating meaningful impact among impact ventures, it is concluded that there is no conclusive answer to the research question: *what do digital entrepreneurs and industry experts perceive as challenges in creating meaningful impact?*

6.1 Future Research

While this study has not been able to identify strong patterns of challenges across impact ventures, this does not mean potentially common challenges amongst digital entrepreneurs has not been observed. Due to the explorative nature of this study, the interviews conducted touched upon several subjects. In examining the results, it became evident there are a number of phenomena and seemingly emerging themes who on their own do not warrant an analysis within a challenge cluster, but further research of these emerging themes could provide valuable insights into unique challenges pertaining to impact ventures. For example: the issues of prejudices or attitudes amongst collaborators and regulators when working to create social impact and how progress is hindered, as seen in the case of interviewee 2 (see 4.1.5), could make for an interesting case study.

As this study has subjected founding entrepreneurs and industry professionals to interviews, repeating this study with purposive sampling of only founding entrepreneurs could create a study which provides more insightful results. Furthermore, by conducting such study of founders within impact ventures of specific industrial affiliations, this could provide evidence of challenges to creating impact within specific industries. Further research could also utilise stronger triangulation, by collecting data on the receivers of impact, and other stakeholders - in addition to speaking to the founders of impact companies.

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Appendices

Appendix 1: Overview of Identified Digital Business Models

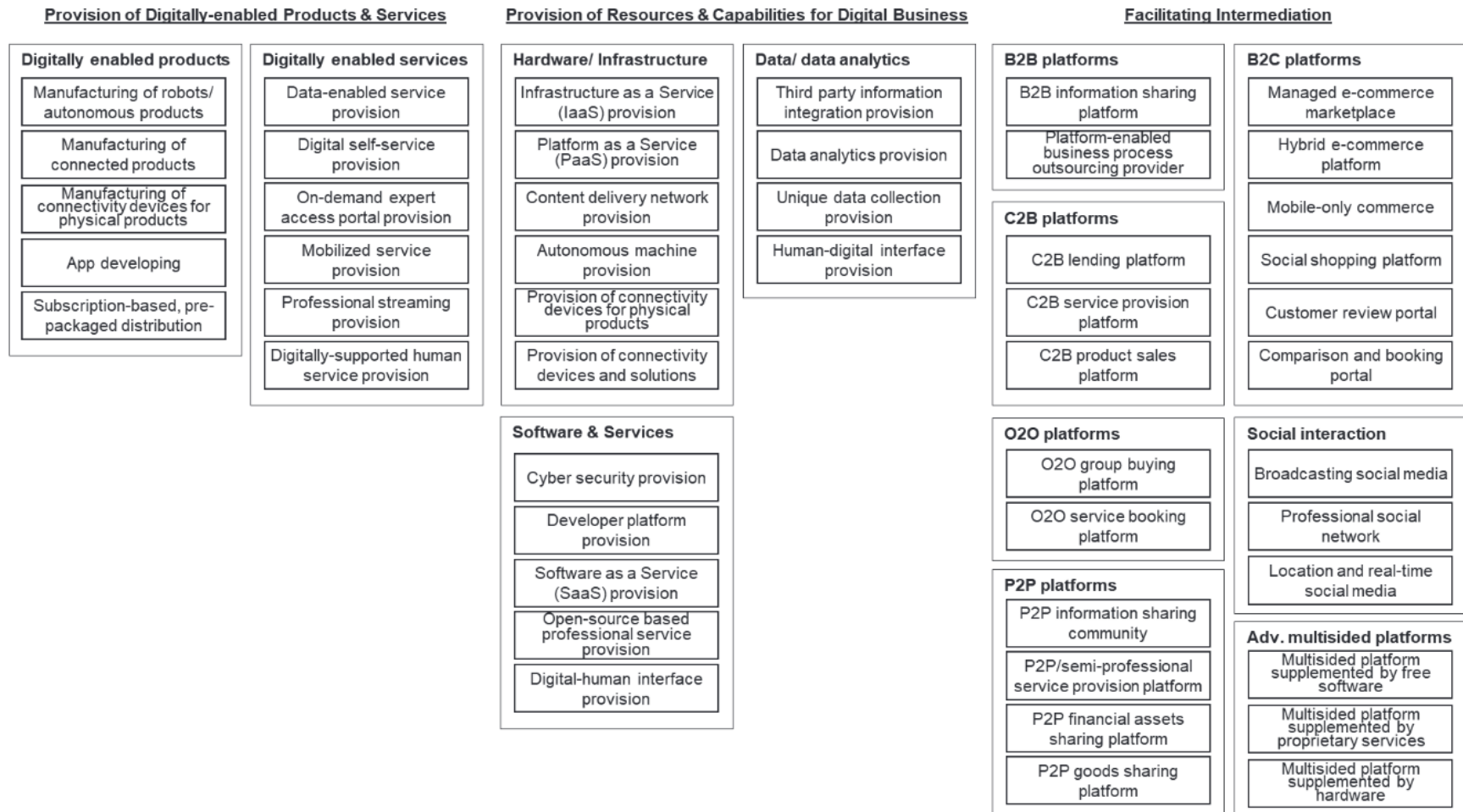


Figure 1: Overview of Digital Business Model Types (Remané, Schneider & Hanelt, 2022)

Appendix 2: SIA Decision Context of Start-Ups

# Characteristics of start-ups	Assessment challenges of start-ups
1 Informal and fast-moving working and management structures (Picken, 2017)	Ensuring continuity and replicability in the assessment (Wickert, 2016)
2 Resource restrictions (Lepoutre and Heene, 2006; Skala, 2019)	Ensuring documentation and completion of the assessment as well as communication of the assessment results (Calabrese et al., 2016)
3 Volatility in business model and value chain (Clarke-Sather et al., 2011; Picken, 2017)	Dealing with uncertainties and unforeseeable changes in business model and value chain (Ries, 2011)
4 New to the market (Skala, 2019)	Measuring sustainability impact without historical performance data (Judl et al., 2015)
5 Lack of specific knowledge (Elford and Daub, 2019; Lepoutre and Heene, 2006)	Choosing a simple assessment approach (Hansen and Schaltegger, 2017; Shields and Shelleman, 2017)

Figure 2: Main Characteristics and Assessment Challenges of Start-Ups (Trautwein, 2020)

Aspect of the decision context	Decision context in the case of start-ups
Objects of assessment	Entire start-up organization, business model, products and services
Actors	Key stakeholders demanding and/or pushing the decision process of the start-up towards sustainability, e.g. impact-oriented early-stage investors, mission-driven founding team
Level of scale	Depending on the object of assessment, the scale of the assessment can affect decisions regarding the strategy of the start-up, the products and services, etc.
Level of complexity	The complexity depends on assessment requirements imposed by the actors e.g. regarding data quality.
Level of uncertainty	The start-up context entails a high level of uncertainty.
Timing of the impacts	The time horizon of the impacts depends on the stage of business of the start-up
Impacts of interest	The relevant impacts are defined by the actors, e.g. social, environmental and/or economic impact.
Strategy	The assessment strategy for a start-up is defined by the actors and specifies objectives, required resources, etc.
What-to (target-oriented) vs. what-if (scenario-oriented)	A start-up could either pursue defined sustainability targets or simulate scenarios weighting up different impacts of interest.

Figure 3: SIA Decision Context of Start-Ups (Sala et al., 2015)

Appendix 3: Solutions for Start-Up Specific SIA Tools

Assessment challenges					
	Choosing a simple assessment approach	Measuring sustainability impact without historical performance data	Dealing with uncertainties and unforeseeable changes in the business model and value chain	Ensuring documentation and completion of the assessment as well as communication of assessment results	Ensuring continuity and replicability in the assessment
Standard for Social Return on Investment Analysis (SSROI) <i>Lingane and Olsen (2004)</i>	Deciding on significant impacts (guideline 2) attributable to the company (guideline 3)	Performing sensitivity analysis to test what effect different key factors and assumptions have on the projected social outcomes and impact (guideline 9)	Taking account of the uncertainty of the projections of the company's financial success and effectiveness in achieving its social impacts (guideline 8)	Documenting the choice of discount rate for social cash flows (guideline 8)	Using an integrated system that captures more data than those already tracked for financial accounting purposes (guideline 10)
Standards of Evidence for Impact Investing <i>(Puttick and Ludlow, 2012)</i>	Offering five flexible levels of progress for assessing impact with the aim of meeting individual conditions and needs	Considering a wide range of rigorous methods depending on the development stage of the product/service; having multiple evaluations of products/services in different settings (level 5)	N/A	Having a standardized process including documentation of deliveries (level 4)	N/A
Sustainability Quick-Check (SQC) model <i>Halberstadt and Johnson (2014)</i>	Offering a manageable and straightforward tool with a clear structure, based on understandable steps	Focusing on sustainability-related targets and monitoring of relevant enabling factors within the business model in order to achieve the targets	N/A	Offering an IT-supported application that allows easy assessments and reports of sustainability activities	Integrating sustainability into well-established management practices e.g. quality and risk management processes
LCA clinic <i>(Judl et al., 2015)</i>	N/A	N/A	N/A	Using tools to facilitate information about results	Using sets of checklists to standardize and streamline modeling work
SPI-Framework <i>(Obst, 2015)</i>	Offering an easy management tool that allows measurement of sustainability at the business model level	Providing a balanced set of core sustainability performance indicators supplementing the business model	N/A	N/A	Fostering the integration of sustainability performance measures into the general management processes
Triple-Bottom-Line Impact Analysis Framework of Fintech Companies <i>(Varga, 2018)</i>	Offering three levels of progress and possibilities for adapting and modifying the framework	N/A	Focusing on the strategic elements which are under the control of the company and which inherently change all related factors and procedures	N/A	Integrating a development path to encourage further steps and development
Lean Impact Measurement <i>(Horne et al., 2019)</i>	Offering six steps in impact identification and impact substantiation while keeping the effort of measurement manageable and lean	Following an iterative and hypothesis-driven measurement approach; including iterations with stakeholders and experts to reduce the risk of false alternatives and hypotheses; making the collected data and the impact calculations public	Benchmarking impact improvements with the best available market alternative	N/A	N/A

Figure 4: Existing Solutions of Start-Up Specific SIA Approaches for Addressing Assessment Challenges Faced by Start-Ups (Trautwein, 2020)

Appendix 4: Overview of Interviewees

Interviewee	Duration:	Sex:	Sector:	Profile:
1.	53 minutes	Male	Finance	Digital banking platform with HQ in Sweden, providing accessible banking without much registration need, specifically focus on migrants.
2.	41 minutes	Male	Healthcare	Digital therapy platform, providing opportunities for people in Sweden to easily schedule video calls with psychologists and improve mental health.
3.	1h 22 minutes	Male	Software	Platform enabling companies to rent out products instead of just selling them. B2B sales scope on Sweden and creating circular business models.
4.	46 minutes	Male	E-commerce	Online Swedish supermarket selling surplus or short-dated stock otherwise thrown away.
5.	1h 14 minutes	Female	Agriculture	Together with farmers, cooling down the planet in Africa and greening degraded land. Activates investors and stakeholders via digital platforms.
6.	32 minutes	Male	Investment	Swedish business developer, offering loans to impact companies in early-stage developments. Commits to digital companies.
7.	1h 8 minutes	Female	Agriculture	Climate intelligence solution founded in Sweden. Helps farmers in unpredictable climates predict the weather on micro level.
8.	1h 1 minute	Female	E-commerce	Online supermarket platform connecting farmer and consumer directly. Creating profit for local farmers and delivering fresh produce to consumers.
9.	57 minutes	Male	HR	Digital training platform which engages workforces by teaching them about their rights as employees, de-risking the supply chain in the process.
10.	1h 12 minutes	Male	Healthcare	Swedish AI platform for precision medicine in intensive care. Enables early-stage sepsis detection in intensive care units.

Appendix 5: Framework for Semi-Structured Interviews

Section 1 – Introduction:

- Welcome and thank you for taking part in this interview.
- State that the interview will be conducted in *English*.
- Introduction of the research topic, without naming the full problem at hand: “*Creating meaningful impact in digital entrepreneurship.*”
- Stating the researchers’ definition of *meaningful impact*: “*Meaningful impact is an approach of doing business where an organisation intentionally and specifically focuses on creating measurable environmental and/or societal impact, and economic value for the business owners and/or investors.*”
- Interviewee’s acceptance for recording the interview.
- Declaring anonymity for the interviewee.
- Stating the intended duration of the interview.
- **Key Question:** Could you please introduce yourself and tell us more about your business and its core activities?
- **Key Question:** Do you have any further questions before we get started?

Section 2 – Main Body: Digital Entrepreneurship & Impact:

- How would you personally define digital entrepreneurship?
- **Key Question:** Can you tell me about your experience with digital entrepreneurship and creating meaningful impact in this space?
- **Key Question:** How does XXX company create meaningful impact?

- **Key Question:** How does XXX company measure the impact it makes?
- In your opinion, what are some key components for a digital venture to be able to create meaningful impact?
- How does XXX company balance the need to create economic value and the desire to make meaningful impact?
- How do you find digital entrepreneurs generally approach creating meaningful impact as a core part of their business?
- Can you provide an example where you found a digital venture successful in creating meaningful impact?
 - What did this company do?
 - Why do you think this company is successful in creating meaningful impact?
 - What do you think this company could have done better?
- **Key Question:** What do you believe are the most significant challenges that digital entrepreneurs face when attempting to create meaningful impact?
 - Why do you think these are significant challenges?
 - To what extent have you encountered these challenges yourself?
- **Key Question:** What are some strategies digital entrepreneurs could use to overcome the challenges of creating meaningful impact?
 - To what extent have you tried implementing any of these strategies yourself?
 - Why or why not?
- Do you believe that digital entrepreneurship has the potential to create a more meaningful impact than conventional manners of entrepreneurship?
 - Do you believe that digital entrepreneurship has the potential to create a more meaningful impact than conventional manners of entrepreneurship?
 - Why or why not?

- Is there anything else you would still like to mention?

Section 3 – Main Body: Sustainability Trade-offs

What we mean by "sustainability trade-offs:

Sustainability trade-offs: In some industries, impact which is usually considered positive can sometimes also have trade-offs. Some basic examples:

Environmental:

Wind Power provides clean energy but it disturbs local aviary populations (Kills birds and such). How does this affect local biodiversity?

Hydropower does something similar with aquatic life (Kills fish and such). How does this affect local biodiversity?

Social:

Social media, which is great at connecting people from all over the world, also seems to have a way of making people feel lonelier and more destitute. Has the interconnectedness of the world had a negative impact on global society?

Economic:

If you look at AI, in time it is likely going to be able to replace manual labour, putting people out of work. Is this a natural part of progress which will benefit the economy, or is the inevitable unemployment going to contribute with more negative than positive economic progress?

- **Key question:** Can you describe a situation where you have encountered or discovered unforeseen sustainability trade-offs in your organisation?
 - Why or why not?
- Have you ever found a need to balance creating impact with the need to be sustainable? As if there was an opportunity for your service/product to make an even bigger impact, but at the expense of sustainability?
- Are there any strategies you have used to mitigate or address sustainability trade-offs?

- **Key question:**
 - Do you think digital entrepreneurs and industry experts perceive sustainability trade-offs differently? If so, how? (Entrepreneurial Angle vs. Industry Angle vs. Employee Angle)

- **Key question:**
 - Do you think there are any common sustainability trade-offs that impact businesses face?
 - Do you think it is important for impact businesses to prioritise sustainability?
 - Why or why not?

Section 4 – Outro:

- Thank you so much for your input so far. Do you have any other questions you would like to ask us?

- Knowing the scope of this research now, is there anyone else you would recommend we speak to who has experience in digital entrepreneurship and creating meaningful impact?

- Could we please send the full research to you upon completion to share our findings with you?

- Thank you and goodbye.

Appendix 6: Consent Form



LUND UNIVERSITY
School of Economics and Management

The Challenges of Creating Meaningful Impact in Digital Entrepreneurship

Henrik Simonsson and Jimme Stam

Interview Consent Form

I have been given and returning information on “*the challenges of creating meaningful impact in digital entrepreneurship*” and discussed this information with *Henrik Simonsson* and/or *Jimme Stam*, who is/are conducting their thesis as a part of their graduation process from the Master programme in *Entrepreneurship and Innovation* at *Lund University*, as supervised by *Johannes Gartner & Solomon Akele Abebe*.

I am aware that, if I give permission to participate in this research, I will be asked to give a period between 0,5 hours and 1,5 hours of my time to engage in the research process. I am informed that my participation in this thesis project is voluntary, and should I change my mind, I am free to refuse to answer; free to refuse to participate and free to withdraw from the research within any given time.

By signing below, I am giving my consent to participate anonymously, and this has been described to me as such. I understand that the data collected from the information shared and received could be used for the later thesis, and journal publications.

Name:

E-mail:

Signed:

Appendix 7: 1st, 2nd Order & Aggerated Dimensions

1 st Order:	2 nd Order:	Aggregated Dimension:
<p><i>We are seeing more and more competitors coming up in the market</i></p>	<p>Competition</p>	<p>Digital Business Start-Ups</p>
<p><i>there are alternatives who do similar things at different price points.</i></p>		
<p><i>More and more companies start viewing services that are typically consumed by everyone in silos.</i></p>		
<p><i>You get these silos which are highly specialised in offering services for their specific segment. And with services becoming more and more available and integration being easier to build, you get more and more specialised services for certain segments, with migrants just being one of them.</i></p>		
<p><i>I mean, if we flip that question, what industries are not trying to digitally transform right now?</i></p>		
<p><i>I think most industries people are trying to digitise.</i></p>		
<p><i>Digital doctors, like (COMPETITOR) and (COMPETITOR), for instance.</i></p>		
<p><i>I would argue that it's just a very favourable position that we are in since we can sort since we are this size that we have, and also the competitors that are very limited, I would say maybe also non-</i></p>		

<p><i>existent depends on how you look at it. But we can decide what to source and we source what our customers buy, potentially, we could source more things and save more food from being wasted.</i></p>		
<p><i>But we can since we are in the position we are right now.</i></p>		
<p><i>And I think in that regard, we are very similar to also other companies that are just I think we are a company that became very sustainable but was not built as or was not envisioned as being their super sustainable thing, but just solving a problem, which made it a lot easier.</i></p>		
<p><i>XXX has successfully established itself as a top competitor in the online grocery industry. XXX, a digital company, makes use of the enormous amounts of client data it gathers. XXX customises the shopping experience and offers specialised product suggestions by examining user preferences, purchasing trends, and shopping behaviours. In order to ensure effective operations and reduce waste, the firm also uses data-driven insights to enhance its supply chain and inventory management.</i></p>		
<p><i>We stand for easiness and sleek design.</i></p>		

<i>"Hey, we should try to find other needs that these people share and try to build a platform for them specifically."</i>	Digital Models	Business
<i>We would describe ourselves as a membership</i>		
<i>Compare it to Costco in the US, where you pay a membership fee and you get everything else at a lower cost essentially.</i>		
<i>Banking has been our core proposition,</i>		
<i>We have about 75,000 paying subscribers</i>		
<i>That is also why our go-to-market strategy has been to put people on the street,</i>		
<i>We offered card deposits</i>		
<i>Psychology online</i>		
<i>Which allows us to we are a private company but this allows us to get subventions from the region's for every every patient call we have</i>		

<p><i>Since our services are a lot more accessible than if you have for instance, you want to meet the psychologists through to your closest VÅRDCENTRAL it could take like months before you get help and then then that could be too late.</i></p>		
<p><i>so a subscription-based business model for physical goods may be managed, automated, and scaled using XXX. To provide a single platform for all subscription activities, such as product swapping, tracking returns, billing payments, sending invoices, and more, the platform effortlessly interfaces with numerous systems, including shop systems, payment service providers, and ERP. By encouraging product reuse and recycling, cutting waste, and boosting sustainable consumption, XXX's business model advances a circular economy. The business assists a variety of businesses, from tiny start-ups to huge corporations, in making the move to a more sustainable business model.</i></p>		
<p><i>XXX for instance, may partner with a clothing business to establish a subscription model for the company's clothing goods, allowing buyers to rent them for a certain amount of time before returning them to be recycled or reused.</i></p>		
<p><i>We offer a digital method of controlling, automating, and growing the operations of a physical goods subscription-based business model. We constantly utilise digital technologies and with those technologies, we assist companies in switching to more circular and sustainable business models that may have a positive influence on society and the environment while still producing profit.</i></p>		

<p><i>For managing, automating, and growing operations of a subscription-based business model for physical items, our platform offers a full solution. The current offerings consist of like, subscriptions management. So, companies set up and control subscription-based services, including like, product leasing, renting, or swapping, with ease and provide flexible and personalised subscription plans for their customers.</i></p>		
<p><i>by facilitating a circular economy strategy through our subscription management platform, we help firms transition to more sustainable business models. By doing this, we assist companies in reducing trash and their environmental impact.</i></p>		
<p><i>And also, we encourage companies to provide subscription-based services that are available</i></p>		
<p><i>First, we offer a platform that enables companies to sell their goods using a subscription-based business model,</i></p>		
<p><i>We may lower costs and hazards associated with conventional linear models</i></p>		
<p><i>we kind of just are a matchmaker in a sense</i></p>		
<p><i>Like, you pay \$60 per year,</i></p>		
<p><i>And it is like subscription model</i></p>		

<p><i>This I thought was actually so cool, because basically what they said is like, just make sure you make an impact and then from there on the financial success will also follow. If the impact is good, the money will always follow later. And I think that has also been our main focus from the beginning. We did not really start with like, oh yeh, we want to make a lot of money, but I think they really looked from the beginning like, okay how can we change people's lives and make a good impact in that regard</i></p>		
<p><i>We want to grow and get people to make more impact everywhere. We want to expand to Paraguay soon and make more impact there. It is also a popular, and like, revolutionary technology – so while I think its nice to have the whole thing for free, I do not think this is going to work in the long-run. Also, the main solution at the end of the day is really focused on farmers, and they are also businesses who profit from our solution in the form of money. In that way, the economic balance for us is quite logical.</i></p>		
<p><i>The business model in Africa is different than Latin America.</i></p>		
<p><i>XXX is a supermarket app for fresh and affordable food which was launched back in 2018...</i></p>		
<p><i>an online supermarket with roots in the Netherlands,</i></p>		
<p><i>which comprises of a user-friendly website and mobile app</i></p>		

<p><i>XXX is a digital solution that helps suppliers prove to global buyers that they take the responsibility that the global buyers want</i></p>		
<p><i>it is kind of a transparent training solution where the brand and the supplier puts up a training plan.</i></p>		
<p><i>We want to be their partner forever. So I mean, this is the same thing with brands. The longer we can collaborate with a brand the better it is, of course for us we have a source model where we work with licenses all the time.</i></p>		
<p><i>Right now we are in the midst of massive scaling with a lot of big global brands.</i></p>		
<p><i>if you take our business model, for example, we want to ensure that the basic rights of people are taking care of that everybody knows about their basic rights in a factory. This can be done by just transferring knowledge through our digital solution or second training and is really about worker engagement.</i></p>		
<p><i>But usually it goes well, it really is our core product</i></p>		
<p><i>So, it is important for us, just as any company to be able to demonstrate that we have a viable business model</i></p>		
<p><i>We quickly realised that international calling is a declining market.</i></p>		

<i>That works really well for us as a go-to-market strategy.</i>	Competitive Advantages	
<i>we provide international transfers at a much cheaper rate than other companies</i>		
<i>With us they pay a membership fee and they can send as much as they want</i>		
<i>much more predictable, and two, it is cheaper. More of what they earn actually goes back home goes back into their own pocket and helps them support their family.</i>		
<i>That has been hugely successful. So, I think understanding context, where people come from and being able to give them a sense of trust when they first engage with us - is a big part of our success.</i>		
<i>We can also offer services in a different way to them, then we could previously.</i>		
<i>since our services are a lot more accessible than if you have for instance,</i>		
<i>I do not think it affects the quality of treatment. Using a digital solution, I think, be the other way around making it more convenient for the patient to use it on the town and from one if you live in some way north of Sweden and we have like 300 kilometres to the clinic.</i>		
<i>So I do not really see that there are a lot of issues affecting the quality, however,</i>		
<i>I think XXX has a significant effect in a variety of ways.</i>		

<p><i>by enabling consumers to return items for reuse or recycling, XXX also lessens the number of tangible goods that wind up in landfills. This has a good effect on the environment by helping to cut down on waste and pollution.</i></p>		
<p><i>And also, we encourage companies to provide subscription-based services that are available and affordable to a wider spectrum of customers in order to advance a more equal and inclusive economy.</i></p>		
<p><i>which promotes product reuse and recycling</i></p>		
<p><i>This lessens waste and promotes extending product lifespans.</i></p>		
<p><i>promoting circularity by allowing products to be mended and reused rather than being thrown.</i></p>		
<p><i>that companies may monitor the sustainability of their operations and decide how to enhance their circular processes.</i></p>		
<p><i>And I think Mat Smart is quite special in that sense, because it's combining the sourcing and sustainable aspect</i></p>		
<p><i>And then since we buy these products for a huge discount, or a reasonable discount, let's say, we can also give them away for for a much lower price, keeping our margins as well. So we are making our cuts to customers make their cut, and also the companies are able to reduce their food waste. So we benefit these three players in a way and also our stakeholders in that sense.</i></p>		

<p><i>reach more people, and have a bigger influence in our efforts to cool the globe through landscape restoration by utilising digital entrepreneurship.</i></p>		
<p><i>A physical store is not necessary because the whole buying process, from browsing items to completing orders, is done online. With regard to XXX's success, digital marketing is essential. The business uses a variety of tactics to connect with and involve its target market.</i></p>		
<p><i>Significant expansion prospects are made possible by the digital platform, which enables them to add new clients, diversify their product offerings, and maybe enter new markets.</i></p>		
<p><i>I believe we would have never been able to drive the concept of providing easy accessibility to better quality food to such a wide range of people if it was not for the digital means</i></p>		
<p><i>We help to provide trainings to ensure that quarter contracts are taken care of and other topics that brands want to focus on in their supply chains. It's measurable, it's easy to implement. It's cost effective.</i></p>		
<p><i>because it is a digital solution, it's also easy to scale.</i></p>		
<p><i>Yeah, they looking at the same data that we are looking at of course, which is knowledge retention</i></p>		
<p><i>And you are going to you know, lead this market on social compliance,</i></p>		

<i>Imagine all the data that we are sitting on, and imagine all the countries and all the companies that will want to know about the data that we are sitting on so I think I think the business case becomes very strong for every year that kind of goes by</i>		
<i>We just do digital training.</i>		
<i>In the beginning when we enter, it becomes immediately clear the level of commitment of the factory and it helps the buyers also understand the level of the factory is committed to improving their own supply chain.</i>		
<i>a software that has an algorithm based on machine learning that accurately predicts which patients in the ICU will develop sepsis in the next three hours,</i>		
<i>In best of cases, we can demonstrate that there are situations where the software through the use of AI can assist the nurses and the doctors and this can relieve some operational burden.</i>		
<i>So, for us, it is very honest, that we founded the company with this mission. That we were going to bring AI to improve healthcare.</i>		
<i>we are looking into where does it make sense to introduce AI or other innovations.</i>	Digital Innovation	
<i>Those sort of developments, even though they seem like huge barriers, I think people are very open nowadays to technology in general.</i>		

<p><i>Even the diaspora where you would think they are actually a little bit reluctant, they vary very quickly in becoming comfortable with such technologies, from what we have seen. I mean, they did not have a bank account, and now they are literally going over to Walmart, handing over cash at the cashier on the counter and they see the money being deducted from their account.</i></p>		
<p><i>Especially due to technical development as well, it is much easier now to integrate with banking-as-a-service platform where you can literally drag and drop features in- and out as product lead and it does not take a lot of development anymore, whereas three years ago when we started - not a single bank was willing to do this and now, you just buy a platform and you integrate within a matter of months. I think it is getting easier and easier.</i></p>		
<p><i>this AI recording. We are not using AI today, but I mean, who knows in the future perhaps</i></p>		
<p><i>I think digital entrepreneurship has to do with creating, developing, and expanding a company or endeavour while utilising digital technologies like the internet, social media, and software platforms is what I interpret by the term "digital entrepreneurship." Like, it can definitely be used in order to find new business possibilities and creating like, cutting-edge goods or services and connect with consumers and stakeholders and grow operations. Also, digital entrepreneurs use digital tools and a lot of platforms nowadays.</i></p>		
<p><i>Our platform makes it simple for organisations to set up and administer subscription-based services like product leasing, swapping, or rentals that may help save waste, improve resource efficiency, and encourage circularity. We always try to deliver a seamless and user-friendly</i></p>		

<p><i>experience for businesses and their customers while also providing data insights and analytics that can help decision-making and improve performance. We do this by integrating with various digital tools and platforms, such as shop systems, payment service providers, and ERPs.</i></p>		
<p><i>Otherwise, we also do a lot of order management. So like, customers of XXX can real-time monitor and receive alerts from their customers, and firms can handle orders, shipments, and returns to a single location. Otherwise, we also manage payments, we integrate tools for businesses if they want something else added to their software and we do a lot, hahaha, of analytics and reporting for the businesses. So like, they can see exactly what is being sold, what sort of area and a lot of other data.</i></p>		
<p><i>Second, we offer a mechanism that makes it easier for things to be returned and refurbished,</i></p>		
<p><i>with a very tech driven approach.</i></p>		
<p><i>you have the website and the online shop. I mean, there are other touchpoints through social media or ads that can be digital, but you have the website and the platform for each market.</i></p>		
<p><i>And then you have the normal checkout experience. Usually if you're logged in, that's also saved. So I guess it was all like the normal factors in modern day shopping. It remembers what's in your cart, you have different payment options. You have different delivery options, and then after you selected everything, you do the checkout process, get updates when your order will be there and can also traces. that's where we come in.</i></p>		

<p><i>We employ digital processes at XXX to support and strengthen our main business operations, such as landscape restoration and climate awareness. For instance, we use digital technology to communicate with our remote partners and stakeholders or acquire and analyse data from our landscape restoration operations.</i></p>		
<p><i>But we also collect data in our app and other data that could be interesting to us. I think this data is super handy and easily collectible when you have a mostly digital company, or so?</i></p>		
<p><i>Digital technology has been critical to the organisation's capacity to scale up its influence and reach a larger audience. We have, for example, created an online platform that allows people and organisations to offset their carbon footprint by sponsoring landscape restoration initiatives. This platform uses digital technology to make it easier and more convenient for consumers to contribute to environmental conservation activities.</i></p>		
<p><i>Tech company that focuses on creating landscape, or like agricultural solutions in tropical countries</i></p>		
<p><i>Move away from traditional measures that they normally use in agriculture for fermenting or like, planting and stuff.</i></p>		
<p><i>So the people are not that knowledgeable on the technology just yet, so it takes quite a lot of educating for me at the moment.</i></p>		

<p><i>So we have three ways of letting the people know, over SMS, over WhatsApp or over email. And then we like, let them know what is going to happen.</i></p>		
<p><i>The people who use the tech are very happy with it and really see the value of it.</i></p>		
<p><i>It is indeed farm specific forecasts. So basically XXX uses very specific satellite images per farm or like, per area to determine what the weather forecast is going to be for the coming 7 days.</i></p>		
<p><i>That is basically the technology that helps them predict these sort of things. It is super valuable for them to know when rain is coming or when they need more water to spray their crops. So yeh, that is basically the technology.</i></p>		
<p><i>That makes my job a lot easier here, because a lot of people just use WhatsApp and they are also more familiar with technology.</i></p>		
<p><i>We see some other applicable solutions for our technology but our main target market is the farmers in these tropical countries and that is also really what we focus on constantly. They just need a lot of educating on how to use our technology and whatnot.</i></p>		
<p><i>It is a 7-day forecast and it makes for a long message. Farmers wake up early and just want to get going. They want short information. They do not want to see a screen with a long message.</i></p>		
<p><i>The current way to deliver those messages are through SMS. So the messages are shorter and they do not really have these challenges.</i></p>		

<p><i>It handles time slots, organises delivery routes, and gives consumers real-time information to provide a smooth and dependable delivery experience.</i></p>		
<p><i>if it was not for the digital means</i></p>		
<p><i>The E2E experience is key for us.</i></p>		
<p><i>As this has progressed and as digital media has come and other opportunities to ensure this in a better way</i></p>		
<p><i>We can see that the level of knowledge beforehand on the topics that we want to train is low, and we can see that after the training with the feelings</i></p>		
<p><i>Via a digital solution. Supporting healthcare with these types of clinical research projects on behalf of the pharma industry and the med tech industry.</i></p>		
<p><i>We bring a portfolio of predictive analytics to intensive care and our products are classified as medical device software, in practice because they have a medical purpose. The common trait with our products or our software is that these are delivered to the point of care where you have nurses and doctors making clinical decisions.</i></p>		
<p><i>There we have, together with the Institute of Health Economics, developed a model that simulates the benefits for health systems and for patient outcomes</i></p>		

<p><i>I think that generalisation is obviously part of doing business, right? I think it is hard to create an unique approach for everybody.</i></p>	<p>Other Digital Industry</p>	
<p><i>We are kind of optimising how our customer service teams sort of operate.</i></p>		
<p><i>I think generally, the service itself is good and it solves a real problem.</i></p>		
<p><i>The purpose of blended treatment is that between your sessions with your psychologist, you should work with telehealth programs called the ICBT.</i></p>		
<p><i>We want to treat people as efficient as possible</i></p>		
<p><i>We are also collaborating with different companies in Scandinavia for example. And one of which sells and rents out clothes. And we also collaborated with an electronics business to put in place a subscription system for their gadgets, allowing users to upgrade to newer versions as they become available without adding to the e-waste problem. E-bikes, too. A wide range of businesses transition to a more sustainable business model with the assistance of XXX since their platform is built to be adaptable and customisable to match the specific needs of any business they deal with.</i></p>		
<p><i>This is accomplished by offering businesses a streamlined procedure for handling returns, product refurbishing, and product resale. Also, we provide data and analytics tools so</i></p>		
<p><i>A sustainable company strategy, in our opinion at XXX, should be based on three basic tenets: social responsibility, environmental sustainability, and economic success</i></p>		

<p><i>Finally, achieving financial viability entails creating a long-term, lucrative, and sustainable firm. We think that a sustainable company model should be created to achieve both financial success and the creation of significant impact.</i></p>		
<p><i>While encouraging circular economy techniques and lowering the demand for like prime resources, we still need to transfer goods and materials around various sites in order to achieve our goal of reducing carbon emissions.</i></p>		
<p><i>You need products that you can sell on a website.</i></p>		
<p><i>It i's on one of the operations are not that usually not that harmful. So just like, being a tech company is not the problem.</i></p>		
<p><i>We need high efficiency to be profitable and sustained.</i></p>		
<p><i>There are questions that are related to you. I mean, can you source all the time? I mean, it is going to change, like, at some point, you are going to run out of products that you can source, for instance? And I mean, that is also a question where, like, in theory, you would, you would think that food waste will be reduced considering how much we are talking about it and use whatnot. So there is going to be so much potential and there is, if we look at the numbers that are out there, nowhere near that we are what we could get.</i></p>		

<p><i>We collaborate with local communities and partners to carry out landscape restoration initiatives that combine traditional and modern methodologies.</i></p>		
<p><i>As well as field visits and community feedback on a regular basis.</i></p>		
<p><i>We are also really not an NGO of some sorts, like. We do receive investments, but do not have anything to do with grants or government funding of any kind</i></p>		
<p><i>We simply want to help the busy customer have access to an every- day market with locally sourced products.</i></p>		
<p><i>We work with the brands to bring us into their supply chain. So we will find the biggest global brands in each segment that we work in in order to get like the spearheading companies to also help us in our own growth.</i></p>		
<p><i>And then they help us to bring our solution out to their supply chain and say we would feel more confident if you train all your workers and we could watch your results and we could you know sit wherever we are located as a brand and we can look at your training data and be secure that you have taken care of your entire factory and that all the workers have been trained so we bring our digital solution to the factory.</i></p>		
<p><i>We really want to get cracking and with these bigger brands, we see this kind of scaling that kind of enables us to do that.</i></p>		

<p><i>There you need to first learn everything, which is again, just digital knowledge</i></p>		
<p><i>I create and implement sustainability projects like those that reduce waste and energy use, evaluate how the company's activities affect the environment, and collaborate with stakeholders to find areas for improvement.</i></p>	<p>Environmentalism</p>	<p>Meaningful Impact</p>
<p><i>This has a good effect on the environment by helping to cut down on waste and pollution.</i></p>		
<p><i>By developing a more sustainable and effective business model, which helps both the environment and the bottom line.</i></p>		
<p><i>And lowering the demand for like prime resources</i></p>		
<p><i>Our ultimate objective is to develop a sustainable business model that minimises any detrimental effects on the environment and society</i></p>		
<p><i>And sustainable aspect with a very tech driven approach.</i></p>		

<p><i>I think we have the scope on emissions and sustainability</i></p>		
<p><i>It is about tonnes of CO2 saved. And also having tonnes of products that we saved that would be waste.</i></p>		
<p><i>To mitigate climate change by repairing damaged landscapes.</i></p>		
<p><i>To cool the globe by restoring ecosystems and supporting sustainable land use practices</i></p>		
<p><i>XXX believes that significant impact is accomplished when we can repair damaged landscapes and enhance the livelihoods of those that rely on them.</i></p>		
<p><i>It entails striving toward long-term sustainability and making the world a more equal and just place for all.</i></p>		

<p><i>The concrete and beneficial changes we create in the natural world, such as rebuilding damaged landscapes, enhancing biodiversity, improving soil health, and increasing water availability, are examples of environmental meaningful effect.</i></p>		
<p><i>Our work has a reinforcing environmental and socioeconomic impact</i></p>		
<p><i>We can create a more sustainable and resilient future for everybody by repairing damaged landscapes and boosting the livelihoods of local populations.</i></p>		
<p><i>We have companies that we have worked with that are truly like we: want to work with data of carbon footprint</i></p>		
<p><i>It is super valuable for them to know when rain is coming or when they need more water to spray their crops</i></p>		

<p><i>A lot of impact on the fields and whatnot and really help improve the lives of farmers there, like make their life a lot easier</i></p>		
<p><i>With the use of XXX last season, some farmers were able to spot forest fires that were starting at the edge of their land and put them out before they could spread.</i></p>		
<p><i>Basically, XXX helped in preventing a big forest fire to happen and make an impact there.</i></p>		
<p><i>We stand for better food, better flavour and positive impact towards our planet</i></p>		
<p><i>This way, they are able to also share sustainable methods amongst each other.</i></p>		
<p><i>XXX is right there with them and we offer our services to those people.</i></p>	<p>Social Justice</p>	

<p><i>Which from a societal perspective, I think it is great. These people are putting food on the table, right?</i></p>		
<p><i>We are solving a big problem, which they were previously unable to solve.</i></p>		
<p><i>I think generally, the service itself is good and it solves a real problem.</i></p>		
<p><i>We do not have hard data on this, but we probably have prevented a couple of suicides because people get help exactly when they need it and not too late.</i></p>		
<p><i>I mean, I think if you want to achieve some kind of like work towards social sustainability in a real way and not just social greenwashing, I think you need to incorporate it internally and externally.</i></p>		
<p><i>I am in charge of creating sustainability policies and practices, monitoring and reporting on the business's sustainability performance, and making sure that we comply with all applicable laws and standards.</i></p>		

<p><i>Societal significant effect.</i></p>		
<p><i>Greater food security, income, health, and resistance to the effects of climate change</i></p>		
<p><i>Our work has a reinforcing environmental and socioeconomic impact</i></p>		
<p><i>We managed to prevent casualties by accurately predicting where the landslides were going to take place and what sort of area and everything</i></p>		
<p><i>Being able to help these people like, get safe from landslides and not die in that regard, to avoid casualties is very nice.</i></p>		
<p><i>Our core activity is making sure that we deliver the freshest ingredients to your door, from your local producers.</i></p>		

<p><i>I think through digital, we are able to lower the barriers when it comes to using seasonal ingredients, but also offer exposures to farmers.</i></p>		
<p><i>And also to show consumers a bit where their food is coming from and what sort of potential impact they have made.</i></p>		
<p><i>But we will always ensure that our operations are a result of negotiations, quality and respect to our stakeholders, as we want to give fair opportunity to our suppliers.</i></p>		
<p><i>We help to provide trainings to ensure that quarter contracts are taken care of and other topics that brands want to focus on in their supply chains</i></p>		
<p><i>The kind of the challenge that we are trying to support is that there is a lot of global buyers who want to ensure that the workers that produce our goods are taken care of in the right way.</i></p>		

<p><i>And if we have reached 100 million people by 2030, then we have you know impacted the world really in a in a positive way then we've had an opportunity to to ensure that that you know democratic processes are being followed and people are really aware of their rights.</i></p>		
<p><i>I think this is the biggest impact that we can create to ensure that people are trained on their break basic rights, at least in factories, and that they also can go to work feeling more motivated and feeling that this is something that generates value not only to them but also to the life that they decide to spend in a factory. So that their work is being valued and they're creating some positive change.</i></p>		
<p><i>We just need to ensure that they are able to understand their rights and to understand what to do with their rights.</i></p>		
<p><i>If you take our business model, for example, we want to ensure that the basic rights of people are taking care of that everybody knows about their basic rights in a factory.</i></p>		
<p><i>It really is our core product that we improve the lives of workers</i></p>		

<p><i>Where early detection is really key and can have a great impact both on the patient outcomes and the health systems financial outcomes.</i></p>		
<p><i>Thereby giving the clinicians a heads up and the possibility to intervene earlier with antibiotics</i></p>		
<p><i>We have big hopes that once we have the commercial installation in place for the first hospital, we will start seeing positive impact on patient outcomes.</i></p>		
<p><i>Financial is linked to early detection of sepsis leads that you can intervene earlier, you will have complications, patients will on average, the shorter time in the intensive care and shorter time in the hospital, which can be translated into a positive financial aspect for the health system. And then we also have in the model quantified the number of estimated saved lives based on an infection.</i></p>		
<p><i>All of that we have been able to demonstrate in our health economic model that there are very beneficial impacts for patients and for society.</i></p>		

<p><i>Societal benefits</i></p>		
<p><i>I would say that there is more people that need help in Sweden right now then the healthcare system has capacity to with like the current system where the primary health care system so a digital services minder enables more people to get help with care and in a more efficient way.</i></p>	<p>Ethical Practices</p>	
<p><i>It is pretty much about identifying a problem that is either not sustainably solved, or something that is solved that you can solve sustainably.</i></p>		
<p><i>We salvage these goods or save them</i></p>		
<p><i>It is about solving something with the, the Yeah, first, the sustainable aspect in mind</i></p>		
<p><i>And for those we can be very specific and know exactly if you would change for instance, the packaging for one product and reduce the emissions.</i></p>		

<p><i>If you compare individual transportation to the transportation that we use, it is much smaller,</i></p>		
<p><i>But was not built as or was not envisioned as being their super sustainable thing</i></p>		
<p><i>'meaningful impact' refers to the concrete and constructive improvements that an organisation can create in the world, in my opinion</i></p>		
<p><i>Making a measurable impact in people's lives, enhancing the health of the earth, and building a more sustainable future for everybody are all part of it.</i></p>		
<p><i>The purpose of impact companies is to create good change, and sustainability is a critical component of that.</i></p>		
<p><i>By emphasising sustainability, impact businesses can demonstrate their dedication to responsible and ethical practices,</i></p>		

<p><i>Impact the structure of the company or a mission to do some good, often.</i></p>		
<p><i>We kind of want to make a change also in the companies where sustainability is not top priority.</i></p>		
<p><i>Just make sure you make an impact and then from there on the financial success will also follow</i></p>		
<p><i>Okay how can we change people's lives and make a good impact in that regard</i></p>		
<p><i>We just keep on making impact the same way we have always been doing so far. For us, it really is also integrated into our activities that this impacts gets made anyway.</i></p>		
<p><i>But also focus on being a positive force in the industry.</i></p>		
<p><i>We worked very hard towards achieving sustainability goals: such as using only paper packaging or driving electrically as much as possible.</i></p>		

<p><i>When we care more about our workers, they care more about us. So after holidays, they come back to my factory and I do not have to recruit as many people I get. I get to keep the good workers, therefore I have better productivity and I have better quality</i></p>		
<p><i>We think this type of technology has benefits in different types of domains.</i></p>		
<p><i>We founded the company with this mission.</i></p>		
<p><i>But not the company is not only trying to do that for the customers and the client or the partners that resource from but also towards the employees.</i></p>	Employee Well-being	
<p><i>A lot of innovative companies like working with, for example, mental health, or kind of the well being of employees being so that is also part of the impact as well</i></p>		
<p><i>I find this very aspiring personally and it helps me also be more involved with the company or feel more connected in some way.</i></p>		

<p><i>I think that is the biggest impact that we can create. Not only ensuring the workers rights are taken care of which is at least the bare minimum we should take care of as global buyers, but that we create a workforce that feels seen and more motivated and generates better business.</i></p>		
<p><i>One of the things we are doing, is that we are working with a company that works together with the UN.</i></p>	<p>Stakeholder Collaboration</p>	
<p><i>I think for them, to see a business like ours that is engaged in the community and talks about the problems that these communities face, I think it reflects good on them.</i></p>		
<p><i>We basically provide quite a variety of services to assist companies in switching to a more circular and sustainable business model.</i></p>		
<p><i>We help firms transition to more sustainable business models.</i></p>		

<p><i>That companies may monitor the sustainability of their operations and decide how to enhance their circular processes.</i></p>		
<p><i>Our company's business plan is built on developing a circular economy strategy that benefits not only the environment and society, but also our customers and investors.</i></p>		
<p><i>Also, social responsibility is for us conducting business in a way that is moral and inclusive, and sensitive to the interests and welfare of all parties involved, including staff members, clients, suppliers, and the general public. We also support giving people from various backgrounds the chance to engage in the digital economy.</i></p>		
<p><i>While taking into consideration the interests of all our stakeholders.</i></p>		
<p><i>The decisions made by one company can have an effect on the whole value chain.</i></p>		

<p><i>Which is also important during this low cost of living crisis. And that's the overarching theme that we create value, because we enable we connect people that have overstock and want to get rid of it.</i></p>		
<p><i>We aim to have a broader impact by raising awareness about the importance of climate action and promoting sustainable land use practices.</i></p>		
<p><i>A one hour one and a half hour of discussion around like this, the impact and the sustainability around the company.</i></p>		
<p><i>We are also now in talks with people in urban areas, like local leaders to have our technology deployed there to help predict these sort of problems in the future and take care of the landslide problem.</i></p>		
<p><i>It means that we can show our farmers' produce and what sort of methods they use to harvest the products they offer.</i></p>		

<p><i>I try to meet people like yourself, spreading the word about social sustainability and the importance of it.</i></p>		
<p><i>This is really important to us that you do this properly and then they usually continue to do it right.</i></p>		
<p><i>It is important to us that it is done right and the correct impact is made.</i></p>		
<p><i>XXX is a company that supports hospitals in Sweden and all over the world with problem recognition and sepsis recognition basically.</i></p>		
<p><i>There we have, together with the Institute of Health Economics, developed a model that simulates the benefits for health systems and for patient outcomes based on the three-hour early detection and early intervention in the intensive care so the metrics we measure there are both financial and health related.</i></p>		

<p><i>Because maybe for 10 years ago, they could send out the sustainability report and people were happy with that, but I think people are getting more and more aware of this. And it's going to be more distinct, I think on what kind of company that is that actually provide value to the world</i></p>	<p>Responsible Production & Consumption</p>	
<p><i>By encouraging product reuse and recycling, cutting waste, and boosting sustainable consumption, XXX's business model advances a circular economy.</i></p>		
<p><i>We assist companies in reducing trash and their environmental impact.</i></p>		
<p><i>By enabling consumers to return items for reuse or recycling, XXX also lessens the number of tangible goods that wind up in landfills.</i></p>		
<p><i>And affordable to a wider spectrum of customers in order to advance a more equal and inclusive economy</i></p>		

<p><i>Which promotes product reuse and recycling. This lessens waste and promotes extending product lifespans.</i></p>		
<p><i>Promoting circularity by allowing products to be mended and reused rather than being thrown.</i></p>		
<p><i>It is just sourcing products that would be want to waste or just end up in landfills</i></p>		
<p><i>We could source more things and save more food from being wasted.</i></p>		
<p><i>And then and that it is sustainable is for a lot of customers a huge thing</i></p>		
<p><i>But creating impact like the one you were mentioning is truly part of our core practices</i></p>		
<p><i>So they were trying to make the whole world less dependent on the fertiliser industry.</i></p>		

<p><i>The impact gets made anyway.</i></p>		
<p><i>XXX also uses electric delivery vans.</i></p>		
<p><i>I believe we would have never been able to drive the concept of providing easy accessibility to better quality food to such a wide range of people if it was not for the digital means.</i></p>		
<p><i>We need to ensure that our business has sustainable focus end to end, meaning that we need to start developing programs that focus on combating the waste of products not consumed by our customers or educating them on ways to order consciously</i></p>		
<p><i>You know the buyer is winning because they have transparent data showing that they can feel confident with their supply chain. The supplier gets better productivity and better quality so they have also a win and then the worker of course feeling that now they know what they're expected of them, but also what rights they have.</i></p>		
<p><i>Our measurement is business-oriented. How much money do people move through our platform.</i></p>		

<p><i>Now, what they are very interested in, is seeing how many people actually set up bill payments, for example. Like, how many people start paying for migration services and even their migration expenses through a bank account. That is a clear indicator that they are successfully integrating into society.</i></p>	<p>Quantitative Measurement</p>	<p>Evaluation of Impacts</p>
<p><i>We track different KPIs that are important to the company's operations and objectives.</i></p>		
<p><i>These KPIs include the quantity of goods that are recycled or sold again through our platform, the volume of garbage that our circular business model prevents from going to landfills, and the decrease in carbon emissions we are achieving by fostering a circular economy.</i></p>		
<p><i>It is saving food, reduce food waste, and enable access to cheaper food,</i></p>		
<p><i>So the company also has other factors such as like the employee turnover and satisfaction</i></p>		
<p><i>So, we look at for examples how many hectares we restored.</i></p>		

<p><i>Otherwise, you can also really see and measure the increased vegetation cover: For that, we use satellite images and on-the-ground measurements to track the amount of vegetation cover in recovered areas.</i></p>		
<p><i>There are in general, so many other indicators of biodiversity: We monitor changes in the richness and variety of plant and animal species in recovered regions and in restored regions, we measure changes in soil carbon levels, soil moisture, and nutrient availability. For social effects, the indicators include the number of individuals taught in sustainable land use practices, the number of employment produced, and gains in health, income, and food security.</i></p>		
<p><i>Like, XXX utilises satellite photos to track changes in plant cover and land use over time.</i></p>		
<p><i>15,000 companies each year, they all have to go through a questionnaire, of sustainability, impact, and kind of make this</i></p>		
<p><i>It is not an evaluation form.</i></p>		

<p><i>We mainly look at people and acquisition numbers, and how our customers are growing or like, doing better. So just the customers and whatnot.</i></p>		
<p><i>We measure how many people we impact – meaning that we look into how many new customers we acquire and how many stay loyal to us</i></p>		
<p><i>We can measure to how many communities we made better food available</i></p>		
<p><i>We measure our impact towards our customers through the Net Promoter Score through which we ask customers to rate the easiness to achieving their goal through the app.</i></p>		
<p><i>We have used third party companies to you know, evaluate the impact that we are generating in factories. We have also factories themselves coming back to us. I mean, in the beginning, in the first, let's say, three to four years, we were never allowed to see any data suppliers were like, This is our data, you are not allowed to see it. Now we have suppliers who share their data and talk about the impact that that our training because this is what they have done in their factory. And</i></p>		

<p><i>they see that they have less retention of people or less loss of people and better retention and then they have better qualities better productivity.</i></p>		
<p><i>Then we have the massive brands that we are collaborating with right now and they do their own follow up and they look at you know, what is what is the level of training in the factory the most important thing for us since we are a company that ensures knowledge is that we can prove the knowledge before and after trainings</i></p>		
<p><i>They looking at the same data that we are looking at of course, which is knowledge retention</i></p>		
<p><i>With the questions afterwards we measure we can see that the level of knowledge is higher.</i></p>		
<p><i>There we have, together with the Institute of Health Economics, developed a model that simulates the benefits for health systems and for patient outcomes based on the three-hour early detection and early intervention in the intensive care so the metrics we measure there are both financial and health related. So, financial is linked to early detection of sepsis leads that you can intervene earlier, you will have complications, patients will on average, the shorter time in the intensive care and shorter time in the hospital, which can be translated into a positive financial aspect for</i></p>		

<p><i>the health system. And then we also have in the model quantified the number of estimated saved lives based on an infection.</i></p>		
<p><i>We will look at how early the conditions have intervene if they have been able to also reduce the number of antibiotic treatments given because in the intensive care units.</i></p>		
<p><i>The financial impact</i></p>		
<p><i>We are doing a lot of like, yeah. constantly working in measuring our treatment outcome and like but it's it's easier said than done to do that. Like we are in but there are a lot of efforts going on.</i></p>	<p>Qualitative Measurement</p>	
<p><i>Oh and also we collaborate with our customers to monitor and report on the results of their own circular projects</i></p>		
<p><i>We assess the impact of our actions on their livelihoods, such as income, food security, and health.</i></p>		

<i>We make them answer some questions.</i>		
<i>Our performance indicators are our customers and we measure it with sales and also client happiness</i>		
<i>We measure impact by looking at the people, like our customers. That is our main indicator.</i>		
<i>I think five SDGs, we are tackling</i>	Stakeholders Perspectives	
<i>I think those are like the metrics that we communicate to our stakeholders and to the readers of the impact report</i>		
<i>We focus on accessibility and easiness to use our product – for both our customers and partners.</i>		
<i>It is measurable</i>		

<p><i>And then after that we gather all the data of all the people that are being trained so that we can share that data back to the supplier but at the same time back to the source.</i></p>		
<p><i>I feel happy that this is validated not only by our own data, but that we have external parties validating it.</i></p>		
<p><i>That data is important and then they are interested in the same data as a supplier. So they want to also see that you know, what is what is the engagement level of workers in the factory? What is the level of people leaving the factory what is the productivity rate, what is the you know, engagement rate and also the quality rate that they see from factories. So I think that is that is key. These are the key metrics.</i></p>		
<p><i>Immediately upon first launch, at the first intensive care unit, we will see both impact and benefits from operational perspective and for the healthcare systems.</i></p>		
<p><i>How we are going to measure impact in commercial use, we will do that both at the operational level so looking how we can make the work of the nurses and the service more effective.</i></p>		

<p><i>So there are impact reports</i></p>	<p>Long-Term Analysis</p>	
<p><i>There are certifications for that</i></p>		
<p><i>Hey, we have this that is going to be thrown away, why not use it. And with that, like simple idea in mind, and without being too focused on metrics and targets that are out there, right now</i></p>		
<p><i>And I think having these impact reports, I think it is only the second one that we published the process, kind of like an indication of that we should have, or we could have done it potentially earlier. But now we are also like acknowledging it and taking more and more effort into it</i></p>		
<p><i>XXX also has a thorough monitoring and evaluation system in place that allows us to track and quantify the impact of our efforts. This method comprises quantitative and qualitative indicators</i></p>		
<p><i>Digital technology has enabled XXX to collect and analyse massive amounts of data on the impact of its projects.</i></p>		

<p><i>We gather all the data we share the data transparently</i></p>			
<p><i>We are also going to do follow ups to look at the patient outcomes. So, we will look at occurrence of sepsis before we launch and after we launched the improvements when we make there</i></p>			
<p><i>One very interesting and challenging part is that everybody has their own frame of reference and contacts.</i></p>	<p>Comparative Analysis</p>		
<p><i>We also regularly audit and evaluate our operations</i></p>			
<p><i>And that data can then quite easily be used to analyse performance,</i></p>			
<p><i>So we have we have done our own measurements</i></p>			

<p><i>We see this is the level of knowledge in the factory when we came in, and this is the level of knowledge when we exit or at the end of that training.</i></p>		
<p><i>It is very complex, because we are in a very sensitive vertical. A lot of people want to be anonymous as well.</i></p>	<p>Measurement Challenges</p>	
<p><i>People can criticise that we are shipping products by a post and this creates CO2. But then if you look at the statistics, it is also in our impact report.</i></p>		
<p><i>The sort of data and proof utilised to measure effect at XXX varies depending on the project or campaign being performed.</i></p>		
<p><i>I am not sure what our head office or like, the top of the company would exactly think of when trying to measure impact</i></p>		
<p><i>We need to focus on what is the impact we create!</i></p>		

<p><i>This is still work in progress and an ongoing project for us, but this is also a way we measure our impact towards the planet</i></p>		
<p><i>The truth of the matter is that we have not generated any measurable impact to date.</i></p>		
<p><i>If we can demonstrate that health systems can save money with our technology that is a big impact for the health systems that they are striving for because many are struggling with increased costs and clinician burnout.</i></p>		
<p><i>We are trying to bridge those gaps by providing a platform where migrants can open a bank account</i></p>	<p>Societal</p>	<p>SDG Interlinkage</p>
<p><i>We actually employ a lot of migrants in the US</i></p>		
<p><i>Goes to show that there is a need right where migrants and certain others segments in society are unable to participate in the financial world</i></p>		

Being able to participate in society, and especially from financial perspective, is obviously step one to integrating into a new country

One thing for example, is that we now offer bank accounts to Venezuelans. And we have seen a lot of Venezuelans in Venezuela, who are in contact with their family members and use Zelle, which is comparable to Swish in Sweden and Ideal in the Netherlands. You can send money to your peers essentially, and they use it for cross border payment. What actually happens is that, there is a business in Venezuela, like grocery store. The grocery store says, we accept Zelle and then they give you a phone number, which you then send to your family member in the US and tell them: "Hey, please send a \$100 to this number." and then the person in Venezuela gets \$100 in groceries.

It is not solving the core problems in Venezuela and it is causing kind of a secondary economy that XXX facilitates.

A part of me is like: "You know what, we are helping the people today, but it is not solving the problem we want to solve on the long-term. It is mostly causing what is called the secondary economy.

<p><i>The latest wave of migrants is very opposed to any businesses doing that, because they believe that it is supporting the local government and the reason they are migrating is because they do not like the local government.</i></p>		
<p><i>"You are supporting our terrible government, so we do not want anything to do with you."</i></p>		
<p><i>"This is supporting the local government, that is not something we want to be associated with."</i></p>		
<p><i>That will, of course, have a negative impact on psychologists.</i></p>		
<p><i>I think also is that when something is very accessible, and it's almost too easy to use, I think it could become negative in a way for some people that they because what most people perhaps don't understand, therapists be able to you know, dig down to the root of your problems.</i></p>		
<p><i>I think a lot of people use XXX one or two times and then they think that they have solved their inner issues or whatever. They have issues. With. And I think that could be that some people are using my session like an excuse like okay, but I did at XXX for instance, and then But then I think</i></p>		

<p><i>you kind of haven't understood like to be able to grow mentally and to fully resolve the mental issues you you have.</i></p>		
<p><i>It could help you in the short term, but perhaps not in the long term.</i></p>		
<p><i>But that also means that we do not need as many people as before potentially. However, the people that we need have a better working environment. And we are also more sustainable.</i></p>		
<p><i>It is possible that these projects will have unintended consequences for nearby communities' livelihoods and social structures.</i></p>		
<p><i>Restoring degraded land may result in changes in local land use patterns, possibly affecting the availability of resources such as water and grazing land.</i></p>		
<p><i>This might have a significant impact on the communities who rely on these resources for a living</i></p>		

<p><i>I can imagine that some of our customers would not visit the local markets so often anymore – since the local market is available on their digital device.</i></p>		
<p><i>This could indeed end up harming some of the farmers who do not work with us unfortunately</i></p>		
<p><i>You could think of having a smaller number of clinical staff when you have these technologies applied</i></p>		
<p><i>We are not replacing any humans, we are assisting them and we are augmenting their decision making so we think the risks are low. The only challenging risk in practice is if clinicians will rely only on our software and stop being human or something intelligent themselves, but I think that risk is very remote. And very unlikely.</i></p>		
<p><i>One of the compromises we have had to make is transportation</i></p>	<p>Environmental</p>	

<p><i>we still need to transfer goods and materials around various sites in order to achieve our goal of reducing carbon emissions</i></p>		
<p><i>The environment may suffer as a result of this mode of transportation</i></p>		
<p><i>there will always be a trade-off between the advantages of circular economy strategies and the drawbacks of transportation. As we strive for a more sustainable future, it is crucial to recognise and resolve these trade-offs.</i></p>		
<p><i>If they think it would lead to more profits, they could be ready to tolerate a certain amount of sustainability trade-offs</i></p>		
<p><i>The environmental and social effects of XXX's business practices and products, on the other hand, could be of more importance to customers and consumers.</i></p>		

<p><i>But then you could also argue that bulgur is diminishing the livelihood of Ecuadorian farmers if you look all the way back, but then people might not buy your products, and then they end up in a landfill anyway.</i></p>		
<p><i>people can criticise that we are shipping products by a post and this creates CO2</i></p>		
<p><i>The possible influence of our landscape restoration efforts on local communities is one example of a sustainability trade-off we've seen at XXX.</i></p>		
<p><i>the introduction of new plant species into a restored landscape may have unintended consequences on local ecosystems, potentially leading to the extinction of native plant and animal species.</i></p>		
<p><i>what comes to mind is energy use, I mean, as we scale we will use a lot of servers and they need to be powered.</i></p>		
<p><i>I do not think they necessarily have an effect on each other. (economic and social)</i></p>	<p>Denial</p>	

<p><i>we think that earning economic value and making a significant influence on the world are not incompatible goals.</i></p>		
<p><i>I think that we kind of include that within the risks or the threats or whatever you had you say like the like what kind of risks are there involved in your company</i></p>		
<p><i>I would like to think that we do not harm the rest of the industry in any way,</i></p>		
<p><i>I do not think so - no perception of tradeoffs</i></p>		
<p><i>Think in our case, the risks or the benefits outweigh the risks.</i></p>		
<p><i>But it could also get in the hands of the wrong people or the data for example, like a cybersecurity thing. So of course, but I think the companies aren't quite aware of what the risks or trade-offs there might be and maybe meet them before they have actually had the time to evaluate or analysed what bad outcomes happens as well. Like, maybe I'm a bit too early in the journey of the company</i></p>	<p>Ethical</p>	

<p><i>And for instance, a good example is also the question if alcohol should be in the assortment, it's always like a pro and con thing of would you/would you is this in line with a sustainable business because of course, this would be thrown away, however, our alcohol is harmful.</i></p>		
<p><i>you could also argue, what are you selling consumers like sugary goods and stuff like that</i></p>		
<p><i>But it could also get in the hands of the wrong people or the data for example, like a cybersecurity thing. So of course, but I think the companies aren't quite aware of what the risks or trade-offs there might be and maybe meet them before they have actually had the time to evaluate or analysed what bad outcomes happens as well. Like, maybe I'm a bit too early in the journey of the company</i></p>		
<p><i>If you are the devil's advocate, you could ask whether it is reasonable to have AI sit in on humans in decision making at all, is it ethical</i></p>		
<p><i>They are interrelated and crucial parts of a sustainable company strategy, in our opinion</i></p>	<p>Other Linkages</p>	

<p><i>Overall, we want to strike a balance between these three pillars that benefits society and the environment while also providing value to our clients and investors.</i></p>		
<p><i>Enterprises in the same sector will have to make overlapping sustainability trade-offs.</i></p>		
<p><i>The ambition of the company of kind of what do you want to what kind of impact do you want to create?</i></p>		
<p><i>But then there is the trade off with saying, okay, but people just need food, and they're going to eat it anyways.</i></p>		
<p><i>The main trade off here is that everything goes a bit slower</i></p>		
<p><i>I think the major trade-off is deciding on what to focus first while making conscious decisions that some topics are left for later stages.</i></p>		

<p><i>We need energy to be able to deliver our service</i></p>		
<p><i>I think people will not be fully reliant on our product like that and this is not something we have to really worry on in the short-term. But it is indeed something we should certainly monitor and keep an eye on. You do not really want AI to interfere with human health solely without any human interaction.</i></p>		
<p><i>this is not this is not a high margin business like you need big volumes for this business to be sustainable.</i></p>	<p>Business Model</p>	<p>Challenges of Creating Impact</p>
<p><i>So, I mean, out of a business perspective, that is not a great model, because usually you want a business model where you can sell more things on your current customers and cross sell upsell, which is not the case for us. So, we want to treat as many people as possible as quickly as possible. So we are always going to be dependent on large volumes of incoming patients. So I am not sure if that was the answer to the question, but it's, it is a tricky business.</i></p>		
<p><i>So I think I do not really see that there are a lot of issues affecting the quality, however, I know that people wish to have longer sessions, our sessions are 25 minutes long and that is a challenge because we can't have longer sessions because we get reimbursed for each and every session. So</i></p>		

<p><i>if we had the double amount of sessions, we would still get the same amount of money from regions Stockholm, so this business won't work.</i></p>		
<p><i>This gives either recommendations based on your previous choices or what other customers were interested in, and tries to fill up the basket because one of the key challenges, of course, is that customers reach a certain order value that is good for them for one and also interesting for the company, but also sufficiently insights that this ecommerce model makes sense because you are sending products and it is not just a store where you pick up one or two items.</i></p>		
<p><i>One of the most difficult difficulties we have is ensuring that the effect we make is staying consistent with the values and needs of the communities with whom we engage</i></p>		
<p><i>Another issue is effectively and sustainably scaling our influence.</i></p>		
<p><i>We have difficulties to kind of make it practical.</i></p>		
<p><i>I believe that many of our competitors chose their “battles” based on what is important to their specific target audience – but there is no player looking at the end-to-end process/experience – which is something we are slowly but surely tapping into.</i></p>		
<p><i>Other than that, I think that one of the biggest challenges comes from the regulatory landscape, so a lot of banking is obviously highly regulated and opening accounts for people without social</i></p>	<p>Regulations</p>	

<p><i>security numbers always raises a few eyebrows here or there. When we wanted to offer cheque cashing a while back, nobody wanted to work with us.</i></p>		
<p><i>Those regulatory compliance issues have been very challenging.</i></p>		
<p><i>The regulators have not quite caught up yet</i></p>		
<p><i>We are tied behind our backs by the region</i></p>		
<p><i>But then it is going to be a different price tag for the so I mean, that's always an option but it's going to cost more as well.</i></p>		
<p><i>And I think those are on one hand already quite challenging to measure because of course you need to have them certified as well.</i></p>		
<p><i>So if you would generalise that tech, or if you would say, like tech companies can be like ecommerce driven, and there is everything that any normal company is challenging, is challenged with as well, just on in another channel.</i></p>		
<p><i>And I guess that is rather a question of regulation and laws that would affect us in that sense, and would also force us to make statements like this because I think seeing there is no real regulatory framework in that regard.</i></p>		
<p><i>The limitations are that we need to be approved in each market.</i></p>		

<p><i>We have seen the FDA approval and the regulatory status interface and it really scales because using up one single platform integrates with and deliver a product or service that I guess but may do different distribution.</i></p>		
<p><i>We get a lot of that, that has been a challenge. I think in the beginning, when we just started XXX, we offered card deposits. So, you can add another card to your account and you could add money from your other bank accounts. And our acquirer, which used to be Adyen, a Dutch company actually. They kicked us out,</i></p>	<p>External Cooperation</p>	
<p><i>So, they did not want to do any business with us anymore.</i></p>		
<p><i>One of the issues was that in the beginning no one wanted to work with us, so we basically started off without being able to offer a bank account to people without social security numbers. Even though that is something we always wanted</i></p>		
<p><i>they are not willing to risk the odds, compliance-wise, for a small fish like us</i></p>		
<p><i>Oh, and last but not least, it is difficult for digital entrepreneurs to locate the appropriate partners and collaborators to support them in making a real difference. Complex social and environmental issues frequently call for cooperation and partnership across many sectors and stakeholders. Finding the proper partners and collaborators who share your beliefs and objectives can be challenging, but it is essential to making a real difference</i></p>		

<p><i>When we discover that our current suppliers are not upholding our sustainability criteria, we may need to change our business procedures or even locate new suppliers.</i></p>		
<p><i>And we have the scale to also distributed because a huge part or a huge part of the problem is how many companies are out there that can just simply source. Two truckloads of cola, or bananas, not bananas, but chocolate or whatever. So this is something that exceeds the capabilities of food banks and food charities.</i></p>		
<p><i>Like if you are not a sustainable company, then we find it hard to... If you don't work with sustainability within your company, we find it hard to- it affects like the cost, it affects the customers the potential the risk for lending out money.</i></p>		
<p><i>If they are not doing this, we simply stop the collaboration. But usually it goes well, it really is our core product that we improve the lives of workers, so if that is not possible – then we simply end the collaboration. It is not what we want to be used as some sort of greenwashing tool</i></p>		
<p><i>I do not know if there are a lot of companies that are trying to do it even if their whole business and core is not social sustainability. So I guess in some in some circumstances, some companies like I don't know if we take H&M For instance, when they are like, talking about how sustainable I mean, to be frank, the best thing that could happen would be H&M closes down because their core is not sustainable from the beginning. So all their work they are doing, like trying this thing, but it just feels like they are patching a core that never was sustainable from the beginning.</i></p>	<p>Balancing Impact and Economic Gains</p>	

<p><i>The lack of knowledge and comprehension of the problems they are attempting to solve is one of the main obstacles. While I think many people may be passionate about bringing about positive change, they might not fully comprehend the underlying reasons of the issues they are working to resolve. The need to strike a balance between the company's financial viability and its goal to make a significant effect presents another difficulty. Because of the complexity and enduring nature of many social and environmental issues, finding long-term solutions can be labour-intensive. Finding the correct balance between producing economic value and having a significant effect may be difficult for digital entrepreneurs. 3</i></p>		
<p><i>I think by being ambitious, and even at zero or impact driven, it gets way more complicated. It is not the end. That is the reality that, and it is a necessity that companies consider this but it certainly makes things not necessarily easy. And there are always trade-offs</i></p>		
<p><i>Many businesses prioritise economic growth and profit over environmental concerns, resulting in negative environmental consequences.er</i></p>		
<p><i>Creating meaningful impact can be challenging at times, because as I said before, you need to make sure that economic value is well considered.</i></p>		
<p><i>Balancing sustainability in a business that aims to grow can be difficult at times, but also difficult to properly measure</i></p>		

<p><i>Implementing sustainability practices across a business comes with time and I think the major trade-off is deciding on what to focus first while making conscious decisions that some topics are left for later stages</i></p>		
<p><i>They were all like: "people are going to defraud us, because you are working with Nigerians" - everybody has this stereotype of like, the Nigerian prince.</i></p>	<p>Human Factors</p>	
<p><i>"Oh, you are opening bank accounts, sending money from one bank account to another. And your main customer groups are Nigerians?"</i></p>		
<p><i>I think people more and more can see through that as well</i></p>		
<p><i>Also, consumers are becoming more and more demanding on this topic and require full transparency over where their products come from</i></p>		
<p><i>I have seen so many workers who have been unable to learn their basic rights and responsibilities. Because there are there were not any good solutions that could help suppliers to train people. If you take for example, a country like China where I live for six years, it's one of the biggest challenge. Sorry, challenges that they have is that a lot of workers feel disengaged in the workforce.</i></p>		

<p><i>For example, and females or women working in factories, they have not been able to take proper maternity leave and they have 16 weeks paid maternity leave that they can take out so they were afraid that maybe there were certain topics that had not been clearly communicated or were not understood in the right way</i></p>		
<p><i>Everybody was talking about sustainability as something that costs money.</i></p>		
<p><i>So I think that it's taking a long time. For us to kind of prove our business case.</i></p>		
<p><i>I do not see any challenges. There have been factories who have been feeling uneasy when we are training people on their rights too much. Maybe there is riots coming or so, but this has never happened to us. We have never seen something like that, so it did not really affect us like that in the past.</i></p>		
<p><i>I have seen suppliers cheat, going through their workforce way too quickly.</i></p>		
<p><i>No, I don't. I don't think it affects the quality of the treatment. However, I think it's the other way around, like our biggest challenge is that we don't have enough psychologists. We can't even meet the demand at the moment. So it's just kind of a luxurious problem like our occupancy rate. is extremely high. But our biggest challenge is that we need more psychologists and it's difficult to find</i></p>	<p>Resources</p>	
<p><i>We are not directly linked to these initial supplies</i></p>		

<p><i>But I mean, then everything else comes in parts of like, where do you source your products from? How are they distributed? And how are you handling returns?</i></p>		
<p><i>So there is certainly an excess of some products. But since there is like the standard demand for products, also leads to the fact that the standard products are potentially harder to get. So of course there can be a mismatch between supply and demand.</i></p>		
<p><i>And then you also want them from specific brands, preferably, and then it gets difficult.</i></p>		
<p><i>However, we must ensure that we have the necessary systems and processes in place to manage this expansion and that our impact is both meaningful and measurable. Oh, and also, we confront data privacy and security problems, particularly as we rely more on digital tools and platforms to run our operations and communicate with stakeholders.</i></p>		
<p><i>On the other hand, we have also experienced many IT complexities or supply chain challenges ... I think those can be real setbacks at times ... 2 years ago, we started focusing our efforts on implementing paper packaging for all our products and we did underestimate the change that it was required. At that moment in time, we had to deprioritise a couple of other projects</i></p>		
<p><i>We can bring on board you know 100 factories per day more or less so we do not see any challenges in kind of growing our business model or supporting many brands and manufacturers.</i></p>		

<p><i>I get it. I think that the challenge for us has been to create meaningful economic impact in in the balance sheet for the investors that we have in the company. I think it is taking way too long in terms for social sustainability to become viable</i></p>		
<p><i>I think the biggest challenge that we've had is to kind of prove our business case, and to ensure that we have enough money to survive because we are even though we're making money, certain quarters more than we're spending if you're going to be a global solution. And you are going to you know, lead this market on social compliance, which I feel we are we have to invest.</i></p>		
<p><i>At the same time, they are always going to want to have return on investment.</i></p>		
<p><i>It could be lower and could be different, but it is also the reality we are facing or when we need automation in our warehouses otherwise</i></p>	<p>Other Challenges</p>	
<p><i>However, rather than getting carried away with the latest technological trends, it is critical to stay grounded in the needs and perspectives of local communities.</i></p>		
<p><i>Okay, we have proven it. We have matured our risk in compliance, our processes and we think we are ready to enter this now." About a year ago we actually migrated to another bank. And we are now actually in the process of migrating all our existing customers to them, so we can officially close the other bank down. I think that is going to be a continuous process of finding ways in with some partners and being able to do parts of what we want to do and then over time hopefully evolve it into the final product that actually solves the problems we want to solve.</i></p>	<p>Business Development</p>	<p>Solutions for Creating impact</p>

<p><i>There's a lot of studies showing that the length of this therapy session is a main factor of the treatment and it has not to do with mindset that you need to change behaviour.</i></p>		
<p><i>I mean, not not criticised in press, but we have done studies on showing that people wish that they could have the option to have longer sessions. We're very aware of that. It's just that we are tied behind our backs by the region.</i></p>		
<p><i>Then also, by incorporating sustainability into product design and development, creative solutions to social or environmental problems may be produced. Utilising eco-friendly materials, cutting waste, or creating goods and services that benefit both people and the environment may all be part of this.</i></p>		
<p><i>When we discover that our current suppliers are not upholding our sustainability criteria, we may need to change our business procedures or even locate new suppliers.</i></p>		
<p><i>So this is certainly something that would be more reasonable also to include. But yeah, it is basically looking backwards of the supply of the value chain, if you look forward towards the consumers</i></p>		
<p><i>We have very long conversations on how to balance our sustainability goals and programs with growth focused initiatives. When setting goals and looking at the strategy, we always as I mentioned before take everything in phases or steps: for example, we only set fair sustainability goals in equilibrium with profit.</i></p>		

<p><i>So I mean, we are moving from kind of a being a blue collar only tool to becoming also a white collar tool.</i></p>		
<p><i>it's crucial to have a distinct vision and plan for making a significant effect and incorporating it into the heart of the organisation. This entails figuring out how to gauge and monitor advancement toward the impact areas that are most crucial to the business.</i></p>	<p>More Impact</p>	
<p><i>But as long as the company is actually, like, genuinely interested in making a change, and it's a process, which takes time.</i></p>		
<p><i>I think the new start-up companies are more, like much more often much more high level and like they want to make an impact. It's kind of part of the core business.</i></p>		
<p><i>If the impact is good, the money will always follow later.</i></p>		
<p><i>I think that is the biggest impact that we can create. Not only ensuring the workers rights are taken care of which is at least the bare minimum we should take care of as global buyers, but that we create a workforce that feels seen and more motivated and generates better business. So this is like a win-win-win. You know the buyer is winning because they have transparent data showing that they can feel confident with their supply chain. The supplier gets better productivity and better quality so they have also a win and then the worker of course feeling that now they know what they're expected of them, but also what rights they have.</i></p>		

<p><i>So we were seeing that so many companies were focusing the majority of their efforts on the environment. You cannot only work with environmental issues, you have to do that and social compliance. And luckily we also see now that legislation is coming so now the EU is forcing the 500 biggest companies in Europe that will later become 50,000 companies in Europe to work with social sustainability and prove that they don't, you know, do anything wrong in their supply chain.</i></p>		
<p><i>No, it has been a lot of hard work. It has been a lot of late hours. It has been you know the first two years we did not earn a penny in me and the co-founder Sophie, we were just you know, working in in silence trying to create a minimum viable product and then and then we started to kind of bring in investors but I do not see that we have any challenges proving our case and becoming impactful and making money this this goes hand in hand for us. And I think with the legislation that is happening right now our case just become stronger and stronger.</i></p>		
<p><i>I think that the key for us was to create something that was truly valuable to the end user.</i></p>		
<p><i>And if that is linked to creating impact, that is great.</i></p>		
<p><i>And the team is extremely mission driven. I would say rather mission driven than actually real. So, I think we have good, an honest approach to what we want to do and I think impact comes naturally.</i></p>		

<p><i>we try to address this in our communication and inform patients as much as possible that and also we work a lot with the psychologists doing encouraged patients to to do a full treatment and not like give up after two or three sessions.</i></p>	<p>Collaborative Efforts</p>	
<p><i>Complex social and environmental issues frequently call for cooperation and partnership across many sectors and stakeholders. Finding the proper partners and collaborators who share your beliefs and objectives can be challenging, but it is essential to making a real difference</i></p>		
<p><i>Also, working together with stakeholders like customers, suppliers, and investors can make it easier to spot and solve problems. Companies may receive knowledge and support for their impact projects by interacting with these organisations.</i></p>		
<p><i>Oh, also, some people I know in this industry advocate and collaborate with each other to promote systemic change and handle difficult problems that call for group effort. Digital entrepreneurs and businesses can have a bigger impact and accelerate change by cooperating.</i></p>		
<p><i>Oh no, no worries. At XXX, we use a multi-stakeholder to address sustainability trade-offs. To detect and resolve any possible negative effects, we engage in open and honest communication with all of our stakeholders, including customers, suppliers, and partners. Additionally, we maintain a tight working relationship with our suppliers to make sure they share our commitment to sustainability and uphold moral and ethical standards.</i></p>		

<p><i>resolving sustainability trade-offs within sectors involves collaboration and collective action. So yeh. We really have to continuously work together</i></p>		
<p><i>we always take a community-driven strategy, which includes active involvement with local communities, as well as governments and other stakeholders. This helps to guarantee that our work is linked with the values and requirements of local communities, allowing us to produce sustainable and locally-led landscape restoration solutions.</i></p>		
<p><i>Otherwise, XXX collaborates with local groups and stakeholders to harness their experience and knowledge, as well as to establish trust and encourage ownership of our programs in the areas where we operate. And XXX tailors its approach to each local setting, knowing that there is no one-size-fits-all answer to landscape restoration.</i></p>		
<p><i>I think that this collective mindset should be utilised to its fullest extent among digital entrepreneurs. Like, individuals should reach out amongst each other and speak about what they think are the best methods on creating meaningful impact. Improve upon these methods together and build the world of the future together, truly. I think this is the tactic that digital entrepreneurs should use to create meaningful impact.</i></p>		
<p><i>we collaborate extensively with local communities to understand their requirements and guarantee that our initiatives support and improve their lives. We also do extensive environmental studies before beginning every restoration project to ensure that our work does not have unanticipated negative consequences for local ecosystems.</i></p>		

<p><i>Engaging local communities and stakeholders in the project planning process is one of the main strategies</i></p>		
<p><i>prioritise collaborating with local partners that have a thorough awareness of the local ecology and can give useful insights into potential trade-offs and mitigation strategies.</i></p>		
<p><i>We have also seen that suppliers want to take this kind of responsibility. These are business women and business men who are willing to do whatever they can do in order to secure better business and a stable business coming in.</i></p>		
<p><i>But now we have these massive brands that kind of say we know what we want, and we want to work with you and we want to scale it.</i></p>		
<p><i>there you have to understand what is what is engagement, what is worker participatory committee in a factory, why should they be voted on by their peers, and how do you kind of feedback that knowledge back to the workforce?</i></p>		
<p><i>Trying to solve it: I think that is a question for the regulators mostly. I think we are a bit like: "You know what? As long as it is allowed and what we are doing is legal, we are going to continue doing it."</i></p>	<p>Lack of Solution</p>	
<p><i>So we can we could you know, in the future, maybe we're gonna like offer a private offering then. But then it's going to be a different price tag for the so I mean, that's always an option but it's going to cost more as well.</i></p>		

<p><i>I think the nature of changing something is also creating stirrups and changes in other parts.</i></p>		
<p><i>I think that, together with the collaboration efforts with best practices, or like, businesses who do a lot right in the same industry, could really push digital entrepreneurs to create more meaningful impact and overcome the challenges it otherwise faces.</i></p>	<p>Specific Solution</p>	
<p><i>I believe that many of our competitors chose their “battles” based on what is important to their specific target audience – but there is no player looking at the end-to-end process/experience – which is something we are slowly but surely tapping into.</i></p>		
<p><i>So for example, and make sure that in any case, whatever that you are creating, that you truly understand the needs of the end user, what is the real value that you are going to bring to the client and then how do you ensure that this is taken care of in the right way before we spend one dime on creating any of it you know, structures or back end or anything we went six trips to Bangladesh and China just with clickable keynotes to understand how to create a service that was you know, good enough for global buyers and beautiful enough for them to kind of see that yes, this is this looks great,</i></p>		
<p><i>you should identify a problem and a challenge that inspires you that you really think is important for yourself</i></p>		

<p><i>start with the problem. Do your best to understand who has the problem, and look at the solutions that are out there and investigate if you can find some improvement that can be improved</i></p>		
<p><i>I mean, I don't- one immediate thing I thought about now since we have this AI recording. We're not using AI today, but I mean, who knows in the future perhaps I saw this article somewhere that perhaps a can help patients more efficiently than psychologists themselves. That will, of course, have a negative impact on psychologists</i></p>	<p>Other Solutions</p>	
<p><i>Like, we also utilise technology and this helps us in expanding impact projects and contacting more people. For example like, some our competitors utilise data analytics and artificial intelligence to pinpoint areas for enhancement and optimise processes to lessen their impact on the environment. We are working on that as well, haha. But we are not that far yet, sadly...</i></p>		
<p><i>We can track the effect of our work and make data-driven decisions to enhance our approach and optimise our impact by combining these strategies.</i></p>		
<p><i>XXX also has a thorough monitoring and evaluation system in place that allows us to track and quantify the impact of our efforts. This method comprises quantitative and qualitative indicators, as well as field visits and community feedback on a regular basis.</i></p>		
<p><i>This enables us to assess the impact of the landscape restoration programs and track progress toward its objectives. Otherwise, as part of our landscape restoration efforts, XXX undertakes soil analysis to assess changes in soil health and fertility.</i></p>		

<p><i>to perform extensive environmental and social impact evaluations prior to the implementation of any projects</i></p>		
<p><i>I think all businesses must be aware of these trade-offs and take a comprehensive approach to sustainability that takes into account the long-term effects of their activities on the environment, society, and economy.</i></p>		
<p><i>so sustainability is also key for simply attracting customers towards your product or your service.</i></p>		