

**SUSTAINABLE SUPPLIER SELECTION: A CASE ABOUT SUSTAINABLE
FASHION ENTREPRENEURS**

Master thesis

Master Sustainable Entrepreneurship

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Abstract

Sustainable fashion entrepreneurs (SFEs) operate in an industry that lacks sustainable options. As a result, SFEs encounter several barriers in finding a sustainable supplier. This paper looks at the process of sustainable supplier selection for SFEs. Specifically, the barriers they encounter in finding a supplier and the strategies used to overcome these. A cross-sectional case study of seven SFEs was done. Semi-structured interviews were conducted to gather data on the process of supplier selection. From this data, a grounded theory approach was used to map the general journey of SFEs in supplier selection. The results show that SFEs use multiple strategies to overcome the barriers that exist in the current system. SFEs gather information (causation), learn as they go (bricolage), creatively use the available resources (bricolage), try multiple leads and techniques (bricolage), create partnerships (effectuation), balance values (effectuation) and stay flexible to new opportunities (effectuation). The dominant strategies were bricolage and effectuation which helped the entrepreneurs deal with uncertainties that exist in the niche they operate in. Therefore, supplier selection for SFEs is a creative process that moves away from a well-thought-through causal strategy towards a creative “learn as you go” process.

INTRODUCTION

The fashion industry is one of the most polluting industries in the world (Pedersen, Gwozdz and Hvass, 2016; Pal & Gander, 2018). With long and complex supply chains the companies in this sector have far stretching impacts on people and the planet (DiVito & Bohnsack, 2017). The excessive use of pesticides, energy, and water in the production of textiles are just some ways in which this sector impacts the environment (Ellen MacArthur Foundation, 2017). Additionally, it causes several social problems: paying less than a living wage, hazardous working conditions, and extremely long working hours (Ozdamar Ertekin & Atik, 2014). Unfortunately, disasters like the Rana Plaza collapse in 2011, where more than 1000 garment workers lost their lives, are a product of the system and its lack of transparency (Khan, 2019).

As stated, the textile industry is very polluting and the time for change is now (Ellen MacArthur Foundation, 2017). Unfortunately, those who go against the stream and contribute to change encounter several difficulties when starting their sustainable brands. One of them is the lack of supply of sustainable materials due to a lack of innovations (Moon, Lai, Lam & Chang, 2014). The current system discourages innovation and investment in sustainable materials for three reasons. First, there is a lack of scalable sustainable business models (Pal & Gander, 2018). Second, to survive in the current system suppliers need to be responsive to trends in the market, investing in sustainability reduces responsiveness and is thus seen as high risk (De Brito, Carbone & Blanquart, 2008). Third, the current system is highly competitive and every item needs to be produced at the lowest cost possible. Investment in innovations adds to the cost and reduces the supplier's bargaining power (Pal & Gander, 2018). To overcome some of the barriers described above, most sustainable fashion entrepreneurs (SFEs) carefully create every step of their supply chain. They work with their own suppliers and manufacturers to ensure that the products meet high standards that align with their brand's identity (Heinze, 2020). Unfortunately, this costs more time and money than traditional fashion entrepreneurs need to

spend on their supply chain (Heinze, 2020) hereby staling the replacement of the current polluting industry (Pal & Gander, 2018).

Thus there is a two-sided problem. Suppliers avoid investments in sustainability because of the high competition on the market (Pal & Gander, 2018) and the need to be responsive to the high pace of the industry (De Brito et al., 2008). In addition, SFEs struggle to create a sustainable supply chain due to a lack of sustainable supplies (Heinze, 2020). The data collected by DiVito & Bohnsack (2017) give an insight into the challenge faced by SFEs: “She engaged in a long search process to find exactly the right material and suppliers and artisan workshops that match her strong sustainability values, especially in the social dimension” (DiVito & Bohnsack, 2017: 579).

Problem identification

The current literature is not clear about the specifics of the barriers that SFEs face in finding a sustainable supplier. Nor how SFEs approach this search to overcome the barriers. Here lies an interesting research problem. Identifying these barriers and overcoming them can contribute to the change and the replacement of the current fast fashion industry (Pal & Gander, 2018). From this problem in practice, the following research question is derived: “*How do sustainable fashion entrepreneurs overcome the barriers that exist in sustainable supplier selection?*”

This research question will be answered by doing a cross-sectional case study on seven SFEs and their search for sustainable suppliers. The research aims to gather data from interviews to deliver a general picture of the search for sustainable suppliers, the barriers encountered and the strategies used to overcome them. This paper will contribute to the literature on sustainable entrepreneurship as it starts to build a theory on supplier selection in new ventures. By addressing the challenges that SFEs face, this research will contribute to practice by helping future SFEs overcome barriers in the current industry.

The rest of this paper is structured as follows. First, a review of the literature is done to map the context of current supply in the fashion industry. This literature review is followed by the method section that explains the steps that need to be taken in gathering data and answering the research question. This is followed by the results and the paper is concluded with a discussion of the findings, implications and recommendations for research and practice.

THEORY

To be able to answer the research question posed above, it is important to look at the current literature on the concepts stated in the question. This section will first highlight the current barriers that are mentioned in the literature on sustainable supply in the fashion industry. Next, it will focus on sustainable entrepreneurs, a relatively new field of study which has matured a lot in recent years. Lastly, the literature on supplier selection is reviewed and common entrepreneurial behaviour is discussed (causation, effectuation and bricolage) in light of supplier selection.

Barriers in sustainable supply

The introduction points out that the current industry creates barriers for SFEs to find sustainable suppliers. An important obstacle to be overcome is described in the literature as a lack of sustainable supply (De Brito et al., 2008; Ozdamar Ertekin & Atik, 2014; Pal & Gander, 2018). This deficiency of sustainable materials has several underlying causes. First, there is a lack of scalable sustainable business models for suppliers (Pal & Gander, 2018). The sustainable business models that exist today remain in the margins of the total industry and are too underdeveloped to replace the current unsustainable models (Pal & Gander, 2018). Second, the industry's high pace makes innovation a risk-full undertaking (De Brito et al., 2008). In the current system, it only takes two to four weeks to realize a collection from idea to store. At this pace, there are about 20 new collections each year instead of the traditional two (Ozdamar

Ertekin & Atik, 2014). This rapid pace forces manufacturers to be highly responsive to changes in demand on the market, such as the latest trends (Pal & Gander, 2018). Predicting such a fluctuating demand is difficult for suppliers and limits their power in the total industry compared to retailers and brands, making it difficult for suppliers to steer innovations towards sustainability (De Brito et al., 2008). Third, there is ongoing competition to produce as fast and as cheaply as possible on a large scale (Pal & Gander, 2018). Investing in sustainability adds to the costs of a supplier; this in result will weaken the supplier's bargaining power, which is undesirable in a highly competitive industry such as the fashion industry (Pal & Gander, 2018).

Another barrier to sustainable supplier selection is the absolute distance of entrepreneurs to suppliers. From the '90s till the '00s the production of clothing increasingly moved to the Far East (offshoring) because of lower costs of materials and higher availability of labour (Ashby, 2016). This created a distance to suppliers that negatively impacts the trust in the relationship between entrepreneur and supplier (Ashby, 2016). Additionally, it decreases the traceability of the supply chain and limits the entrepreneur's control over its practices (Ashby, 2016). As a result, producing closer to home (nearshoring) is becoming increasingly popular amongst sustainable brands (Sirilertsuwan, Hjelmgren & Ekwall, 2019). Advantages of nearshoring are increased traceability, easier in-person visits to factories, short lead time and high-quality suppliers (Sirilertsuwan et. al, 2019).

Sustainable entrepreneurship

Who are these people that start new and innovative brands despite the lack of sustainable options? Sustainable entrepreneurs (SEs) are people who collect entrepreneurial rents like any other entrepreneur but at the same time solve local and global challenges (Cohen & Winn, 2007). SEs create value in three dimensions: economic, social and environmental (Belz & Binder, 2017; Sirilertsuwan et al., 2019). The challenge of sustainable entrepreneurship lies in

the paradox of balancing economic, social and environmental value (DiVito & Bohnsack, 2017; Van der Byl & Slawinski, 2015). For SFEs this is where the challenges begin because there is no such thing as a completely sustainable fabric which makes it hard to establish core values on sustainability to base decisions on (Fletcher, 2014).

Sustainable entrepreneurship is explained in two ways in the current literature, first as opportunity discovery (Cohen & Winn, 2007; Hockerts & Wüstenhagen, 2010; Vuorio, Puumalainen & Fellnhöfer, 2018) and second as opportunity creation (Alvarez, Young & Woolley, 2015; Pacheco, Dean & Payne, 2010). Opportunity discovery assumes that there are market imperfections that form an opportunity for sustainable products and services (Cohen & Winn, 2007). In the fashion industry, these imperfections are negative externalities that occur during the production process such as the spillage of pesticides in the environment and water pollution (Ellen MacArthur Foundation, 2017). When left unsolved these imperfections cause several problems for the environment and society (Cohen & Winn, 2007). But market imperfections are the source of new opportunities for sustainable entrepreneurs to exploit (Vuorio et al., 2018).

But not all scholars agree on this view of opportunity discovery. Some scholars say that sustainable entrepreneurs need to actively create opportunities themselves to establish a viable business case (Alvarez, et al. 2015; Pacheco et al., 2010). This is also true for SFEs when building a sustainable brand. SFEs have to actively create opportunities for their sustainable supply chain to exist (Heinze, 2020). Opportunity creation puts extra pressure on SFEs that fashion entrepreneurs outside of the sustainable niche market do not encounter (Heinze, 2020).

Criteria	Definition
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Cost	Lowest product price without compromising the quality
Quality	Ensure high-quality control on the products
On-time delivery	Level of delivery on time as per the agreement with the customer
Rejection rate control	Control on rejection rate of material
Toxic chemical usage control	Control or avoid the usage of toxic chemicals in the cultivation process and production process of textile
Water consumption control	Control the unwanted use of water in business operations
Energy usage control	Control the unwanted use of energy in business operations
Pollution control	Control the improper waste disposal, use of hazardous material in operations
Restriction on underage labour	Control the underage employment in business operation.
Restriction on long working hours	Control the forcing of workers to work more than determined hours (apart from overtime)
Human rights care	Basic facilities to labour, respect, <i>etc.</i>
Safeguard mechanism for workers	Monitor the workers' health and safety

Table 1: Sustainable supplier selection criteria (Jia et al., 2015).

Supplier selection

Looking at the research question it is important to explore the concept of supplier selection in more depth. There is little literature on the specifics of SFEs and supplier selection, there is however literature on retailers and their supplier selection. Jia, Govindan, Choi & Rajendran (2015) establish a framework with criteria to select the optimal supplier (see table 1). The criteria in this list are derived from the triple bottom line and are weighted differently by each

supplier in their sample, as each has different values that they focus on depending on the brand's identity (Jia et al., 2015). Once established, these criteria can be used in a decision-making matrix to select the most suitable supplier (Jia et al., 2015). Supplier selection is often approached as a multi-criteria decision-making problem and solved through a matrix (Kannan, 2018). Although commonly accepted by actors in both practice and research (Kannan, 2018), this method of supplier selection is not suitable for the current research problem. There is not enough knowledge on the choice opportunities that SFEs have. Thus we cannot know how to fill in the matrix.

A theory that is better applicable to this specific research problem is that of causation, effectuation and bricolage. These three strategies are often mentioned in entrepreneurship literature when it comes to decision-making and entrepreneurial behaviour (Servantie & Rispal, 2018). Bricolage and effectuation especially, are often used by starting entrepreneurs when they are dealing with a novel and uncertain context (Sarasvathy, 2001; Servantie & Rispal, 2018). The three strategies are a way of categorizing entrepreneurial behaviour of decision-making when creating and running a business (Servantie & Rispal, 2018). Supplier selection is one such entrepreneurial process and can be explained through the three strategies. Previous research shows that entrepreneurs use the three decision-making strategies depending on the context, novelty calls for effectuation whereas more established contexts call for causation (Hauser, Eggers & Guldenberg, 2019). The strategies will help to understand the journey of SFEs in selecting their suppliers and the specific context that they are operating in. The three strategies and their entrepreneurial behaviour are explained in more detail below.

Causation

Causation is the more traditional view of decision-making and is often used in business research (Hauser et al. 2019; Sarasvathy, 2001). It focuses on a set goal or effect that the entrepreneur wants to achieve. To reach this, the entrepreneur can pick between different existing means (Sarasvathy, 2001). In a causational strategy decisions are made in light of the goal (Servantie & Rispal, 2018). Causation helps entrepreneurs to map out the needed means to reach their set goal (Sarasvathy, 2001). Some of the behaviours that reflect this strategy are: gathering information about the market, developing a business plan, calculating returns on identified opportunities, implementing control processes and gathering information on competitors (Fisher, 2012). Causation in supplier selection would express itself in a structured search with a clear end-goal. With the entrepreneur making well-calculated steps towards this goal.

Effectuation

As a starting entrepreneur, you have to deal with many uncertainties making the causation strategy ill-suited for the context. Sarasvathy (2001) therefore introduces effectuation as an alternative strategy, often used by starting entrepreneurs. The exact goal is often still unclear in the early stages and uncertainties make it difficult to predict and plan steps. Instead, the entrepreneur focuses on what they can control, using a means-approach the entrepreneur looks at what they can do based on the means at hand. Because the goal is not set, the entrepreneur stays open to new opportunities that may arise (Sarasvathy, Kumar, York & Bhagavatula, 2013). This strategy gives room to strategic alliances that exploit contingencies that come their way (Servantie & Rispal, 2018). Characteristics of effectuation are: “Affordable loss, rather than expected returns; Strategic alliances, rather than competitive analyses; Exploitation of contingencies, rather than preexisting knowledge; Control of an unpredictable future, rather than prediction of an uncertain one.” (Sarasvathy, 2001: 259). Effectuation in supplier selection

would express itself by using minimal means, collaborations, and learning more as they go through experimenting and iterative learning.

Bricolage

Bricolage was first used by Lévi-Strauss (1966) as a way of making do with the resources at hand. Since then the concept is often used in science to describe situations in resource-stressed areas. Baker & Nelson (2005) introduce the following definition of bricolage in entrepreneurship: “making do by applying combinations of the resources at hand to new problems and opportunities” (p.333). The characteristics of bricolage can be summarized as follows: *Making do*; taking action and an active approach to problems rather than passive (Baker & Nelson, 2005). *Combining resources for new purposes*; using resources for a different goal than they were intended or designed for (Baker & Nelson, 2005). *Resources at hand*; make use of what is available, especially use resources that are often cheap and seen as worthless by others (Baker & Nelson, 2005). Because they choose to see the value in these resources they can create new opportunities that others cannot (Baker & Nelson, 2005). An important difference between bricolage and effectuation is that the latter focuses on the network and working with others, whereas bricolage is more individual problem solving (Servantie & Rispal, 2018). Bricolage would express itself in supplier selection when the entrepreneur uses resources in a way they were not intended and focuses on the most accessible options available.

Overlap

Fisher (2012) described the individual behaviour that is observed for each of the strategies in practice (see appendix E). This study showed that sometimes entrepreneurs show behaviour from different strategies at the same time, possibly pointing at overlapping areas between the three. Servantie & Rispal (2018) continue on this and make a clear theory that shows that the three have overlapping areas. Effectuation and bricolage both assume that opportunities are

created, whereas causation states that opportunities are out there and are to be discovered (Servantie & Rispal, 2018). Effectuation and bricolage are built on shared concepts of; experimentation, socially constructed resources and, bypassing formal rules and structures (Sarasvathy, 2008). Both bricolage and causation start with a clear vision in mind. However, they search for their solutions in different strategies. For bricolage, this is making do and for causation, this is decision-making towards a set goal (Servantie & Rispal, 2018). Both effectuation and causation try to reduce uncertainty in decision-making by creating alliances with other parties. For effectuation, these alliances are formed from the entrepreneur's network and for causation, these are more formal business transactions based on mutual benefit (Servantie & Rispal, 2018).

To conclude, the strategies show overlap in underlying concepts, yet each is generally connected to a specific phase in the entrepreneurial process. Servantie & Rispal (2018) discovered that bricolage is often seen at the start of a venture when there is a vision and ideas start to take shape. Causation is used when a venture is more established and it is looking to scale up (Hauser et al., 2019; Servantie & Rispal, 2018). Effectuation is used in the stage between, where uncertainties of the beginning are still present but new growth opportunities arise (Servantie & Rispal, 2018). The rest of the paper will look into the strategies and overlap between them for SFEs during the process of selecting a sustainable supplier.

METHOD

To answer the research question raised in the introduction a cross-sectional case study was conducted. Next, a grounded theory approach was used to build a theory. This inductive method is especially useful when there is no theory formed on the topic yet, which is the case for SFEs and supplier selection. The following sections will explain the steps that were taken to collect and analyze the data. Figure 1 shows a schematic overview of the method that was used.

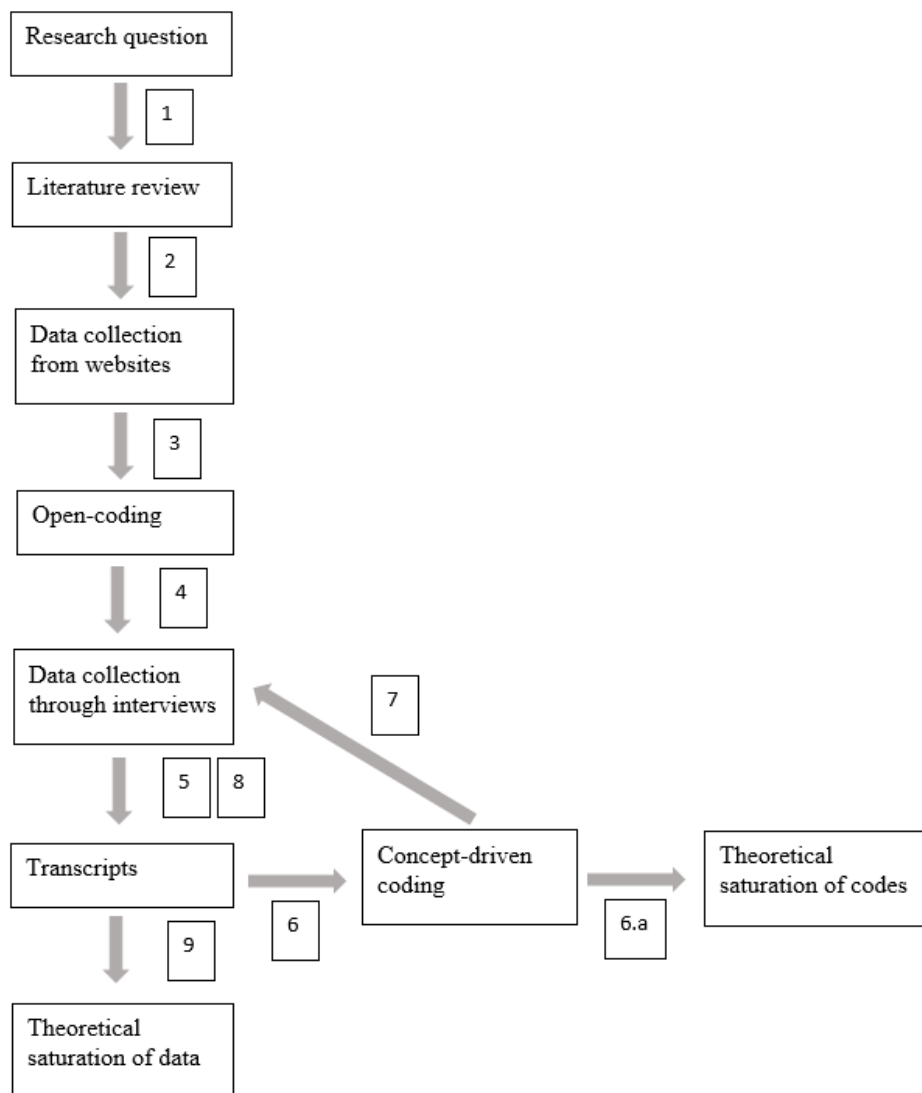


Figure 1: Method of data collection and analysis

Data collection

Data was collected by interviewing seven SFEs who recently started their brand or who are in business for a few years now. It is useful to draw from both of these groups because the former still has a fresh memory of the events that occurred and can recall more details of their search for sustainable suppliers. Whereas the latter group is now more experienced and can draw some lessons from the past and compare their strategy between then and now. Using retrospective cases and real-time cases also reduces bias (Leonard-Barton, 1990). A case study requires data

from several sources to create a rich base of data for theory-building (Eisenhardt & Graebner, 2007). Therefore, additionally to the interviews, data from the page on sustainability and the brand's story on their websites were used when present, to triangulate and increase the validity of the data. The interviews were conducted in Dutch or English depending on the preference of the interviewee. The text was only translated to English in case of a quote in the final paper, allowing to stay closer to the data. All the transcripts were sent to the interviewee for revision within 24 hours after the interview took place. Participants could still withdraw their participation until two weeks after the interview was conducted as stated in the consent form (appendix D).

Sample selection

The entrepreneurs were selected through a convenience sample based on the researcher's network. After approaching two initial SFEs, from this network, the snowball method was adopted to reach out to more SFEs. In total fifteen participants were contacted from which seven were interviewed online for the final research. The others did not take part for the following reasons: two turned out to be a poor fit to the sample after initial contact, two did not reply, and four were too busy at the time of the data collection. Three of the participants in the sample were selected through a platform that has strict social and environmental sustainability standards for members (Sustainable Fashion Gift Card, 2021). The total sample ended up being seven cases, six from the Netherlands and one from Germany. The cases can be found in appendix C.

Semi-structured interviews

Semi-structured interviews were conducted with the founders of the selected sustainable fashion brands. Founders are closely connected to their brands and involved from the very start (Heinze, 2020), thus making them suitable for this research. At the time of data collection, it was not possible to meet in real life due to the Covid-pandemic. The interviews were therefore conducted through Google.meet and recorded through the same software. The recordings are stored for one year after the research is done and only accessible to the researcher. Questions that were asked during the interview were based on the existing literature and fell into the following categories: the start of the business, finding suppliers, balancing values and power balance & innovation. See figure 2 for an example question per category, the whole question guide can be found in appendix A. The question guide was different for new and established fashion entrepreneurs to anticipate their different experiences. The interview guide was followed for each interview, making it possible to compare the cases later on. The interviews took between 40 and 60 minutes and were conducted between April 13th and 29th 2021.

The start of the business	How would you describe your current supply chain? What elements are there?
Finding suppliers	What did the search for a supplier look like for you when you were just starting your brand? And for a manufacturer? (<i>tour question</i>)
Balancing values	What role did these values play in finding a supplier?
Power balance & innovation	How would you describe the balance of power in the relationship between you as a brand and your suppliers?

Figure 2: Example questions per category.

Data Analysis

After each interview was conducted the spoken text was transcribed verbatim. Verbatim transcription gives an exact written report on what was spoken, including errors, stutters and grammar mistakes (Halcomb & Davidson, 2006). By using verbatim transcription the researcher stays closer to the spoken data this is useful for a grounded theory approach (Halcomb & Davidson, 2006).

A grounded theory approach was used throughout the data gathering and analyzing process. In this approach, coding is done alongside data gathering (Bryman & Bell, 2011). It is important to analyze the data in several rounds and to include in these rounds existing literature and theories to build upon (Eisenhardt & Graebner, 2007). When theoretical saturation is achieved the analysis is coming to an end. This means that more data will not give new insights and codes and concepts are fully aligned (Bryman & Bell, 2011). Each step will be elaborated on below and can be viewed in figure 1.

For six of the seven participants, secondary data was found on their website on the mission of the business and their sustainability values. One of the participants did not have a website yet so there was no secondary data available. This participant was asked a few additional questions about their mission during the interview. The data was coded using Atlas.ti. Because the secondary data was collected before each interview, open-coding was used to code the data. In this method, codes are derived from the data allowing for a more grounded theory to be developed (Gibbs, 2007). This resulted in a coding tree with seven themes and 57 codes in total. After this, the interviews were conducted. Based on the first three interviews additions were made to the coding tree using concept-driven coding. This approach uses existing theory on the topics mentioned in the data and bases the codes on these concepts (Gibbs, 2007). This concept-driven approach created four more themes that were not mentioned in the secondary data but were mentioned in the primary data. Using open-coding again, 26 more codes were added to

the coding tree. This made the total coding tree for the data analysis 11 themes and 83 codes (appendix B). A codebook was made in excel to keep track of the number of codes and their exact meaning and way of application. This is important to create consistency in the analysis of the data (Gibbs, 2007). After four interviews no additional codes were needed to explain the data, meaning that saturation of the codes was achieved. The sixth and seventh interview did not give major new insights compared to the others implying that saturation of the data was achieved.

The coded data were further analyzed by looking at the research question and collecting those parts that help answer the research question. By focusing on those parts that are important for the research question a deeper analysis can be achieved (Bryman & Bell, 2011). From this selected data a general journey of sustainable supplier selection was discovered. The results of this can be read in the next section of the paper.

RESULTS

This section will start to answer the research question central to this paper: *How do sustainable fashion entrepreneurs overcome the barriers that exist in sustainable supplier selection?* It becomes clear from the data that each entrepreneur in the sample walked a unique journey to find a sustainable supplier. Although unique in their journey there are some commonalities to discover in the barriers that they faced and the strategies that they used to overcome the barriers. Four steps are recognized in the general search for a sustainable supplier by the entrepreneurs in the sample (figure 3).

<p>Step 1: Establish criteria</p> <p>The entrepreneurs research what sustainability is and what options exist. They establish values that are of importance to them. They mainly focus on fair working conditions and minimal impact on the planet.</p>	<p>Step 2: The search</p> <p>With the values in mind they look online for suppliers. They learn as they go what works best. This step also includes an offline search, through networking, use of existing contacts and visits to warehouses.</p>	<p>Step 3: Initial contact</p> <p>Once a few suppliers meet their criteria they contact them through email or via phone. Here they ask additional questions and discuss possibilities. The entrepreneur values quick replies, honest answers and direct contact.</p>	<p>Step 4: Create partnership</p> <p>The entrepreneurs settle for best available option which is often producing on a small scale in their own country with fabrics sourced at warehouses. They value long-term partnerships with their suppliers.</p>
<p>Challenges</p> <ul style="list-style-type: none"> - Ambiguity of sustainability - Balancing values depending on the situation - Continuous process as venture matures 	<p>Challenges</p> <ul style="list-style-type: none"> - High MOQs - Closed culture - Online presence of suppliers - Reliability of information 	<p>Challenges</p> <ul style="list-style-type: none"> - High MOQs - Lack of transparency - Visiting suppliers is difficult 	<p>Challenges</p> <ul style="list-style-type: none"> - Higher production costs - Continue searching for better options
<p>Solutions</p> <ul style="list-style-type: none"> - Online search for knowledge on the industry - Talk to experts in the industry - Use prior knowledge 	<p>Solutions</p> <ul style="list-style-type: none"> - Rely on third party certifications - Try many different channels to find potential matches 	<p>Solutions</p> <ul style="list-style-type: none"> - Search for fabrics at warehouses - Work with an agency - Form partnerships with other brands 	<p>Solutions</p> <ul style="list-style-type: none"> - Small scale and local production - Stay reflexive and continue learning
<p>Entrepreneurial behaviour</p> <p>Effectuation</p> <ul style="list-style-type: none"> - Balance values and make changes based on what is available on the market. <p>Causation</p> <ul style="list-style-type: none"> - Gathering knowledge on the industry 	<p>Entrepreneurial behaviour</p> <p>Bricolage</p> <ul style="list-style-type: none"> - Use amateur and self-taught skills to discover how to best search for a supplier. - Use many different techniques to find suppliers 	<p>Entrepreneurial behaviour</p> <p>Effectuation</p> <ul style="list-style-type: none"> - Use the limited resources at hand and adapt plans accordingly. - Create alliances to overcome high MOQs 	<p>Entrepreneurial behaviour</p> <p>Bricolage</p> <ul style="list-style-type: none"> - Settle and make do with what is available, being creative with the resources at hand <p>Effectuation</p> <ul style="list-style-type: none"> - Stay flexible and open for new opportunities.

Figure 3: The general journey of supplier selection

Step 1: Establish criteria

The search for suppliers, in general, started with establishing search criteria. This is closely tied to what the entrepreneur values and sees as sustainable. All entrepreneurs explained that what counts as sustainability differs depending on the situation. This ambiguity forces the entrepreneurs to continuously balance values. It is important to them to stay up to date on new information even after they established their values and launched a collection. The entrepreneurs see it as their responsibility to keep learning and searching for newer and more sustainable options. Balancing values is reflected in the following quote of E2: *“All clothing is polluting, all cotton is polluting, but you can choose how polluting it is. So then you have to make sure that you choose the option that is the least polluting”*.

What becomes clear from the data is that all entrepreneurs focus on different criteria but in general these fall in the categories of fair working conditions and minimal impact on the planet. For those who are new in the field, establishing sustainability criteria requires thorough research on the sustainable options in the textile and clothing industry. Some searched online for more information by looking at video's, reading blogs and other articles (E3 and E6). They also gathered information by talking to people in the industry. This part of the search was in general not experienced as very difficult but it continues to play a role in the development of their business. E1 explained that her values and criteria changed as her business developed: *“You catch yourself doing it every time, then you think you are fully sustainable but it is always more. [...] So you keep developing”*

Step 2: The search

Once the entrepreneur has a clear view of what they are looking for in a supplier they use different strategies to search for suppliers who meet their criteria. The strategies that can be distinguished in the data are networking and internet search. Of these two the internet search

was used most often. Looking online for suppliers that meet the SFE's criteria was a tedious task and required a lot of time scrolling through many internet pages for one potential fit.

Some entrepreneurs had no prior experience in the industry and were amateurs in the field of supplier selection. They had to figure everything out themselves starting with looking for suitable search terms. E4 describes it as follows: *"It's just like, try to put a lot of keywords in, combine them in different ways and go through the first 10 pages"*.

The internet search did give a lot of results but not a lot of potential matches, mainly because of the high sustainability standards established in step 1. This part of the search was often referred to as difficult and frustrating. It took place over weeks to several months. E3 experienced it as follows: *"Actually, it wasn't that easy. I really put a lot of time into that. [...]. Especially because I had a very clear framework: it had to be fair, they had to have sustainable suppliers for materials, not too far away, not too high numbers. This meant that a lot of things were excluded. You just have to keep searching, searching, searching. When I look back, it was quite difficult."*

Because the entrepreneurs had limited resources to start with, they often did not meet the minimum order of quantities (MOQ) that a supplier asked on their websites. If the MOQ was too high at first glance, the entrepreneurs did not contact these suppliers, leaving them with fewer options.

Searching online for suppliers came with its challenges. One of them is the lack of suppliers' online visibility. As E6 states *"You find very little on the Internet, there are few companies that actually put online what they do and whether it's done ethically. So that was a challenge."*

Another challenge was the reliability of the information online. To overcome this uncertainty in information certificates showed to be an important source of credibility for the

entrepreneurs. GOTS and FairWear were mentioned and seen as reliable by the SFEs. These certificates played an important role in deciding whether or not to contact the supplier in the next step of the journey.

The second strategy of finding potential matches was through offline networking. E3 for example visited a trade show to get in touch with people in the industry. Entrepreneur 1, 2, 4 and 5 had prior experience in the industry and used some of their old connections to start their search. Not all entrepreneurs experienced this in the same way. Some stated that their colleagues in the industry were open to sharing information about their suppliers, others encountered a more closed culture and were left to their own devices.

The entrepreneurs used the internet and their network to find suppliers. But besides this, they also tried other ways, such as contacting non-sustainable suppliers to tap into new networks (E2). Joining Facebook groups and writing embassies to discover what suppliers match their criteria in the preferred production country (E7). And by ordering products online and checking the labels for more information on the supplier (E4).

Step 3: Initial contact

The next step is contacting those suppliers from the previous step that meet the sustainability standards. This was often done through email or phone call but also included ordering samples or in-person visits to suppliers. In the case of an email or phone call, the entrepreneur often explained what they are looking for and what type of collection they want to produce. The quantities were also discussed at this stage since this can be a deal-breaker for both parties.

In this initial contact phase, it was important for the entrepreneur to feel a connection to the supplier. They describe that they value direct contact, quick replies and honest answers. If something felt off, the entrepreneur decided to look further. For example, E6 wanted to have a quick response: *“If it took them two weeks to send back an email. That sets off alarm bells for*

me. Because if that happens when you're producing, it really doesn't make you happy. If you are in a stressful situation and you really have to have those garments, then you really don't want people to wait two weeks before they answer you."

Transparency turned out to be an important deal-breaker for the entrepreneurs as well. E2: *"The moment I wanted to go there to see for myself or wanted some more info about how they worked (I wanted to see proof that fair wages were being paid) I was just cut off or there was no response. So it was actually not as transparent as I wanted it to be. And it did not feel right to me to go into business with them."* Practices like this made the entrepreneurs question the transparency and they decided to continue their search.

Step 4: Creating a partnership

Once the challenges above are overcome and a partner is found that meets most of the criteria a partnership is formed. Because of the high MOQs and lack of transparency of foreign producers most entrepreneurs ended up producing in the Netherlands in small ateliers (E1, 2, 3, 5 and 6). Due to a lack of suitable external partners, some decided to produce the garments themselves and start their own atelier (E1,2 and 5).

In general, the entrepreneurs value long term relations with their suppliers, this is reflected in their sustainable values as well. E3: *"I think this manufacturer is very good so I want to continue working together for the long term. A mistake can happen, then you just look together how we can prevent this."* Investing in a long-term partnership has advantages. It increases trust from both sides, which results in more possibilities such as lower MOQs and discounts. Another advantage is that the supplier knows the brand and the style of the brand so that communication is quicker and ideas can be more easily transferred.

Although the entrepreneurs express the value of long-term relationships they also refer to their current supply chain as temporary and an intermediate step towards something better and

more sustainable in the future. E4: *“so I'm just starting out like this. [...] I would never ever stay in this supply chain. And right now, this is like the most sustainable I could start off with. But it gets better. And as soon as I can afford it, I will do it immediately.”* The same is true for E6: *“So the fabrics that I use now are a part of the production chain that I am not 100% convinced about. That's also why I've decided to continuously search for fabrics myself.”*

DISCUSSION

Conclusions

SFEs encounter several barriers in their search for a sustainable supplier. Namely, the ambiguity of sustainability, high MOQs, lack of transparency from suppliers and suppliers' bad online visibility. SFEs use different methods to overcome these challenges, such as developing self-taught skills in supplier selection, relying on third-party certification, using online and offline contacts and adapting their plans to the available resources. The results show that in the end there was not one strategy that gave more success in supplier selection. It was the combination of strategies that made them succeed. There is no silver bullet, rather the data shows that it was trying, experimenting and learning as they go. This in the end helped SFEs to find a supplier. This is also reflected in the multiple strategies that are used sequentially and simultaneously during the search.

Interpretation of the data

The SFEs in the sample used causation, effectuation and bricolage to overcome the barriers that they encountered in their search. The following section will go into more detail on the behaviour shown in the data for each step of the journey based on the categories made by Fisher (2012) (appendix E).

Step 1

The behaviour shown by the SFEs can best be described as effectuation in this first step. The entrepreneur has to balance values and choose differently depending on the decision that has to be made. The SFEs show that they are flexible as they stay open to new opportunities that may arise, this is typical for effectuation (Fisher, 2012). Because 100% sustainable clothing does not exist yet SFEs continuously search for the best next thing. Additionally, this first step shows some elements of causation. The entrepreneurs gather information and acquire knowledge before launching their brand (Fisher, 2012). Entrepreneurs use causation to gain more insight into the industry and the different options available. This is different from what Hauser et al. (2019) discovered, as they state that causation is mainly used in a later stage of the entrepreneurial process when the venture seeks growth or takeover. Whereas here in the results, we see that SFEs use causal strategy in the first step of their journey to organize the vast ray of information that exists. But the dominant strategy remains effectuation, this is in line with what Hauser et al. (2019) found.

Step 2

This second step is dominated by bricolage behaviour. First of all, SFEs use different techniques to find suppliers, both online and offline. This behaviour shows that SFEs try many different actions to solve a problem which is typical for bricolage (Fisher, 2012). It also shows bricolage in that they use amateur and self-taught skills to get closer to solving their problem (Fisher, 2012). The entrepreneurs were laymen when they first typed in the search engine to begin their search. But after a while, they knew where to look for and what to include in the search bar. This is in line with the current literature on bricolage (Baker & Nelson, 2005; Servantie & Rispal, 2018) that shows how entrepreneurs use bricolage in resource-constrained areas by refusing to be limited by the context and the resources provided.

Step 3

As the search continues, entrepreneurs start to accept that some wishes cannot entirely be fulfilled. In the third step, they show elements of effectuation, namely, using the limited resources that are available and adapting their plans accordingly (Fisher, 2012). This becomes clear from the results as the SFEs switch their plan for international production to more local production because they discover the lack of transparency offshore. Furthermore, as the initial contact with suppliers is sought, SFEs need to find ways to overcome the high MOQs. This is done by looking around and finding suitable partners who can help. Asking ‘who do I know?’ is typical for effectuation (Sarasvathy, 2001).

Step 4

In this step bricolage and effectuation come very close together and even overlap. Bricolage is reflected in that SFEs settle and make do with the suppliers that are willing to collaborate at this point in their search. But at the same time effectuation is used as they continue to search for new opportunities that will better reflect their values. Although the entrepreneurs value long-term relationships (DiVito & Bohnsack, 2017), they keep looking for different options. Bricolage and effectuation are used at the same time by the same SFE, confirming their overlap. This is not surprising since both strategies are found on the concepts of using resources at hand, experimenting, and flexibility (Servantie & Rispal, 2018). All these three concepts come into play in this step of the journey as SFEs launch their collections and continue to develop their brands.

Implications

Lack of green supply

There are several challenges that SFEs face in finding a sustainable supplier. Especially step 2 and 3 are described as frustrating and long. This is partly due to the lack of green supply on

the market today. This is in line with the existing literature which states that there is a lack of green supply in this industry (De Brito et al., 2008; Moon et al., 2014; Pal & Gander, 2018).

Supplier selection as a creative endeavour

The results show that effectuation is the dominant behaviour in the SFEs's search for sustainable suppliers. In all but one step, this behaviour is displayed. This is similar to Hauser et al. (2019) who found that effectuation is dominant throughout all stages of the entrepreneurial process of their sample as it deals best with uncertainties that occur during the process. Hauser et al. (2019) did not include bricolage in their research. The current study however shows that bricolage is used in two of the four steps of the search for a sustainable supplier, this might point at an interesting runner up. There is a clear overlap, both strategies do not require a plan before any decision-making in the entrepreneurial process (Servantie & Rispal, 2018). The SFEs in the sample seem to favour this way of doing business, especially in their early years as it allows them to stay flexible and respond to new opportunities that may arise (Servantie & Rispal, 2018). This is interesting to see since supplier selection often is seen as something planned and based on set criteria and optimization (Jia et al., 2015; Kannan, 2018). Such planned strategic decisions fall under the causation strategy (Fisher, 2012). Because of the limited information available on suppliers, a causation strategy is not suitable for supplier selection by SFEs. The barriers such as; reliability of information, lack of transparency and bad visibility of suppliers online, force the entrepreneurs to come up with their own strategy. Creating a sustainable supply chain thus becomes more of a creative endeavour that requires flexibility in actions, depending on the available information for each decision. The results challenge current thinking on supplier selection as a mainly causal strategy Flexibility and making-do are characteristic of bricolage and effectuation instead of a well-thought-through causal strategy. This finding is in line with Hauser et al. (2019) who state that entrepreneurs pick a decision strategy based on the context that they are in. In a

more uncertain or new context decisions are based on effectuation strategy, whereas a more settled and steady context calls for causation (Hauser et al. 2019).

Nearshoring

Because of the lack of sustainable supply most SFEs end up working with suppliers in their own country. The results show that nearshoring of activities has several reasons, one is the lack of transparency of offshore suppliers. Another is that the entrepreneurs find it important to be able to pay a visit to their supplier and to see the practices with their own eyes, this is easier when the supplier is close by. Despite higher costs, SFEs chose to start their brands in a local small scale atelier. Sirilertsuwan et al. (2019) acknowledge similar results; because of better traceability, shorter lead time and easier to visit, nearshoring is becoming more popular amongst sustainable brands. There are however disadvantages to nearshoring that the SFEs in the sample mentioned. For example, production in the Netherlands is more expensive and there is a lack of production capacity, forcing growing entrepreneurs to search for suppliers outside of their own country. This is also what Sirilertsuwan et al. (2019) discovered, their study additionally found that garments made in western countries are sometimes of lower quality. This was not mentioned by the SFEs in the sample which might show that the quality in the Netherlands has improved or that the entrepreneurs settle for the lesser quality simply because this is the only available option at that time. This latter explanation would point to bricolage behaviour, making do with what is available.

Limitations

The generalizability of the results is limited because of the small sample size and the lack of diversity in the sample. All but one entrepreneur operate from the Netherlands, it is in this specific context that the results were found. Generalizing beyond this country needs to be considered carefully as it can be problematic. The small sample was picked on purpose to

gather in-depth data followed by grounded theory analysis to explore this relatively new field of study. Future research could conduct similar research on SFEs in different countries to see if the results show similarities or are specific to the context in the Netherlands. Suspected is that within Europe the results will be similar as the SFEs were focused on suppliers in Europe, others might draw from the same pool of suppliers and encounter the same barriers.

Another important limitation has to do with the reliability of the data which is impacted by the fact that SFEs were asked about something in the past but they used their present perspective to answer (Emans, 2002). Recalling what had happened to them during the search was impacted by their recent successes in business which made the past look easier than it was. Using retrospective thus impacts the validity of the data, this was minimized by asking specific and detailed questions to trigger the entrepreneur's memory. Future research could take on a more longitudinal design to be able to view the journey of supplier selection from a present perspective. This however is more time consuming and requires more resources (Bryman & Bell, 2011).

Lastly, there is likely a social desirability bias which makes SFEs give the most desired answer in light of their mission or sustainability values. This was limited by asking indirect questions about the sustainability values of the entrepreneurs to remove the judgement in a question.

Recommendations

Future and existing SFEs can learn from the general journey explained in this paper (figure 3) as it identifies barriers that they will encounter in starting their businesses. Additionally, it maps possible solutions that are used by entrepreneurs in real life to overcome these barriers.

What becomes clear from the results is that there is no single strategy that works. It rather is the combination of different methods and creative solutions that made SFEs succeed. Future SFEs would benefit from using a bricolage and effectuation strategy in finding a supplier. It is useful to explore these methods and behaviours in more depth as an entrepreneur, to become more creative and resourceful with the options available. In the future bricolage and effectuation can be taught in fashion schools and business schools to better equip entrepreneurs for the challenges ahead.

Another recommendation that can be made based on the results is that suppliers should work on their online visibility so that SFEs can easily find them. For example by having a clearer page on sustainability on their website and adding the certificates that they have to increase their reliability in the eyes of the SFEs. Second, radical transparency at warehouses of textiles and suppliers is needed to support the SFEs in their supplier selection. This is also beneficial for SFEs as it supports the sustainability story that they tell to their customers.

One of the biggest barriers in supplier selection were the high MOQs. This is the result of the system that is focused on squeezing the margins and striving for profit maximization. The only way suppliers can make a profit today is by producing large quantities. Future research should be done to explore ways to lower MOQs and making innovation more rewarding for suppliers. An additional question that should be asked in future research is whether or not it becomes easier to reach the MOQs if SFEs have more financial capital at their disposal.

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APPENDIX A - INTERVIEW GUIDE

Text marked in *italic* are notes for the interviewer to guide the analysis of the data. Questions in **blue** are for the established entrepreneurs who have launched more than 3 collections with their business. Sub questions are used as prompts.

The start of the business (10 min):

How would you describe the mission of your company?

How many collections (how many years) have you launched? (*exact answer*)

How would you describe your current supply chain? What elements are there?

- What types of suppliers do you have?
- What elements are in your supply chain?

How is this supply chain different from when you just started?

Finding the supplier (max 30 min)

What did the search for a supplier look like for you when you were just starting your brand? And for a manufacturer? (*tour question*)

- where did you **start** looking
- what **resources** did you use
- What did you have to find out for yourself?
- How much **time**/months/years did you spend on it?
- How did you **experience** this search?

What was harder, finding a fabric supplier or production company?

How did you approach suppliers during this search?

- What challenges did you encounter in approaching suppliers and producers?

Are you facing the same challenges now compared to the first 1-3 collections? If not, how do they differ?

What was the first supplier you made an appointment with? And why did you choose to go with them, what made this supplier different from the rest?

How would you describe the strategy you use to find a supplier?

Balancing values (max 10 min)

What is important to you in sustainability? (perhaps link to mission) What role did these values play in finding a supplier?

- Were there certain non-negotiables for you?
- Do the suppliers you found during your search have similar values? If not, how do they differ?

Are your sustainability requirements different when you were just starting out compared to now?

Balance of power and innovation (maximum 10 min) (*You succeeded in finding a supplier, how to proceed?*)

How would you describe the balance of power in the relationship between you as a brand and your suppliers?

- How do you ensure that the supplier keeps their side of the bargain?

Is there a difference between when you just started and now that you are more advanced/bigger as a brand?

Suppose you want a new innovative textile in the collection, is it possible to convince the supplier that he must have this fabric in his range to be able to deliver to you and others like you? With this question I want to measure whether the supplier has room to innovate or whether it is really as difficult as written in the literature.

Do you feel that there is room for collaboration on sustainability?

APPENDIX B – CODE TREE

Themes	Sub-themes	Codes								
Fast fashion problems		Waste	Low wage	Poor working conditions	Use of chemicals	Complexity	Lack of transparency			
Functions of clothing		Comfortable	Express identity	Fashionable						
New business models		Second chance system	On-demand production	Affordable	Basic collection	Small scale production				
Social values		Education	Workers safety	Fair wage	Fair working conditions	Inclusivity	Job creation	Job security	Freedom to express	
Sustainable values	People	Fair trade	Fair wage	Hand made						
	Planet	Reducing emission	Durability	Versatile	Water use	Renewable sources	Reduce use of chemicals	Reduce impact/ footprint		
	Materials	Organic	Recycled materials	Natural dye	Sustainable materials	Upcycling	Zero waste			
	Business operations	Transparency	Local production	Quality						
Supplier selection	Why/criteria	Direct contact	Unplanned visits	Modern machinery	Trust	Aligning values	Language	Third-party certification	Local	
	Search	Ask questions	Time spent on the search	Contracts	Network	Internet	Experience	Gut feeling	Visit suppliers	
		Research	Email or call	Samples						
	Who	Sustainable supplier								
	Challenges	MOQ	Compromising values	Supply	Pricing					
Sustainable tradeoffs		Expensive alternative	Tradeoff material	Tradeoff in impact						
Market		In the Netherlands	Development of the market	Share knowledge						
Approach		Causation	Effectuation	Bricolage						
Power relation		Equal	Dominant supplier	Dominant entrepreneur	Room for innovation					

APPENDIX C- INTRODUCTION OF THE CASES

No. Entrepreneur	Mission/ core values	Number of collections
E1*	Equality in her business towards employees, raising awareness amongst consumers to consume less, contribute her share in being sustainable and doing good for people and the planet. Important values are quality, durability and recyclability.	Started in 2016 as a graduation project. Has launched 4 sustainable collections.
E2*	Producing sustainable clothing for every woman. Making sustainable fashion the norm. They focus on attracting customers who normally don't buy sustainably. They attract them by their designs and high quality.	Started in 2020. Does not really work with collections but launched 6 mini collections so-called 'drops'.
E3*	Creating a supply chain that is both ethical and sustainable to deliver affordable, feminine and sustainable clothing to the customer.	Started in 2019. Is too small to produce full collections, so launched 5 mini-series of products.
E4	Create art that raises awareness for pressing issues in our society. And print this on streetwear that is produced sustainably.	Started in 2020. The first collection will launch soon.
E5	Creating effortless, timeless style that is comfortable to wear while at the same time contributing to a more ethical and eco-friendly world	Started in 2019. Launched 1 capsule collection and 2 additions to this capsule collection.
E6	With a less is more philosophy they create garments that are comfortable, versatile and of high quality. This way consumers buy less and items last. The items are produced with a minimal footprint.	Started in 2020. Launched her first collection spring 2021.
E7*	Creating a financially viable business that does well for the world and the people living in it. They achieve this by producing sustainable clothes in a social and human-friendly way.	Started in 2018. So far launched 2 small collections in their own web shop and 3 retail collections. Total 5 collections.

The entrepreneurs with a * are more established enterprises. These were asked additional questions (see interview guide appendix A).

APPENDIX D - CONSENT FORM

Consent form

-English below-

Doel van dit onderzoek

De gegevens worden verzameld ten behoeve van een afstudeeronderzoek voor de studie Sustainable Entrepreneurship aan de Rijksuniversiteit Groningen. Het doel van het onderzoek is het in kaart brengen van de zoektocht die duurzame fashion ondernemers moeten afleggen om de leverancier te vinden die bij hun merken past. Het geeft antwoord op de volgende onderzoeksvraag: Hoe overwinnen duurzame modeondernemers de barrières die zij tegenkomen bij het vinden van de juiste duurzame producent?

Ik _____ ga akkoord met de deelname aan en de opname van dit interview. Ik ben geïnformeerd over het doel van het interview en ben op de hoogte van:

- Het feit dat ik mijn deelname op elk moment tijdens het interview kan intrekken
- Dat ik inzage kan vragen in de verstrekte gegevens
- Dat ik tot twee weken na de dataverzameling kan voorkomen dat de onderzoekers mijn gegevens gebruiken
- Dat al mijn gegevens vertrouwelijk zullen worden behandeld en dat ik inzicht zal krijgen in de getranscribeerde versie van het interview om mijn antwoorden te kunnen herbeoordelen.
- Het feit dat al mijn informatie en antwoorden anoniem zullen blijven in het uiteindelijke onderzoeksrapport
- Het feit dat ik tijdens het interview geen risico loop op lichamelijke of psychische schade en dat alle vragen te goeder trouw gesteld zullen worden
- Mijn mogelijkheid om contact op te nemen met de onderzoeker voor verdere verduidelijking of in geval van andere vragen
- De getranscribeerde versie zal worden ingezien door de professoren die toezicht houden op de onderzoeksopdracht.

Purpose of this research

Data is gathered for the purpose of a graduation research project for the study Sustainable Entrepreneurship at the University of Groningen. The aim of the research is to map the journey that sustainable fashion entrepreneurs have to make to find the supplier that fits their brands. It answers the following research question: How do sustainable fashion entrepreneurs overcome the barriers they encounter in supplier selection?

I _____ agree to the participation and the recording of this interview. I have been briefed about the purpose of the interview and am aware of:

- The fact that I can withdraw my participation at any time during the interview
- That I can request insight into the data provided
- My ability to stop the researchers from using my data until two weeks after data collection
- That all of my data will be handled confidential and that I will get insight into the transcribed version of the interview in order to reassess my answers.

- The fact that all of my information and answers will remain anonymous in the final research report
- The fact that during the interview I am under no risk of physical or psychological harm and that all questions will be asked with good faith
- My ability to contact the researcher for further clarification or in case of any other questions
- The transcribed version will be seen by the respective professors that supervise the research assignment.

Name of interviewee:

Date:

Name of interviewer:

Date:

Signature interviewee:

Signature interviewer:

APPENDIX E - BEHAVIOURS PER STRATEGY (Fisher, 2012)

Behaviours underlying entrepreneurship theories (Fisher 2012).

Definition	Behaviour
<p>Causation processes take a particular effect as given and focus on selecting between means to create that effect</p>	<p>Causation (adapted from Chandler et al., 2011; Sarasvathy, 2001)</p> <ul style="list-style-type: none"> • Identifies an opportunity before developing anything: Gathers information about customer needs to identify a gap Analyzes technological trends • Identifies and assesses long-run opportunities in developing the firm: Maps out (writes up and discusses) scenarios for the firm's future Creates and compares financial projections for firm growth • Calculates the returns of various opportunities: Conducts net present value analysis or probability analysis to choose between various alternatives • Develops a business plan: Produces a written business plan document Presents a business plan to external audience • Organizes and implements control processes: Establishes an internal reporting structure (management accounts and monthly reporting) Designs and implements a clear organizational structure • Gathers and reviews information about market size and growth: Gathers data about the market Interviews potential customers • Gathers information about competitors and analyzes their offerings: Gathers data about competitors Analyzes data about competitors Uses data about competitors as an input into key decisions • Expresses a vision and/or goals for the venture: Articulates a vision or goal Holds strategic sessions in which goals are discussed • Develops a project plan to develop the product and/or services: Produces a project plan Monitors product and market development in relation to a project plan • Writes up a marketing plan for taking the products/services to market: Produces a marketing plan Implements and monitors marketing activities in accordance with a marketing plan
<p>Effectuation is a process in which a set of means is taken as given, and the entrepreneur focuses on selecting between possible effects that can be created with that set of means.</p>	<p>Effectuation (adapted from Chandler et al., 2011; Sarasvathy, 2001)</p> <p>Items pertaining to the effectuation construct loaded onto four factors:</p> <p>Experimentation</p> <ul style="list-style-type: none"> • Develops multiple variations of a product or service to arrive at a commercial offering: Creation of multiple different product prototypes Delivering different services in the process of finding an offering • Experiments with different ways to sell and/or deliver a product or service: Use of different distribution channels Use of different revenue models

	<ul style="list-style-type: none"> • Changes the product or service substantially as the venture develops <p>Affordable loss</p> <ul style="list-style-type: none"> • Commits only limited amounts of resources to the venture at a time: Seeks out ways of doing things in inexpensive ways • Limits the resources committed to the venture in to what could be lost: Develops product or service using only personal resources <p>Flexibility</p> <ul style="list-style-type: none"> • Responds to unplanned opportunities as they arise: Rapidly changes the offering or revenue model of the venture as new opportunities arise • Adapts what they are doing to the resources on hand: Focuses on what is readily available when deciding on a course of action • Avoids courses of action that restrict flexibility and adaptability: Consciously rejects courses of action that will lock them in (relationships or investments) <p>Precommitments</p> <ul style="list-style-type: none"> • Enters into agreements with customers, suppliers, and other organizations: Negotiates with other parties prior to having a fully developed product or service
<p>Bricolage is making do by applying combinations of the resources at hand to new problems and opportunities.</p>	<p>Bricolage (adapted from Baker & Nelson, 2005; Senyard et al., 2009)</p> <p>Bricolage definition</p> <ul style="list-style-type: none"> • Takes identifiable action to solve problems: Experiments to solve problems (instead of trying to figure it out conceptually) • Combines existing resources in creating solutions: Uses goods on hand to create solutions to solve problems Uses readily available skills to create solutions to solve problems Uses existing contacts to create solutions to solve problems • Reuses resources for purposes other than those for which they were originally designed. • Uses existing resources (rather than seeking resources from outside). <p>Bricolage domains</p> <ul style="list-style-type: none"> • Uses forgotten, discarded, worn, or presumed “single-application” materials to create new solutions <p>(physical inputs):</p> <ul style="list-style-type: none"> Uses physical goods for surprising purposes • Involves customers, suppliers, and hangers-on in projects (labor inputs): Regularly interacts with other stakeholders (physical presence at the venture; online interaction) • Encourages the use of amateur and self-taught skills that would otherwise go unapplied (skills inputs). • Works around rules and standards (institutional environment): Does things that surprise people, e.g., bumping up against norms or laws