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Sustainable Development and Creative Start-ups

Creativity and the uniting and splitting
implications of its perceptions

Thesis

by

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Abstract

Sustainable development is currently a topic of great interest due to United Nations' Brundtland report in which a strong case is made for the need to transform societies towards a more sustainable orientation. Despite relatively few studies on the subject, sustainable entrepreneurs are claimed to play a significant role as change agents in sustainable development. For this reason, we chose to make a small contribution and conduct a qualitative case study on a start-up running a sustainable business. Considering that creativity represents an important key driver in the entrepreneurial process of start-ups, we investigate more specifically the creative aspects behind the implementation and development of a sustainable business. This paper aims to investigate how creativity is perceived in a start-up team and the not so positive consequences creativity may have in the context of an innovative sustainable start-up. As a result of our qualitative interviews, we were able to identify the existence of and need for different types of creativity in different situations. This may contradict the theory suggesting a distinction between creative and uncreative team members. Consequently, we conclude that the awareness in a team of the existence of different perceptions of creativity and the coordination of different types of creativity could have some valuable implications for the functioning and further success of a start-up.

Keywords: sustainable development, entrepreneurship, start-up, creativity, organizational creativity

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Contents

1	Introduction.....	6
1.1	The urgency for sustainable development.....	6
1.2	Sustainability and creative businesses.....	7
1.3	Perceptions and effects of creativity	8
1.4	Overall purpose and research questions	9
1.5	Outline of the paper.....	9
2	Literature Review.....	11
2.1	Sustainability and sustainable development.....	11
2.1.1	Businesses as agents of sustainability.....	12
2.2	Entrepreneurship	12
2.2.1	Definitions and features of entrepreneurship.....	12
2.2.2	Creativity in the entrepreneurial context.....	14
2.2.3	The distinctions between sustainable and regular entrepreneurship.....	15
2.2.4	The challenges of sustainable entrepreneurship	16
2.2.5	The role of sustainable entrepreneurship	18
2.2.6	Entrepreneurship and start-up in the scope of this study	19
2.3	Theoretical framework	19
2.3.1	Amabile’s componential theory of creativity	20
2.3.2	Different types of Creativity	24
2.3.3	Bilton’s views of creativity.....	24
2.3.4	Managing the creative team	28
3	Methodology	31
3.1	Philosophical Grounding.....	31
3.2	Research Design.....	32
3.2.1	Interviews.....	33
3.2.2	The case start-up	34

3.2.3	The interviewees	35
3.2.4	The reasons behind our choice.....	37
3.3	Analytical approach.....	37
4	Results.....	39
4.1	Idea generation - coming together.....	40
4.1.1	An idea is born	40
4.1.2	Familiarization – combination of different kinds of thinking in a team	42
4.1.3	Motivating values.....	44
4.1.4	Attitude towards problems - creative thinking.....	45
4.2	Idea realization – commercializing the solution	45
4.2.1	Different kinds of thinking come together.....	46
4.2.2	The importance of a shared value base	48
4.2.3	The significance of the work environment	49
4.2.4	Creative diversity of the team	50
4.3	Idea overload – uncoordinated styles of thinking	52
4.3.1	Idea overload.....	53
4.3.2	The business grows but the big clients don't jump on board.....	54
4.4	Idea execution - split	57
4.4.1	Over-specialization	58
4.4.2	The split	58
4.5	Epilogue	59
5	Discussion.....	60
6	Conclusion	65
7	References.....	67
8	Appendixes	74

1 INTRODUCTION

In this chapter we lay the grounds for our study. At first, we illustrate the urgency of the global sustainability challenge. Following we describe the role of entrepreneurs as change agents in the transition towards a more sustainable society. Finally, we make an argument for the significance of creativity and its effects in the efforts of sustainable entrepreneurs.

1.1 THE URGENCY FOR SUSTAINABLE DEVELOPMENT

The Brundtland report on sustainable development (United Nations, 1987) states that “economic and social development must be defined in terms of sustainability” (p. 41) and that “sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations” (p. 43).

The societal and environmental challenges and problems sourcing from the expansion of the primary pursuit of economic value are multiple (Besley & Ghatak, 2017) and have become a growing concern. Pollution, miserable working conditions and social anxiety are only some of them. To further improve society, there is a need to consider additional aspects to that of economic value and learn more about the generation and implementation of innovative sustainable solutions that can be key drivers for the transition to a more sustainable society (Stock, et al., 2017; Dentchev, et al., 2016) and the forces behind them.

The issue of global warming and the growing amounts of waste make the news daily, and the need to act for the protection of the environment is pressing. Blundel and Lockett (2011) express an increasing concern about the incapacity of governments to deal with all social and environmental issues by themselves, and considering the significant presence of entrepreneurs in society they see the potential lying in that sector when it comes to the development of sustainable solutions. Small and medium enterprises (SME), they say, can often even function as environmentally sustainable suppliers to larger organizations and subsequently help them address environmental issues and further, in turn, their sustainability goals.

One significant element of this spreading concern is disposable packaging waste, a problem that grows with the critically expanding volumes of online commerce (Reclay StewardEdge, 2017). Further underlining the urgency of this issue is the EU directive on packaging and packaging waste, aiming at reducing “the production of packaging waste and promoting

recycling, re-use and other forms of waste recovery” (European Union, 1994). According to this directive packaging should meet requirements such as limiting its weight and volume, decreasing content of unsafe substances and materials, and designing reusable or recoverable packaging. Disposal of any packaging waste should be regarded, according to the directive, as a very last resort solution. Awareness about sustainable development, sustainable business and sustainable entrepreneurship seems to be advancing in the scholarly field in step with the ever-growing public concern for climate change and pollution (Hall, et al., 2010).

1.2 SUSTAINABILITY AND CREATIVE BUSINESSES

The sustainability issue is of interest due to the wide spread belief on the impact that entrepreneurs could have on sustainable development (Blundel & Lockett, 2011). The wider topic of Corporate Social Responsibility, mostly preoccupied with organizational models of virtuous social responsibility and their impact on social and environmental issues (Vogel, 2005) appears well investigated, but focuses mainly on large corporations with rich economic resources (Jenkins, 2006; Perrini, 2006). When it comes to the conversion of sustainable solutions into financially viable businesses we found that existing accounts dedicate less attention to the efforts of small, creative and innovative value driven start-ups. Considering the spread trust in the role of businesses with social entrepreneurial spirit as decisive change agents in the transition toward a sustainable society (e.g. de Bruin, 2016; Hoogendoorn, et al., 2017) it could be suggested whether further knowledge about creativity in sustainable entrepreneurial businesses could help them face some challenges that may slow down the running of a more efficient business. For value driven, creative and innovative companies, business may act mainly as a tool allowing them to make a significant global impact through the creation and application of new environmentally sustainable solutions that could, in turn, be adopted by bigger companies. But the generation and development of innovative solutions requires a good deal of creativity considered that the difficulties and constraints to overcome will not only concern the pursuit of profitability (Fillis & Rentschler, 2010) or the generation of new ideas. Learning more about these small start-ups and their pursuits of sustainability-related opportunities are inspiring as they give us hope for the future.

Additionally, we discovered the existence of a growing interest in understanding the transformative power of creative sustainable business models (Dentchev, et al., 2016). The 2015 Global Cleaner Production and Sustainable Consumption Conference organized in Barcelona by global information analytics business Elsevier, resulted in a call for further

research. Signed by a global group of scholars who underline the need for more studies on the topic of sustainable business models, the appeal suggests e.g. the need to learn more about the role of entrepreneurs in the development of new sustainable businesses and on the significance of the creative processes in the application of sustainable business models (Dentchev, et al., 2016). Investigating a creative, innovative sustainable start-up could shed some light on this process and its effects. In the best of cases our findings could aid sustainable entrepreneurs by providing them with helpful insights and a better awareness of the function and implications of creativity, and thus possibly help them prevent or avoid altogether time-consuming issues that may distract them from their main objective.

1.3 PERCEPTIONS AND EFFECTS OF CREATIVITY

Creativity is a topic that seems to fascinate researchers but to elude managers, despite a business climate in which innovation is claimed to be the key of competitive advantage (Amabile & Khaire, 2008). Still the challenge seems to lie in how to guide, use and provide for creativity in organizations (Amabile & Khaire, 2008). Creativity in organizations is often analysed from the point of view of the leaders in the management of creativity (Bilton, 2007; Amabile & Khaire, 2008) or the practice of creative management (Bilton, 2007), but a further dimension is the evaluation of the role and models of creativity in entrepreneurship (Fillis & Rentschler, 2010) and, eventually, the role of creativity and the creative process within sustainable entrepreneurship when developing and implementing new sustainable business models (Dentchev, et al., 2016) in high-growth start-ups. And while Bilton (2007) argues against the myth of the creative lonely genius in favour of the development of creative solutions in teams of *creative* and *uncreative* individuals, George (2007) suggests instead the possibility of looking at organizational creativity in terms of *differences in creativity* depending upon the type of job or organization. In his research Bilton (2007) looks mainly at the creative industries in which creativity is the given at the root of any business, but he wonders whether even other types of businesses could draw some learning from it. Furthermore, in a general atmosphere which generally sings the praises of creativity, there is a further claim according to which creativity might not always have merely positive personal and professional effects and consequences (Ross, 2004, cited by George, 2007). For this reason, a more nuanced approach to it may provide us with a better understanding of creativity's multifaceted character in organizations (George, 2007).

Following George's thread of differences in types of creativity put against Bilton's suggestion of a distinction between *creatives* and *uncreatives*, and the controversial consequences of creativity, we consider the role of sustainable entrepreneurship in the transition towards a sustainable society. The purpose of this study is to investigate and interpret how creativity is perceived and exercised in an innovative sustainable start-up team, reflect on creativity's uniting and splitting forces in the team, and consider the consequences of a lack of coordination between different kinds of creativity. We hope that this study could contribute, however modestly, to a better understanding of creativity's implications in sustainable entrepreneurship in which more studies are claimed to be welcomed (e.g. Dentchev, et al., 2016; Hoogendoorn, et al., 2017).

1.4 OVERALL PURPOSE AND RESEARCH QUESTIONS

The purpose of our study is to explore and interpret the perceptions and implications of creativity within a sustainable high-growth start-up during the development and implementation of an environmentally sustainable innovative business model. To this end we attempt to investigate on the following points:

How is creativity perceived in an innovative sustainable start-up?

What are the challenges of coordinating creativity with the financial viability of an innovative start-up?

What are the uniting and splitting creative forces in a start-up team?

1.5 OUTLINE OF THE PAPER

The following chapter will present the reader with an introduction to sustainability, explain the role of entrepreneurship in sustainable development, and illustrate the connection between entrepreneurship and creativity. The theoretical background outlines the theories of creativity chosen to analyse the case company. The chapter assumes the role of providing the reader with the information necessary for understanding the stand taken in this study.

In the third chapter we illustrate our methodological approach: we explain our philosophical grounding, the analytical approach for the research, and provide a description of the case participants.

The fourth chapter outlines the results of our investigation. This part attempts at presenting a chronological narrative tracing the story of our case company and its creative processes and systems from start to present.

In the fifth chapter we discuss our findings, suggest the existence of different perceptions of creativity and illustrate its less positive implications.

Finally, we conclude with a summary of our thesis outlining our conclusions, highlighting some limitations and make suggestions for future research.

2 LITERATURE REVIEW

This chapter will provide a literature overview on sustainability, the role of businesses in sustainable development, a definition of entrepreneurship and its affinity with creativity, and an overlook on sustainable entrepreneurship and its distinctions in relation to regular businesses. In the ensuing description of the theoretical framework we will illustrate the creativity theories on which we base our study.

2.1 SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT

Sustainability and sustainable development appear to be complex concepts encouraging a variety of interpretations and clarifications (e.g. Linnanen, 2002; de Bruin, 2016; Scott, 2018). Much of the literature that we were able to study on the subject elaborates the topic starting from the definition presented in the Brundtland report and mentioned in the beginning of this study. The report states that sustainability is to be understood as a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987, p. 43). Sustainability is considered a complicated, multifaceted challenge (Kajzer Mitchell & Walinga, 2017) that requires revolutionary solutions when dealing with the consumption of natural resources, the ensuing environmental issues and global climate change (Hall, et al., 2010).

In accordance to the difficulties faced by researchers and practitioners to define the concept of sustainability Scott (2018) provides a more holistic approach to the subject as the ability of continuance in the long term and suggests that it implies more than just an environmental dimension. According to him “the mechanism of sustainability is waste elimination (and prevention) followed by resource-life extension” (Scott, 2018, p. 2). In his comprehensive book on sustainable business Scott offers as one of the main objectives of sustainability the reduction of all kind of waste, present and future, in all its forms, so to promote competitiveness, profitability and continuance.

Broadly, it is suggested that sustainable business has three main and often reciprocally disagreeing dimensions: one social, one environmental and one financial, and that they all need to be addressed and combined responsibly (e.g. Hall, et al., 2010; Aagaard, 2013; Hahn, et al., 2014). In other words, sustainable businesses have what Elkington (1998) calls a *triple bottom line*, where success is not measured by profit only but, most importantly, by environmental and social performance. Elkington’s (1998) *triple bottom line* partially disagrees with conventional

business thinking and Friedman's (1970) shareholder theory which states that the purpose of doing business is solely to maximize profits, and is instead more in line with Freeman's (2002) stakeholder theory stressing the importance of the social responsibility of businesses.

2.1.1 Businesses as agents of sustainability

Sustainable businesses, one of the dimensions of global sustainable development (Hall, et al., 2010), may represent one answer not only to environmental and social issues, but also to what Handy (2002) refers to as the human desire to make a positive contribution to the world. When working for a higher purpose, profit does not necessarily win over meaning (Handy, 2002) and success may be measured in terms of shared value rather than economic results (Porter & Mark, 2011). Therefore, it may contribute significantly to an individual's intrinsic motivation to run an activity. That said there are scholars within the Corporate Social Responsibility (CSR) field claiming that the business for purpose can still be consistent with the pursuit of profit and does not need to be a choice between the two (Vranceanu, 2014; Edmans, 2015). The prime objective of sustainable business models is to find solutions to environmental and social issues, while profit generation remains a secondary target (Dentchev, et al., 2016). Despite Vogel (2005) maintaining that we still lack strong evidence of a clear connection between profitability and virtuous behaviour, and consequently challenges the existence and emergence of business for good, the business case for sustainable entrepreneurship is getting stronger and is revealing of the dawning transition towards a more environmentally and socially sustainable society (Hockerts & Wüstenhagen, 2010). Dentchev, et al. (2016) argue in fact that creative and innovative sustainable solutions sourcing from value driven entrepreneurs are necessary to respond to environmental challenges, as they could assist a quicker transition to what are defined as "Equitable, Sustainable, Post Fossil Carbon Societies" (p. 2).

2.2 ENTREPRENEURSHIP

In this section we describe the concept of entrepreneurship and clarify the definition to avoid confusion with other related terms. We also outline the connection between entrepreneurship and creativity which will support the reason behind our choice to investigate the creative aspects of entrepreneurship. Finally, we introduce the concept of sustainable entrepreneurship.

2.2.1 Definitions and features of entrepreneurship

Despite the large amount of studies conducted in the field of entrepreneurship, a clear definition of the concept appears still difficult. Miller (2011) suggests that entrepreneurship has mainly three distinctive characteristics: *innovativeness*, *risk-taking* and *proactiveness*. *Innovativeness*

would illustrate the way entrepreneurs search for new opportunities to pursue profit in the marketplace by suggesting truly innovative propositions rather than simply presenting novel ideas (Fillis & Rentschler, 2010). *Risk-taking* refers to “the tendency to engage in behaviors that have the potential to be harmful or dangerous, yet at the same time provide the opportunity for some kind of outcome that can be perceived as positive” (Allah & Nakhaie, 2011, p. 78). *Proactiveness* depicts the effort to make things happen through perseverance and breaking the conventional ways of doing things (Fillis & Rentschler, 2010). On the other hand, entrepreneurship is also defined as “the change agents in the economy forward by serving new markets or creating new ways of doing things” and entrepreneurs “innovators who drive the creative-destructive process of capitalism” (Mort, et al., 2003). As such, scholars offer slightly different definitions of entrepreneurship instead of an established, clear definition of the term.

Entrepreneurship is often also confused with *small business*. However, these concepts do not automatically refer to the same thing. Entrepreneurship is not necessarily defined by the size of an entity since not all small enterprises are run by entrepreneurs and not all entrepreneurs run small companies. As Fillis and Rentschler (2010) explain “entrepreneurship occurs in all types and sizes of organizations, from the domestic microenterprise to the global corporation” (p. 2). The distinction between entrepreneurs and small businesses is attributed to the traits of entrepreneurs who are innovative in creating new activities and are goal oriented, whereas small businesses do not always need to conform to these traits (Carland, et al., 1984).

The valuable role played by entrepreneurship and its impact on society is widely recognized by virtue of the contribution of entrepreneurs to economic growth (Carree & Thurik, 2010; Tu & Yang, 2013; Fillis & Rentschler, 2010). Entrepreneurs generate new businesses through their entrepreneurial activities and are subsequently able to create new jobs (Baumol, 2002 cited in Lee, et al., 2004). Through for example, the reinforcement of employment entrepreneurs is therefore considered significant contributors to economic development (Baumol, 2002 cited in Fillis & Rentschler, 2010).

Another substantial entrepreneurial impact is the potential for breakthrough innovation. Since entrepreneurs are attempting to create new economic activities by exploiting entrepreneurial opportunities and innovativeness (Miller, 2011), they have the ability to construct new norms, rules and markets (Chisson & Saunders, 2005 cited in İyigün, 2015). Entrepreneurial efforts to create new products or services in creative ways lead therefore to innovation once they are successfully recognized in the marketplace. Subsequently, entrepreneurship appears to have

the prerequisites to assume an important role in providing economic, societal and environmental values to make a positive impact in the world.

2.2.2 Creativity in the entrepreneurial context

Innovative entrepreneurship is by definition closely connected to the concept of creativity. According to Fillis & Rentschler (2010), entrepreneurial activities and creative activities have certainly different meanings but there are overlaps between them. Despite the numerous definitions of creativity one common understanding is that creativity is the ability to create something that is both novel and appropriate to a specific need (Amabile & Khaire, 2008; Lee, et al., 2004; Fillis & Rentschler, 2010). Since entrepreneurs can be defined as individuals attempting to create new economic activities by exploiting opportunities in the marketplace (Cuervo, et al., 2007; Mort, et al., 2003), aspects of creativity can often be recognized during their entrepreneurial processes of creating new businesses. Amabile (1997, cited in Fillis & Rentschler, 2010) defines creativity in entrepreneurship as “entrepreneurial creativity” and is considered a critical driver in both the initiation and implementation stages of new businesses (Tu & Yang, 2013). Bridge, et al. (2003, cited in Fillis & Rentschler, 2010; Tu & Yang, 2013), describe creativity as an essential entrepreneurial attribute and required in the entrepreneurial processes, in particular when initiating new businesses. Lee, et al. (2004), take it even so far as to conclude that “entrepreneurship is a form of creativity and can be labelled as business or entrepreneurial creativity because often new businesses are original and useful” (p. 882).

The connection between entrepreneurship and creativity is understandable as the latter is generally defined as having a new or different idea that is both useful and valuable (e.g. Amabile, 1997; Bilton, 2007). In describing creativity as the use of both convergent and divergent thinking, and the need for both idea generation and realization, Bilton (2007) argues for the integration of different styles of thinking and different kinds of competences avoiding the divide between so called ‘suits’ and ‘creatives’. This stereotype leans on the myth of the creative genius and assumes that creativity cannot be managed but, on the contrary, needs to be released by removing all obstacles and interventions for it to thrive, and that it is the real life application of ideas that counts and not only in the creative economy (Bilton, 2007). Subsequently we suggest that this is at least as important in the implementation of sustainable business models. The context in which creativity is practiced becomes a bigger concern than the generation of creative solutions because they need to eventually be developed into profitable products and services (Bilton, 2007) and, more importantly in the case of sustainable development, even in functional, applicable solutions. When resources are limited creativity

becomes a useful asset necessary to develop and implement solutions (Fillis & Rentschler, 2010), and not only a tool to generate new ideas. Creativity needs to extend over idea generation to encompass the implementation of business solutions, because content delivery may, in fact, become more important than the content itself (Bilton, 2007). In summary, creativity should not only be regarded as a tool to generate new ideas, but also as an important instrument to be used purposefully in the implementation and diffusion of innovative solutions.

2.2.3 The distinctions between sustainable and regular entrepreneurship

Sustainable entrepreneurship represents a sub-field of entrepreneurship studies and shares many of the characteristics of regular entrepreneurship (Gast, et al., 2017). A key difference is, however, that sustainable entrepreneurship has a strong value base (Linnanen, 2002) with the primary goal of solving issues of environmental and/or social character through the discovery of entrepreneurial opportunities (e.g. Dean & McMullen, 2007; Pinkse & Groot, 2015; de Bruin, 2016). Like in regular entrepreneurship the goal is still to achieve a profitable business, but the business is build upon environmental and/or social objectives (Choi & Gray, 2008). Linnanen (2002) explains that sustainable entrepreneurs' main distinction is to be found in their objective of making profit *in addition* to their ethical reasoning, and their primary desire would be to make the world a better place. This would contribute to the reinforcement of their market integrity and reliability as partners (Linnanen, 2002). The gains brought by sustainable entrepreneurs are produced through products, processes and services and include both economic and non-economic profits that benefit not only the entrepreneur, but also society, its individuals, and the economy at large (Shepherd & Patzelt, 2011).

The growing awareness of environmental issues (Hall, et al., 2010) has generated various streams of sustainable entrepreneurship as for example sustainable entrepreneurs, ecopreneurs, and social entrepreneurs (Schaltegger & Wagner, 2011). To avoid confusion between the different designations, some explanation can help the reader make a distinction. According to Schaltegger & Wagner (2011), previous studies address that ecopreneurship gained popularity around 1990s and is often described as *environmentally orientated entrepreneurship*. Ecopreneurs are certainly similar to sustainable entrepreneurs in the sense that both are concerned with the environmental impact of their activities, but definitions may slightly differ. The main objective of ecopreneurs is to earn money through the business of solving environmental issues and their environmental goal is an integrated part of their business, whereas sustainable entrepreneurs consider social values in addition to economic and environmental values (Schaltegger & Wagner, 2011).

On the other hand, social entrepreneurs create social values based on an explicit and central societal mission (Dees, 1998; Mort, et al., 2003; Weber, 2007). Since the achievement of the social mission is the primary purpose of social entrepreneurs, the economic goal is just a mean to achieve a social goal (Schaltegger & Wagner, 2011). Moreover, social entrepreneurs “will simply be someone who organizes and/or operates a venture or corporation, which features a social goal” (Peredo & McLean, 2006, p. 57) while the sustainable entrepreneur even seeks economic value to make also the business itself sustainable.

In recent years, however, even ecopreneurs have found themselves needing to take more of the social dimension in consideration in their business in line with the UN Global Compact which highlights the social aspects as dominant and crucial elements of business (Schaltegger & Wagner, 2011). Furthermore, the social entrepreneurs caring less about the economic value of their activities may find it difficult to sustain their activities since they usually require significant funding (Schaltegger & Wagner, 2011). As a consequence, sustainable entrepreneurship generating economic, environmental and social values has the potential to become a change agent of sustainable development given that “sustainable entrepreneurs supposedly display a different mentality as evidenced through donations to environmental causes, employee-friendly working conditions, an interest in wider social issues than bottom-line profits and a concern for the longer-term implications of their business activities” (Harvey 2007, cited in Gibbs, 2009, p. 64).

2.2.4 The challenges of sustainable entrepreneurship

As stated earlier the definition of sustainable entrepreneurs differs from the regular entrepreneur in that the previous values social and environmental issues parallel to economic profit and makes them into an entrepreneurial activity. The objectives of the sustainable entrepreneur involve therefore a broader scope and complexity (Pinkse & Groot, 2015). As Elkington (1998) explains in his theory of the triple bottom line (TBL) sustainable business includes, firstly, the conventional *economic bottom line*, referring to a business’s economic profits. Added to that a sustainable business includes a social bottom line, challenging a business’s role as a member of society and, as such, taking care of social values, in other words the *people* dimension including all stakeholders involved in the activity of a business. This means all people, inside or outside a business, affected by a company’s activities (Elkington, 1998). Finally, there is the environmental bottom line, taking into consideration the *natural capital* and running a business in a way that has least negative impact on the environment (Elkington, 1998).

The issue in this last point is that calculating the environmental performance of a business is very difficult, if not impossible (Vogel, 2005). Nevertheless, this is an accountability desired both by the environmentalist field in order to keep companies accountable when it comes to their use of resources, and by investors who, especially when feeding money into a value driven start-up, wish to see a healthy return on investments (Elkington, 1998). *Environmental accounting* aims at evaluating environmental costs and profits similarly to regular accounting practices in order to provide easily understandable indicators of performance (Elkington, 1998) which leads us to the consideration of the specific challenges faced by sustainable entrepreneurs.

Due to the value laden ambitions of the sustainable entrepreneur s/he often encounters challenges and barriers that the regular entrepreneur does not necessarily need to take into account (Hoogendoorn, et al., 2017). According to Hoogendoorn, et al. (2017) three main challenges are recognized as particularly demanding for sustainable entrepreneurs one of them being the lack of attractiveness for investors that are after quick, or at least measurable, returns. Notably the perspective of the sustainable entrepreneur is long-term and value performance is difficult to measure, thus pushing the return on investments to a further future (Spence, et al., 2011; Hoogendoorn, et al., 2017). Secondly, sustainable entrepreneurs need to manage a broader variety of stakeholders and complex issues, but the usually limited number of people running a start-up reduces the company's access to an extensive pool of knowledge and expertise, abundantly present in larger corporations (Hoogendoorn, et al., 2017; De Massis, et al., 2018). This causes additional costs as services, such as e.g. patent agency, must be purchased at high fees (Minot, 2014) to which a struggling start-up seldom has the finances to. A third challenge is the institutional burden in the process of institutional transition (Hoogendoorn, et al., 2017). Not all sustainable entrepreneurs have the objective of implementing institutional change, but often they need to challenge the existing rules, norms and public policy, and face competition in insufficient infrastructures subsidizing regular businesses without specific social or environmental goals (Pinkse & Groot, 2015, cited in Hoogendoorn, et al., 2017).

Further challenges are to be found in attitudes and the unwillingness of people to change their behaviour. The benefits of sustainable solutions have the tendency to manifest themselves only over time (Scott, 2018) and that poses its difficulties when trying to convince people to change their consumption choices and adopting a more sustainable behaviour. Scott (2018) lists out a series of challenges faced by sustainable businesses, general ignorance and lack of awareness

being the main ones. Following there is a mentality that sees only the costs and inconveniences of sustainability, forgetting the long-term profits as well as the savings. Strangely enough, Scott adds, there even seems to be an acceptance towards waste as a natural side effect of business, and the belief that simple, low-tech solutions can hardly make a difference. Furthermore, he notes, many businesses mistakenly believe they are already doing all they possibly can, or they prefer to wait and see what others do first, often falling in the trap of group-think. Finally, Scott (2018) adds to the list the fear of change and concern for criticism, inadequate leadership and management, and weak decision making.

In his double role of researcher and sustainable entrepreneur Linnanen (2002) notes, however, that stumbling blocks can also derive from a too highly sustainable attitude of the entrepreneur her/himself. For example, the strength of values can surpass the importance of financial viability. A strong ethical stance may cause confusion (Linnanen, 2002) within a business world that believes that to succeed one must leave all scruples behind (Hall, 2001 cited in Linnanen, 2002).

2.2.5 The role of sustainable entrepreneurship

A summary by Hall, et al. (2010) of a body of research on sustainable development and entrepreneurship concludes however that there appears to be a rather optimistic belief that sustainable entrepreneurs may hold the potential of being the change agents able to create sustainable economies through the introduction of innovative sustainable solutions. Following this claim research about the relationship between sustainability and entrepreneurship seems to have grown and it is believed that the field is gaining importance (Hall, et al., 2010). The role of entrepreneurship in social change is seen as essential as sustainable entrepreneurs contribute to reshaping models of production as well as consumers' behavior (de Bruin, 2016). As Dees (1998) claimed already in the early stages of the social entrepreneurship discourse: "Social entrepreneurship describes a set of behaviours that are exceptional. These behaviours should be encouraged and rewarded in those who have the capabilities and temperament for this kind of work. We could use many more of them" (p. 6). Consequently, with the understanding gained so far that this type of entrepreneurs need to rely on their creative abilities in order to succeed in their mission, Chapter 2.3 will provide the theoretical background on creativity this study is based on.

2.2.6 Entrepreneurship and start-up in the scope of this study

Due to the ambiguity of the terminology as described in previous chapters we attempt at clarifying the concept of entrepreneurship and start-ups as used in this study to avoid confusion with other related terms. Entrepreneurship can be defined as an entity creating new economic activities for a vision or for value creation by exploiting different opportunities (Cuervo, et al., 2007; Mort, et al., 2003). Since entrepreneurship, as explained above, can be confused with concepts such as small business, we would also like to clarify here the term of start-up, which we will be using in the course of this study investigating an entrepreneurial start-up. The relatively recent concept of start-up has its origins in technological business and generally refers to a small, newly started business (Cambridge Academic Content Dictionary, 2018) with the ability and the interest to scale up quickly (Robehmed, 2013). The concept appears to be free from framed definitions but some descriptions claim that a start-up is characterized by an atmosphere in which an innovative mentality reigns, and in which the team trades stability for the opportunity to make an impact without any guarantee of success (Robehmed, 2013). Van de Ven, et al. (1984) define start-ups as entrepreneurs starting new, innovative firms. Korunka, et al. (2003) suggests more precisely the start-up process as beginning with the “would-be entrepreneur” taking the first steps to initiate a business, eventually ending with the first actual business activities of the new company. More popular definitions provided by practitioners in the field outline a start-up as a “state of mind” and “people ... making the explicit decision to forgo stability in exchange for the promise of tremendous growth and the excitement of making immediate impact” (Robehmed, 2013). The main feature of a start-up would be its enormous potential for fast growth, and a start-up ceases to be one once it becomes profitable and can therefore still be defined one even after several years in business (Robehmed, 2013), as is the case with the start-up chosen for our case study.

In this study we will use the term sustainable entrepreneurship and sustainable start-up meaning the same thing, with the only distinction that a start-up is an entrepreneurial business that has not yet reached the growth it aspires to in order to make it financially completely viable.

2.3 THEORETICAL FRAMEWORK

This section explains to the reader the elements of creativity we have chosen to use in our attempt to understand the creative systems of our case start-up and exploring the implications of creativity. The main theories we review are Amabile’s componential theory of creativity and Bilton’s theory of integration of uncreative and creative team members. The variety of existing

interpretations of creativity make it complex to examine and define and therefore we will only look at some creative aspects to limit the scope of our study.

2.3.1 Amabile's componential theory of creativity

Creativity and innovative entrepreneurship are generally mentioned as a pair and, as noted earlier, creativity is one substantial attribute of entrepreneurship (Fillis & Rentschler, 2010; Blundel & Lockett, 2011). In the field of creativity research, the work of Teresa Amabile is widely recognized in organizational creativity research and used as a ground for empirical studies (Amabile, 2013). In her definition, creativity would entail the production of appropriate and new solutions – be it a product or other kind of action – to an open-ended task (Amabile, 1997). Bilton (2007) agrees with this definition by underlining the importance of the usefulness of a creative idea and emphasizing its problem-solving characteristics. The contextual dimension is mentioned as a further level of the creative process and refers to testing the appropriateness of generated ideas in a context. Creativity is hence defined as the production of ideas or outcomes that are both novel and appropriate to some goal (Amabile, 1997), i.e. implementing ideas in real life and, consequently, testing their 'fitness for purpose' (Bilton, 2007).

2.3.1.1 The components of creativity

The creative process described by Amabile (Amabile, 2013) in her componential theory of creativity distinguishes a series of components of creativity based on two assumptions. First, that there are different *levels* of creativity going from an everyday task solving level of creativity to high levels of creativity leading to e.g. ground-breaking discoveries or works of art. Secondly, that there are different *degrees* of creativity that are individual and may be related to single domains (Amabile, 2013). Amabile (2013) further distinguishes four components each affecting the creative process: *domain-relevant skills*, *creativity-relevant processes*, *task motivation* and the *social environment*.

One of the components of creativity called *domain-relevant skills* indicates "technical knowledge and skills necessary to perform the task" (Fisher & Amabile, 2009, p. 15). Domain-relevant skills include the expertise, knowledge, technical skills, intelligence, relevant experience, and talent in a particular field or domain on which a problem-solver is working (Amabile, 1985; Amabile; 1998; Amabile, 2013). This expertise entails everything that the person knows and can do in her/his domain in a broad sense (Amabile, 1998). The knowledge gained through both formal and informal processes is included. As an example, we could

consider a problem-solver working within green businesses whose domain-relevant skills would be knowledge, skills, and experiences in the field of environmental issues, green economy, business management, and so forth. Another type of example for domain-relevant expertise is illustrated by Amabile (1997) as follows “a high-tech engineer's expertise includes his innate talent for imagining and thinking about complex engineering problems, as well as focusing in on the important aspects of those problems; his factual knowledge about electronics; his familiarity with past work and current developments in high-tech engineering; and the technical skills he has acquired in designing, carrying out, and interpreting research” (p. 42). Domain-relevant skills are helpful in assessing the appropriateness of the generated novel ideas (Fisher & Amabile, 2009). Since creativity is defined as “the ability to produce a work that is both novel and appropriate” (Sternberg, 1999, cited in Lee, et al., 2004, p. 882) to be creative, ideas need to be applicable in a particular context and their viability needs to be examined and confirmed.

A second component of creativity is the creativity-relevant process or what is originally called *creativity-relevant skills* (Amabile, 1985; Amabile, 2013; Amabile & Pratt, 2016). Creativity-relevant processes refer to “how people approach problems and solutions – their capacity to put existing ideas together in new combinations” (Amabile, 1998, p. 79) and “a cognitive style and personality characteristics that are conducive to independence, risk-taking, and taking new perspectives on problems, as well as a disciplined work style and skills in generating ideas” (Amabile, 2013, p. 4). This creative process can be described as the ability to generate creative ideas, divergent thinking operating at the most general level and using effective heuristics as well as cognitive styles, working styles, and personality traits (Amabile, 1985; Amabile, 1988). In order to generate creative works using new perspectives, thinking broadly and combining several materials in new ways are of great importance. Without these creative thinking skills, a person would not be able to produce creative work even when in possess of an extraordinary high level of expertise (Amabile, 1997). This creativity-relevant process is to some extent dependent on the personality characteristics and their way of thinking and working (Amabile, 1998). Persistence, taking more risks and avoiding doing things in the same way are characteristic for some individuals (Amabile & Pratt, 2016). As an example, Amabile (1998) mentions: “The pharmaceutical scientist, for example, will be more creative if her personality is such that she feels comfortable disagreeing with others that is, if she naturally tries out solutions that depart from the status quo” (p. 79). Her personality trait of denying the present state is useful for enhancing creativity since she is inclined to try different ways of doing things

rather than sticking to the conventional way, Amabile (1998) explains and, she continues, the creative thinking skill is greatly dependent on the individual personality characteristics as described but the creative thinking skill is also influenced, to some extent, by the organizational circumstances or her social environment.

A third component of creativity is *task motivation*. Task motivation is different from what a person is capable of doing (i.e. domain-relevant skills) or the creative thinking processes described above and concerns rather what the person *will* actually do or *wants* to do (Amabile, 1997). Task motivation can be understood as *intrinsic motivation* and *extrinsic motivation* (Amabile, 1997; Fisher & Amabile, 2009; Amabile, 2013; Amabile & Pratt, 2016). Intrinsic motivation refers to behaviors generated by curiosity, enjoyment, satisfaction, personal challenges and deep interests for the task itself. Extrinsic motivation implies behaviors driven by external factors such as for example salary, compensation, evaluation, punishments and rewards. Social environment and previous experiences, such as success or failure in the task domain, will also influence task motivation (Fisher & Amabile, 2009). According to the componential theory of creativity, intrinsic motivation plays a central role in enhancing creativity (Amabile, 2013). Amabile (2013) clarifies that this is attributed to the idea that people tend to be most creative when they feel interested, satisfied and passionate about the work itself rather than when they are triggered or forced by external factors. Extrinsic task motivation does not necessarily hinder from exercising creativity, but it is considered that extrinsic motivation often does not help as people may feel that they are controlled or bribed (Amabile, 1998). However, according to a revised version of Amabile's creativity theory, some of the extrinsic rewards are in fact meaningful for enhancing the intrinsic motivation and creativity if they are utilized as confirmation of the competence and the value of their performances (Amabile, 2013). This process is defined as *motivational synergy* (Amabile, 1993 cited in Amabile, 2013; Amabile & Pratt, 2016). In motivational synergy intrinsic motivation and extrinsic motivation are positively combined to enhance creativity as extrinsic motivation can complement the intrinsic motivation under some circumstances (Amabile, 1993). Therefore, task motivation driven by the person's desire to do something, i.e. intrinsic motivation, is significantly important when it comes to enhancing creativity, whereas extrinsic factors can also contribute to creativity when used properly to stimulate intrinsic motivation.

The last component of creativity is the social environment or, more specifically, the work environment (Amabile, 2013). The three components of creativity described above are rather intra-individual components, but the work environment is more an organizational component

affecting the way people exercise creativity (Amabile & Pratt, 2016). The work environment plays a significant role for creativity, but the environment can be functioning to both enhance or kill creativity in an organization. As Amabile and Pratt (2016) explain environmental stimulants to creativity are the factors providing positive impacts on creative work in an organization such as idea sharing, freedom, supervisory encouragement, team work support, organizational culture encouraging new ways of doing, and so forth. Amabile (1998) has presented six general categories of a work environment particularly important for fostering creativity. These categories are *challenge*, *freedom*, *resources*, *work-group features*, *supervisory encouragement*, and *organizational support*. On the other hand, environmental obstacles are factors having negative impact on the production of creative work. These could be for instance organizational impediments, excessive workload pressure, low risk attitudes and political problems in the organization (Amabile, 1997; Amabile, 2013; Amabile & Pratt, 2016). The work environment can support people to think and act in a creative way but at the same time there is a possibility that the environmental factor will be an impediment for creativity.

Moreover, there is a mutual influence between work environment and the three intra-individual components of creativity as an open system (Amabile & Pratt, 2016). For example, motivation in an organization is influenced by the work environment and at the same time the passion people feel for their task to some extent constitutes the work environment. Therefore, work environment is a significant element of the creativity components in the sense that the environment influences both creativity and the intra-individual components of creativity in various ways (Amabile, 2013; Amabile & Pratt, 2016). The work environment and the intra-individual components of creativity interact with each other.

Amabile and Pratt (2016) explain that each of the components introduced above will take various roles in the stages of creative processes and contexts. For example, task motivation assumes a key role in finding a task interesting and identifying problems in the earlier creative processes. Consequently, they continue, people generate a number of new ideas utilizing cognitive skills flexibly as creative-relevant processes. After that, the validity of those generated ideas is assessed by using domain-relevant skills in order to make sure the appropriateness of those ideas to the context. These stages of exercising creativity are just an example and in real situations each component is active in a number of ways (Amabile & Pratt, 2016).

2.3.2 Different types of Creativity

As well as describing a creative idea as a novel and appropriate solution to a problem, creativity may be examined in various other ways. Boden (1992) suggests the categorization in three types of creativity for idea generation: *combinational*, *exploratory* and *transformational* creativity. This would imply that creativity can be exercised through various ways and processes. Gomez (2007) refers as well to the possibility of considering different kinds of creativity and refers to another three categories of creativity: *artistic*, *scientific and technological*, and *hybrid creativity*. Creativity can be exercised through the artistic inspiration of individuals, but also through a process of scientific and technological invention. Although there are some similarities between the types of creativity models described by different scholars it can be agreed that creativity is not necessarily a uniform way of doing things, and that it rather is something that can be exercised in different manners and through various processes.

Furthermore, there are different stages to creativity. One stage is about generating new and novel ideas, which is usually driven by intrinsic task motivation and creative-relevant skills (Amabile & Pratt, 2016). New ideas may be generated by the curiosity or the attitude to try different ways of doing things while another stage would be testing ideas for appropriateness. At this stage individual creativity needs to be exercised to check the validity or appropriateness of the novel ideas in order to make them feasible and this type of creativity is largely dependent on the individual's domain experience, expertise and skills (Amabile & Pratt, 2016).

2.3.3 Bilton's views of creativity

From being explained as an action of defying norms and conventions through original thinking and solutions (Fillis & Rentschler, 2010), to the ability to integrate one's logic and intuition (Young, 1985), or the result of the interplay between individual and situation in a favourable environment (Hunter, et al., 2007), we end up with Amabile's organizational adaptation of creativity as the fundamental element for entrepreneurship when creating a novel and purposeful solutions to a problem (Amabile & Khaire, 2008).

We will focus next on Bilton's (2007) views of creativity due to his suggestion to apply some of the creative systems and processes exercised in the purely creative industries to more conventional organizational settings. Bilton (2007) points out that according to literature the essence of creativity lies in two main features: 1) it deviates from convention and 2) creative people need to be free to express their ability. He notes, however, that this individualist and

innovation-based definition lacks the notion of the creative idea needing to be valuable and useful also advocated by Amabile in her numerous studies. Thinking differently and continuously coming up with new ideas is not productive if the ideas are not eventually implemented in practice (Bilton, 2007). In fact, it is suggested that creativity does not prosper in the solely creative team, but would, in fact, lie in the ability of combining disparate and contrasting ways of thinking and different kind of people pushing each other's thinking towards the limits of the proverbial box, eventually expanding it (Bilton, 2007). Creativity is not the prerogative of the individual *creative genius*, as the Western individualistic ideology urges us to believe, but is rather explained by a dualistic theory of creative processes in which 'creatives' and 'managers' come together, instead of working in separate spheres (Bilton & Leary, 2002).

According to the psychological definition of creativity, and as mentioned earlier, an idea is creative not only when it presents something novel, but when it is also useful, i.e. solves a problem and thus has a value for the context it is introduced to (Amabile, 1997; Bilton, 2007). The subsequent problem is, however, the transition between the idea and its realization (Bilton, 2007). The creative process in its entirety involves idea creation as well as idea implementation (Bilton, 2007). In other words: does the idea solve a problem and, if it does, how do we take that idea from theory to practice? To understand that, Bilton (2007) says, one needs to understand a problem's context and the underlying values and expectations.

Bilton (2007) suggests that creativity cannot dwell in total chaotic, random freedom, but neither can it prosper under strict, logical control. The ideal habitat of creativity, he suggests, is in the intersection of these two extremes and the ability of negotiating between them. He proposes a set of arguments about the creative process in an organizational context. First, that organization with creative claims must be able to handle diversity, complexity and contradictions. Second, that creative thinking lies in the ability to combine different kinds of thinking, i.e. creative and uncreative. Third, that an idea is creative not in itself on an abstract level, but also in its practical implementation and interpretation. Fourth, that creative thinking means *expanding* the box, not necessarily jumping out of it. Fifth, that the creative process needs some stimulating boundaries and constraints, such as e.g. deadlines and targets. Sixth, that collaboration and compromise go hand in hand with individual goals. Seventh, that creativity is planted in a cultural context.

Appropriate, creative solutions are born through the identification of a problem, and to do that a thorough understanding of the context in which the problem arises is essential to define the problem properly (Bilton, 2007). The same applies when assessing the value of the solution

one is after: the solution may be a good one, but its timeliness may be wrong or its values are not presented in a way that strikes a chord with the target group (Bilton, 2007). This could be the case when for example proposing something that is ahead of times for current ideals or markets. Therefore, a creative idea needs to be presented in a familiar way and, at the same time, expand that familiarity towards something new (Bilton, 2007).

2.3.3.1 Creative thinking and the creative process

Creativity is perceived as having a dual character requiring and combining both *convergent* and *divergent* thinking (Bilton, 2007). Convergent thinking is defined as a conscious process active within constraints in a top-down, systematic way (George, 2007; Bilton, 2007). Engaging in one thing at the time, conscious thinking can only process a very limited amount of information (Dijksterhuis & Nordgren, 2006) making very narrow use of the mind's capacities and thus limiting even decision making in complicated cases (Kahneman, 2003 cited in George, 2007). Divergent thinking operates instead in a bottom-up manner on a sub- or unconscious level (Dijksterhuis & Nordgren, 2006; Bilton, 2007; George, 2007), eliminating constraints and estimating solutions based on existing acquired knowledge without following any particular order or hierarchy (George, 2007). Divergent thinking is spontaneous, intuitive, and does not move *in* the problem, but rather *around* it, eventually leading to useful insights (Bilton, 2007; George, 2007).

Consequently, creative processes need to combine the irrational with the rational, rather than focusing just on the first. As Bilton (2007) explains when 'wild', uncensored ideas proliferate, such as for example advocated in early brainstorming techniques, the purpose for creating the ideas may get lost on the way. Therefore, a more recent development of brainstorming suggests preceding sessions with clear problem definitions and following them with solution testing (Bilton, 2007). This way the creative process obtains a frame the limits of which can eventually be tweaked and expanded.

Despite the efforts to elucidate it, the creative process is not a linear step-by-step process that fits all, as one would like to believe looking at Figure 2-1. Rather it is an iterative, unpredictable progression going back and forth, with steps overlapping, being jumped over, repeated and revisited. As the figure shows there are several versions that identify and describe the creative process' different elements and that further highlight the duality of creativity (Bilton, 2007). For example, Poincaré breaks down the creative process in four phases: *preparation*, in which one defines and analyses a problem and gathers information; *incubation*, involving the work

of the sub-conscious mind; *illumination*, meaning the achievement of a creative breakthrough; *verification*, finally testing an idea's usefulness (Bilton, 2007). In the innovation process, that we remind here would be the ability to select and develop an idea for the market (Blundel & Lockett, 2011), this would be expressed in *problem definition*, *concept generation*, *concept selection* and, finally, *concept realization* (Bilton, 2007).

Translated in thinking styles Weisberg proposes the process in alternating steps of *convergent thinking*, considering the criteria of *fitness for purpose*, followed by *divergent thinking*, concerning the criteria of *novelty*, eventually combining both thinking styles developing thus in *innovation*, and finally resulting in *new convergent thinking*, thus becoming a *viable solution* (Bilton, 2007) consequently expanding the limits of the box. In both cases the duality of creativity, i.e. the need for freedom and the need for constraint, is made clear. Subsequently the organizational creativity model by Kantor would suggest that the individual steps in the creative process of an organization include the *activation of an innovation*, the *generation of the idea* itself, building a *coalition behind the idea*, the *realization of the idea and activation of the innovation* and, finally, the *transfer and diffusion of the solution* (Kantor as cited in Bilton, 2007).

The different stages of these sequences cannot be controlled temporally nor is it possible to regulate how they relate with each other: creative people explain for example that the 'incubation' phase combines different kinds of thinking that fluctuate between conscious and unconscious thinking, and that a creative insight may come up 'by itself', without really thinking about the problem at hand (Bilton, 2007; George, 2007).

Poincaré's Creative Process



Innovation Process



Weisberg's Thinking Styles



Criteria



Kantor's Organizational Creativity



Figure 2-1 Steps in the creative process (Bilton, 2007, p. 9)

2.3.4 Managing the creative team

Bilton (2007) makes also a reference to Abraham Maslow who established that the effectiveness of creativity lies in how it succeeds in profitably integrating different styles of thinking, i.e. integrating the spontaneous and intuitive processes of divergent thinking to the more disciplined and rational convergent thinking needed to shape the idea into a functional whole. Bilton (2007) argues for the presence of some individual or system intended to manage the creative process so to combine spontaneity and rationality in a productive way, and thus for the transition from an individualistic view to a team based, collective model of creativity that combines the talents and abilities of many members.

According to this view teams would be constructed according to the needs of each project and would include both innovators and adapters as proposed by Kirton (1984) in his theory of complementary opposites. Such a combination of different styles of thinking would make a

team better equipped to implement ideas into practice (Bilton, 2007). According to Bilton (2007) this would mean avoiding building teams that are too homogeneous and instead integrating a mutually challenging diversity that would encourage creative thinking. This would suggest that recruiting the right type of skills and ensuring all team members are thoroughly conscious of the goal of the project becomes crucial (Bilton, 2007). Principally basing on his experiences in the creative industries, Bilton (2007) notes that members of a start-up need to be generalists, able to take on many roles, self-manage and be able to tolerate a great deal of uncertainty and contradictions very differently than teams in traditional, mature and developed organizations. This would imply that the usually few co-founders of a new project have loosely defined roles that may however lose momentum with time. Following Bilton's (2007) account in the initial stage of a project, when members start familiarizing with each other and the project, diversity, contradictions and challenging opinions will be more frequent and stronger. With time, however, the team may become more like-minded and the initial 'creative tension' slowly dilutes. With expansion and the growing administrative requirements, the roles and responsibilities become more delineated and team members may each turn back to their own familiar field of specialization and stop contributing to each other's territories encouraging further creativity (Bilton, 2007). This sequence suggests that *over-familiarization* may drift into groupthink and kill creative tension on the one side, while *over-specialization* may lead individuals to hide behind their core competences and avoid confronting bigger problems (Bilton, 2007).

Over-specialization occurs generally in the stage in which an organization starts to grow, new responsibilities require new recruitments and consequently this growth could shrink the previously generalist role of the initial members, leading the team to fragmentation (Bilton, 2007). When at start a group would fearlessly test boundaries and objectives, and while flexible multi-tasking is still manageable, the subsequently growing, decentralizing organization requires an intermediation, or 'brokering', between different talents that start to float apart hence serving as a connection between these talents and the big picture (Bilton, 2007). The significance of the project would thus provide the motivating context for the application of one's talents, independently of their level or degree of creativity. Through bigger ownership of a project team members are more motivated to see their own abilities as mean to an end and gain a better understanding for the need of adopting different roles, instead of hiding behind over-specialization (Bilton, 2007).

Bilton (2007) speaks of creativity as “something we do rather than something we have” (p. 39), and this is why the importance of opposition and difference, creative friction, passion and disruption becomes relevant in teams. Divergence needs to be challenged by convergence, and Bilton (2007) claims therefore that creative teams need uncreative people to be successful. According to these claims the main importance of the creative idea lies in its recognition, development and implementation, i.e. in the convergent problem solving of a divergent problem finding. Purposeful ideas can be generated through a thorough understanding of the big picture, and for this reason both freedom and constraint are needed, in combination, i.e. one needs to combine novel idea generation with the process of value creation. The one sustains the other.

3 METHODOLOGY

In this chapter we introduce the methodological approach behind our thesis. We will present our research design, delineate the structure of the interviews and present the participants of our interviews in order for the readers to get acquainted with the degree of human capital of our case start-up. We will further illustrate the whole process of our research starting from general methodological information to the description of more practical stages such as data collection, interpretation and analysis.

3.1 PHILOSOPHICAL GROUNDING

The methodology we choose to apply for our study is of a qualitative character in the interpretive tradition, in our goal to understand and make sense of encountered phenomena (Prasad, 2015), in this case understanding the role of creativity and creativity processes within the realm of entrepreneurship in a sustainable start-up. The epistemological ground, “the question of what is or should be regarded as acceptable knowledge” (Bryman & Bell, 2011) we take for our research is interpretive taking subjective meaning into consideration (Prasad, 2015).

Since challenges and creative processes are largely attributed to entrepreneurs’ perceptual views, we believe that an interpretive approach is more appropriate for our research than a positivistic approach seeking an objective truth (Carson, et al., 2001). Moreover, we also take a role in identifying and recognizing creativity aspects from our own perceptual lens which is constituted by the theories we have learned and our previous experiences.

In the framework of interpretivism in epistemology, we will gain knowledge from the interpretation of particular texts and the contexts behind them (Bryman & Bell, 2011). The interpretivist stance allows to have multiple different points of view on a phenomenon and the reality constructed through social processes, nonetheless we wish to avoid too casual approach and make an effort at grounding our study in theory, as suggested by Prasad (2015) in order to attempt a focused data collection. Our intention may not so much be to achieve any kind of *qualitative positivism* (Prasad & Prasad, 2002, cited in Prasad, 2015), but rather strive at containing our study within manageable frames. An interpretive, reflexive approach is therefore justified as we attempt at understanding and make sense of people’s behavior and actions, and their meaning.

3.2 RESEARCH DESIGN

We have chosen to conduct a *case study*, the approach to comprehend the complex social phenomena with a holistic viewpoint (Yin, 2014), focusing on one sustainable start-up and the creative aspects behind the development and implementation of a scalable sustainable business. With the help of in-depth interviews and the study of available documentation about the company, such as existing written and filmed interviews, videos, articles, documents and other available material, we make an attempt at recognizing and understanding the creative elements, systems and processes behind the generation of an innovative solution, its implementation and the ways of solving the challenges met on the way. Since we particularly investigate aspects of creativity in the start-up team as participants of interview discussions, the form of our research draws on the micro-ethnographic style (Wolcott, 1995, cited in Bryman & Bell, 2011).

Prior to conducting our interviews, we gathered information on creativity, sustainability, entrepreneurship and studied our case company through related articles, books, filmed interviews and published documents in order to deepen our understanding about the topic and be able to prepare relevant interview questions and discussions with our interviewees. We also strived to acquire a clear understanding of the terminology and the concepts related to sustainable entrepreneurship and the relationship between entrepreneurship and creativity to be able to better define our intentions and prepare our in-depth interviews.

To collect empirical data for our qualitative research we chose to conduct *qualitative interviews* (Bryman, 2012). We could get in contact with several team members of which nine were available for our study and we could assess that would give us enough empirical material to answer and discuss our research questions. We started by contacting and gaining access to all three co-founders who, in turn, put us in contact with several others involved in their start-up. In addition, we were able to track some team members through the professional networking platform LinkedIn.

Five interviews were conducted in the start-up's home town either at a café or a hotel, the latter of which was chosen to get access to a quieter environment. In addition, we were also able to visit the building where the head office of the start-up is located. Although we were not able to get access to the team's office, we could get a glimpse of the building which is a start-up hub built in an old medical hospital. The reason for the interviewees to choose so varied locations lies we believe in the nomadic way of working of the team, who meets physically only occasionally. Team members are spread over Finland and Europe and due to the different

character of their tasks, the different needs of the activities and the limited financial resources the team chooses, for now, to work where most convenient for each member and meet when necessary.

3.2.1 Interviews

We conducted seven *semi-structured in-depth interviews* (Kvale, 1996) as to follow our original research questions but at the same time have the opportunity to modify our questions and pursue our topic following the replies of our interviewees (Bryman & Bell, 2011). The intention was to allow the flexibility of semi-structured interviews to reveal more about the team's perceptions of creativity, their creative processes and their challenges. A less structured approach would allow us to discuss more on the topics that seemed to cause stronger reactions. In addition to the questions we had prepared we would allow for new, probing questions that would follow the line of thought of the interviewee and for discussion that would possibly lead the interviewees to further reflection about the topic of creativity.

As we would interview team members who had different tasks and roles we prepared different sets of questions we deemed relevant and able to capture the insight and knowledge of each interviewee as well as to take in consideration the differences of their professional roles. Therefore, the co-founders were asked somewhat different questions than the partners or the interns. It would not have made sense to ask an intern about the idea generation of the original innovative solution, nor the co-founders whether they were allowed to participate to creative problem solving. The content of the interview questions was only partly specific and directive to the extent for us not to lose sight of our topic and get lost in too general discussions. We also made an effort to keep our questions rather open and broad even though we occasionally felt the need to offer some explicit hint as to what kind of information we wished to get at for the sake of our study.

In addition to our in-depth interviews we also conducted two structured e-mail interviews with team members who we did not have the opportunity to meet in person nor contact via Skype or telephone. The interview schedule was specific and short due to our interviewees' wish for their contribution not needing to require too much time. Unfortunately, we could not get an answer from all the four team members we contacted due to their busy schedules.

The interviews would start with general questions proceeding to more specific and detailed inquiries with follow-up questions, probing questions and specifying questions. The most typical questions were in line of "What is your understanding of sustainable business?", "What

do you think is the role of creativity in your task?”, “What do you do to enhance creativity in the team?”. The intention was for us to understand the interviewees’ perception of creativity and whether they considered that working for a sustainable start-up would require more creative abilities than working for a regular business.

All but two team members who wished to meet us together were interviewed individually. The length of each interview varied depending on the availability and enthusiasm of the interviewees. Some would allow us an hour of their time while others seemed to wish to talk with us for hours as they enjoyed the conversation. The interviews lasted one to two hours during which we were able to have abundant time to elaborate several questions. As researchers we were both present at all interviews and would actively participate to posing questions and leading discussions. All interviewees declared their availability for further contact should we feel the need for specifications or more information.

The interviews were all recorded prior permission of the participants and transcribed afterwards. This allowed less imperfections due to poor memory or lacking notes and thorough examination of interviewees’ statements (Bryman & Bell, 2011).

3.2.2 The case start-up

The company we investigated for this study is a Nordic sustainable start-up providing a reusable packaging solution to the fashion e-commerce. In the result, discussion and conclusion sections of this paper we refer to the company as ‘start-up’, ‘business’ or ‘company’. The mission of our case company is to eliminate (sic) package waste from e-commerce and so make a significant global impact and be a part of sustainable development. To achieve this goal, they have developed a reusable packaging system inspired by the bottle return system mostly used in the Nordic countries. The system consists in returning the package in which a web shop customer has received her/his purchase and get back her/his initial deposit which is paid for when choosing the returnable package. The refund is a discount coupon to be used at any other e-shop connected to the reusable packaging service.

Despite being founded in 2011 the team still considers itself a start-up since they have not yet achieved the level of scaling required firstly for being a business within the packaging industry, and secondly to finally step out their start-up status.

After the decision to study this start-up and having established contact as well as arranged some of the meetings, we were informed that the team had just split into two companies only some weeks prior our first contact. This made things even more interesting and several questions

came up about the reasons of the split, the fact that the team members still were available to be interviewed for our study, and their evident desire to continue promoting the solution each equally backing it despite the company having taken a new form. Presently two founding designers are running their own company designing packaging for e-commerce in line with their original invention. The third co-founder and former CEO of the company continues to promote the solution developed with the designers and is presently responsible of marketing and B2B acquisition of new customers. The goal is to launch the solution globally and reach significant scaling. The reusable packaging system is currently being used by several companies in Finland, Germany and the Netherlands with some pilot starting in Australia and several negotiations going on in other countries.

3.2.3 The interviewees

In describing the team-members we wish to highlight their backgrounds in order to give the reader a good understanding of their level of knowledge that acts as a context of idea generation and innovation activation, and also to describe their attitude towards sustainability and how it extends on their private sphere.

Being a start-up with limited resources the company has currently only one full-time and three part-time paid for team members. We were however able to reach partners and former employees who have worked for the company for shorter periods. This allowed us to gain multiple and complex interpretive opportunities (Prasad, 2015) in relation to creativity and its aspects in an innovative start-up. The anonymity of the interviewees is ensured but we nevertheless choose to speak of them by their main task since it appears to have relevance when it comes to their attitude towards creativity: a designer and an IT-expert may approach and perceive creativity differently.

Two of the three co-founders are trained and experienced industrial designers while one detains an MA in European Urban Cultures and a BSc in Management and is a carbon foot print expert. They are all approaching their 50s and have a solid background in entrepreneurship and consultancy in their fields of expertise. All of them share strong environmental and societal values that extend outside their professional sphere and involve even their families. One of the designers is a vegetarian who loves his native North and its nature. The other cherishes his hikes in Lapland with his fellow designer and was the initiator and inventor of the reusable packaging solution, motivated by the shock caused after having witnessed the amounts of

disposable packaging used in e-commerce. The third co-founder loves cars but chooses not to own one and declares to deeply hate fast fashion.

Other interviewees include a partner defined “The Fourth Musketeer”. An entrepreneur himself he has been involved in the start-up from the very beginning even if never as employed or formally working for it. He sees his role as an advisor able to give valuable input due to his outsider status and a substantial background in business consultancy and business transformation as well as management. He proclaims himself being a bitterly disillusioned former environmentalist who nonetheless could not resist the brilliance (sic) of the solution he immediately felt strongly for and wished to back in every way possible.

One external designer has been involved with our case start-up from 2012 and is responsible for the multiple award-winning design of the package, service and brand of the packaging solution. An entrepreneur himself he has a substantial international education and expertise in packaging, innovation and service design and detains an MA in International Design Business Management. Albeit concerned about environmental issues he wishes not to boast with particularly sturdy environmental values. He is still involved with our case start-up according to need but prefers working independently in the sphere of his own company.

A second partner and present part-time head of operations can be described as a data wizard dedicated to green IT solutions. He is an entrepreneur in his own right and has developed, together with his business partner, the IT behind the reusable and returnable packaging system. An avid environmentalist he lives as he talks trying to minimize his carbon foot print at work as well as privately. He has been involved in the start-up since 2015.

Additionally, we could meet one team member who had worked as an intern and later as a trainee for some months and was responsible, amongst other things, for content production on social media and contacts with the press.

The two team members we could reach via mail had worked both as trainees on different occasions and were responsible amongst other things for content production, sales and external relations.

Even the trainees are all highly educated with degrees e.g. in Business Administration and Social Sciences and have various working experiences. During their period working for our case start-up they were able and willing to take on several different tasks.

In summary it can be claimed that the team has a high level of knowledge, expertise and motivation behind its innovative solution. Their different fields of expertise and education allow the combination of varied types of thinking claimed to encourage the creative process but reveal also the knowledge-based character of a horizontal organization that relies on autonomous self-management and shuns hierarchical administration.

3.2.4 The reasons behind our choice

The case company was familiar to one of us through a previous project on innovation and creativity and we both share an interest in sustainable issues and creativity. Speaking in favor of this start-up was the ingenuity of their solution showing their innovative, creative and sustainable character. Furthermore, the team being a combination of different types of high level expertise – design, business management and IT-solutions – lead us to believe that it would represent an interesting case that would allow us to investigate on the systems and perceptions of creativity in a business that does not purely belong to the creative industries and would try the case of creativity as competitive advantage.

We initially also believed that sustainable start-ups face specific challenges that require a more creative approach to find appropriate solutions and therefore wished to explore and argue for the role of creativity in sustainable businesses.

3.3 ANALYTICAL APPROACH

When analyzing the transcribed texts of the interviews we took not only the texts but also the contexts and situations in consideration. In applying the hermeneutic approach for analysis, and thus considering the meaning behind texts in relation to the social contexts in which the text was produced (Bryman & Bell, 2011), we reflected on the underlying social contexts of the phenomenon and attempted to read between the lines. The ambition was to reach beyond the obvious meaning of texts and capture the subtexts, i.e. the hidden meaning underneath the texts (Prasad, 2015).

Inspired by Alvesson & Kärreman (2007) we also made an effort at approaching the empirical material in a reflexive manner to avoid taking it at face value thus assuming it mirrors reality. Through reflexivity we try to question the basic and obvious assumptions used to describe reality (Cunliffe, 2016) and to do that we attempt to use various perspectives (Alvesson & Kärreman, 2007) to try and interpret the empirical material, in this case through different aspects of creativity.

The process of analyzing empirical data was an iterative process in which we moved from theory to material and back to theory, investigating their relationship with an aim of committing to the continuous meaning-making process (Srivastava & Hopwood, 2009). Our interpretations are bound to be affected by our previous knowledge and experiences (Bryman & Bell, 2011) and this lead us to strive and polish and refine our interpretation of the texts through gaining a better understanding of the theories we were relying on. We listened through the recordings, read the transcripts and went through the interview situations over and over again both individually and together in order to deepen our understanding. By so doing we attempted at deepen our interpretation of the empirical material through the continual process of learning theory and investigating data.

We also strived to accurately comprehend the chronology of events, i.e. in which stage certain events had occurred. The intention of making sense of which stage each team member was participating in the work would help us understand which phenomena provided the context with meaning (Dahlberg, 2006). Same occurrences could provide different meanings to different individuals and therefore we present the results in a chronological order, rather than purely thematic.

4 RESULTS

In the following results we describe, in a chronological and thematic order, the creative elements and processes behind the construction of our case start-up launching an innovative reusable packaging solution. Our goal is to interpret the team members' perception of creativity through the description of these processes. The interviews were conducted in English, which was not the native language of the interviewees neither of the conductors of the study. Some quotes have been corrected for better linguistic fluency and some interjections were eliminated for readability. In some cases, details of reference have been added in square brackets to make the context more understandable.

Despite our effort to present the creative process in a structured, easy to follow manner, we still would like to point out its iterative and messy character. It is worth remembering that many of the steps one takes in a creative process are repeated, they may overlap, and that sometimes the process has gone back and forth in the development of the physical product as well as of the business model. Often the team has been forced to get back to the drawing table and think some details or whole processes anew. Four team members we had the opportunity to interview have been involved in the process from start, occasionally gaining a bigger or smaller role in the start-up, depending on which needs the business or the team had at the moment. Some of our interviewees have joined the team only later, while others have had only a temporary, albeit significant input. There are team members that wish to see themselves as 'outsiders', despite their significant and still ongoing role in the development of the business: they still lend their services to the activity, with or without remuneration, according to need.

The one thing that seems to make them overcome any issue is their faith in the ability of their business idea to make a significant impact and contribution to the pressing environmental issue caused by disposable packaging waste and their conviction in the functionality of circular economy. Referring to the distinctions mentioned earlier between ecopreneurs and sustainable entrepreneurs, while going through the story it will become evident that the team is concerned not only about environmental issues but feels strongly even for the social aspect of its own, as well as others' businesses and, of course, wishes to create a financially sustainable activity as well. For this reason, we choose to define our case company a sustainable start-up.

4.1 IDEA GENERATION - COMING TOGETHER

In this section we look at the initial phase of the start-up: we identify the components of creativity on the lines of Amabile's componential theory of creativity and some of the steps of the creative process that lead to the innovative idea to come alive, and how the building of the creative team takes place.

4.1.1 An idea is born

The story of this start-up begins with two industrial designers (Co-founder B and C) working together on a project for a postal logistic service where they could observe tons of disposable packages used in e-commerce being distributed daily and realizing that, eventually, they would become waste. The initial idea is born not out of the needs of the project the duo was working on, but as a side product inspired by the discovery of a problem that was not the reason that took them there to begin with. As they recall:

Then when we spent a lot of time at the [postal] distribution centre we just saw a lot of like... full conveyors of disposable packages going one way. It was very linear. And all those packages were basically disposable, like cardboard boxes and... then this idea came to me that if they would be... what about reusable packages?

The two have worked for years designing products and services and were concerned about the value of the environmental impact of all these disposable packages. Despite their educational background from the 90s not having provided them with knowledge about the environmental consequences of disposable designs and planned obsolescence, the two felt a strong consciousness and aversion against this side of their professional role and were not afraid to take it into account in their projects, presenting their clients with more environmentally sound solutions. With the help of the future third co-founder of the soon to be start-up they could provide clients with carbon foot print calculations on the consequences of different designs and offer them an alternative to a traditional solution.

We have an environmental aspect to our work and of course this was quite a natural step to take then, to think about things this way. And so we continued with our design work but we also started to think: would this be a good business? Would anybody need that kind of solution? But we weren't actually thinking about who our customers would be. We were more thinking about this on general level.

So far, we are concerned with a narrow definition of creativity limited to idea generation. In the creative processes depicted in Figure 1. this initial phase could be assigned to Poincare's *preparation* stage and Kantor's *innovation activation*. Bilton speaks in his turn about the Western mythology of the genius, engaged in interpreting creativity as an individual talent having a breakthrough 'aha!' moment. It was one of the designers who got obsessed with the thought of a reusable and returnable package and came up with the idea. At this point the seed of the 'invention' was created: through problem identification, problem definition and, subsequently, with the help of divergent thinking (see Weisberg's thinking styles in Figure 1.), moving to the generation of an idea, which would be the next step of a creative process. But an idea is not enough: what counts is what one does with it, if it has a value and whether it is useful (Bilton, 2007). This duo is used to look for and solve problems "we have called each other problem lovers", they say. But they also wish to make a living out of this talent.

Actually, we got an outside designer helping us more on a technical level and manufacturing, understanding. And we made the first package, but we didn't understand very much of packaging design because we hadn't done any such project and we're not, like, professional packaging designers. So the package was too heavy and broke too easy and stuff like that. And it took maybe half a year before we understood that we have to understand our client, and their needs, and create a solution for them.

The need to combine different kinds of expertise and thinking becomes obvious at a very early stage of this creative organization, and the duo is quick to involve external knowledge into the equation, confirming modern theories of creativity according to which creativity is a combination of processes and systems rather than something residing in one talented individual (Bilton, 2007). Once in the process of developing the physical design of the product they become aware of the need not only to refine the package, but even to specify the practical and environmental aspects of its material: it should be light, durable and, eventually, recyclable minimizing its carbon footprint. If that was not enough already, the fact that the solution would be based on returning the packages to their senders, just as one does with returnable bottles one pays a deposit for and gets it back when returning them, there was a whole logistic dimension to be designed. All of this required returning to a drawing board these industrial designers were not familiar with, at which point a further important character, the carbon foot printing expert (Co-founder A), is offered a more significant role in what will become the trio's start-up.

So, they wanted to make more sustainable products and solutions, but lacked proof. Is this really so and so? That's why I came in, and we started looking at doing like carbon footprints of different materials and what if this solution is implemented on a wider scale? What does that mean in the systemic environment for example with the carrying load carriers in the postal network? But our solution comes with an impact on the whole system, not just this one carrier. So that is the approach that we took. (Co-founder A)

Calling on to domain-relevant skills that are defined by Amabile as knowledge, technical skills, relevant experience, and talent in the domain in which the problem-solver is working on adds to the individual-based 'aha!' moment of creativity which transforms into a multidimensional process that Bilton (2007) defines as a *collective model*, where different talents combine into a team. In 2011 the trio founded their start-up with the mission to reduce packaging waste through providing a reusable packaging solution to e-commerce. Each of the co-founders has different knowledge and experience in the field of sustainability, product and service design, and business management, all crucial elements in the developing this type of business. All these abilities however would be difficult to find in just one person, as Bilton points out when defining the roots of creativity in teams.

Just as in the creative industries described by Bilton (2007), even in this case the self-expression of individuals, their personalities and the ensuing collective, productive relationships appear closely related to creativity. Often the work happens in forms of projects and is done by networks of specialists. The projects are started by a couple of people with an idea and to start the project each member of the small group needs to be a generalist despite their specialist skills. The meeting between individuals with different kind of thinking can provide the diversity and friction needed to trigger and feed creativity. Following Kantor's model this stage could be fitted into the *coalition building* step (see Figure 2-1).

4.1.2 Familiarization – combination of different kinds of thinking in a team

From start there seems to be a clear awareness and tolerance about the differences in the way of thinking within the team. The way in which this team chooses to combine the different ways of thinking of its members is openness and engaging in a tradition of 'night shifts'. The night-shift would imply after-hours meetings to plan and discuss in front of a pint (or two) of beer. This kind of social interaction is not uncommon in a creative context, where communication and exchange of ideas as well as establishing business contacts takes place informally (Bilton,

2007). The team communicates openly its idea to anybody who would listen, and gladly accepts feedback that allows them to further develop and improve the solution they were working on.

So, the early years it was just... we were like uh... it was almost like uh... we created this job to make the party lifestyle possible. (laughter) It has helped us a lot, because it was easy to take on new people and make strong bonds between each other. But, of course, it has changed when we've grown older, but I think still, for example, me and [the other designer] have... [he] lives in Vaasa and I'm living here [in Helsinki], so basically when we meet face to face, we do a night-shift: we drink and work a lot to the late hours. (Co-founder C)

The designers explain they look at problems differently from their client's way of seeing them, confirming the *divergent thinking* style explained earlier. Finding a problem and solving it is the ideal place to be. While the third co-founder, more of an implementor and business administrator, sees upon his own way of thinking in another way and almost shuns the term creativity. During an initial e-mail contact with us he even questions the value of his contribution when it comes to creativity, stating that the designers would probably be better suited to answer questions regarding the topic. But if creativity, as claimed, is born in the intersection of different kinds of thinking, even this co-founder, when queried further, admits to being creative, albeit by identifying a "gap between ideas and action" that he wishes to fill.

I have to be creative at every meeting, absolutely! Like I said maybe earlier that probably I'm not in that... If I'm to like, yeah, come up with 20 uses for this thing [*lifts a small flower vase on the table*] or the like. My creativity comes from understanding culture, customers, and our environment and what can be done and what cannot be done there. [...] In that sense, maybe my approach to creativity is a bit different to just having ideas. They have to be implemented, tested and validated.

In this respect Bilton (2007) mentions the need of *uncreative* people in *creative teams*, but it feels difficult to maintain that the third co-founder would impersonate the role of an uncreative individual. We would rather maintain that his is a different kind of creativity, based on his knowledge and expertise, and not the lack of creativity altogether. According to Bilton (2007) the *uncreatives* would be the ones recognizing the realities of an organization in the world surrounding it, preoccupied with rational arguments and the actual implementation of an idea assuring its *fitness for purpose*, the criteria behind convergent thinking according to Weisberg (see Figure 1.). Nevertheless, Bilton also adds that creative thinking is the combination of

different styles of thinking, such as the rational and the intuitive, and that creative teams need to become skilled into switching roles, being able to consider different members' mental spaces without omitting one's own (Bilton, 2007). It is in this constellation of three that the process of idea generation starts in our case start-up. Diversity, friction, contradictions and challenging each other's way of thinking is enriched by the introduction of outsiders' feedback and inputs and by a strong sense of mission.

4.1.3 **Motivating values**

What we could claim defines this start-up is the cofounders' commitment to sustainable values. It would appear that their values are a main element of inspiration, leading them together and pushing them forward. Their intrinsic task motivation, indicated by Amabile (1993) as covering a central role in creativity, appears significant and would be, in this case, at the core of the whole business idea. Their attitudes and behavior extend on both the personal and the professional level. One of the co-founders for instance is a vegetarian, another has opted not to own a car, despite being passionate about them, because it would not make any sense. At the same time, he admits to flying quite extensively because of his job. Their concern appears nonetheless genuine and goes hand in hand with the need of meaning in their work that translates in the effort of making a real change in the world. The strong motivation of the founders is even recognized by the employees. One former trainee explains that "they are really motivated to get these small, like, popular way of reducing waste and reducing packaging waste...They have been really like motivated to accomplish this."

[...] I think the impact [the start-up] has is, so I mean it's so much greater than whatever impact I have on a personal level. The potential that [this business] has in terms of having an impact in the global environment far exceeds any decision that I make. I eat meat. I feel bad about it, but I still do. Like for now we're working more and more with fashion and I don't, I find fast fashion disgusting. It's killing people. It's using factories that are death traps. (Co-founder A)

Moreover, the value base of the start-up extends not just over the co-founders and other team members, but even over the families who give their support to the cause, thus helping the team to keep up the work despite the intermittent economic drawbacks.

And of course, my wife and [Co-founder C's] wife both understand the value of this business and how important this is. And so, if we would have done any other business

my wife would have said that absolutely now quit that. I'm not financing that any longer. Get a job! (laughter)" (Co-founder B)

4.1.4 Attitude towards problems - creative thinking

In addition to the values and motivation as sustainable entrepreneurs, the founders have their own set of attitudes and perspectives on problem solving, something they think is "really fun".

We really like to find a problem. And we both are people who love to find a problem when there has to be a solution. When we know there has to be a solution, but we don't know yet to what, that's a really nice situation. We really like to be there. (Co-founder C)

The team members view a problem not as a nuisance but as a challenge to overcome. They rather enjoy the process of solving problems because they understand and believe that they are able to find solutions. This kind of attitude, as well as a sort of fearlessness in front of risks and new solutions, are distinctive parts of the *creativity-relevant process* introduced by Amabile (2013) as a component of creativity. As one member of the board and partner explains when asked about his own understanding of creativity "[a] willingness to fail is really, really important. Most probably things won't work out and [even] that is a result. And then you just kind of... you just learned something. Learning. And curiosity".

4.2 IDEA REALIZATION – COMMERCIALIZING THE SOLUTION

Because coming up with creative ideas. It's... that's not hard. The hard part is making them happen. (Co-founder A)

In this section we look at the developmental phase of the start-up, which enters more clearly in what Poincaré defines the incubation stage of the creative process. Here the three co-founders continue to develop the reusable packaging service and design its implementation in order to make the solution more refined and feasible. We identify the components of creativity behind this stage based on Amabile's componential theory of creativity, continue to look into how the individual idea development becomes a collective process, how the creative team grows and how its members play different parts following Bilton's consideration of a 'team-based' approach to creativity.

4.2.1 **Different kinds of thinking come together**

The physical design and prototyping of the packages following the generation of the general idea was done already from start with the help of an external consultant specialized in service and business design and with a solid background in brand design. He was introduced to the concept at a very early stage and got acquainted with the first cardboard prototypes. Subsequently he was presented with the suggestion to help the team develop a concept good enough to be presented at the 2012 Venice Architecture Biennale to which they were invited.

I had a background in brand design. So, I had already experienced like creating world class brand identities. So that was like a good challenge for me and so I developed a fresh brand identity for [the service], and a tone of voice. This was all part of their positioning as a modern and sustainable service. That way I helped the team create, or make, the concept more appealing to potential clients and users and an international audience.” (Brand Designer)

After having designed and prototyped the physical packages, focus had to be directed also on the development and design of the whole system behind them, including logistic operations, IT functions, marketing and so forth. In order to develop these elements more expertise and experience were needed from relevant fields of service. One co-founder, engaged in the sales and scaling of the solution, explains that according to him “the co-founding team wasn't growing in skills to do the job. We needed to meet new people, equipped with sales and marketing skills that can work on an international level.” This led to the involvement of new team members equipped with business skills, able to contribute with new insights and expertise. The multiple features of the solution had to be developed and improved by people in possess of domain-relevant skills (Amabile, 2013), and further elements were introduced to contribute to the improvement of the team’s way of thinking and learning, and its creative maturity. The diversity in ways of thinking causes the contradictions and tension that in the best of cases can result in new combinations of ideas (Bilton, 2007). In the case of this start-up the ability to tolerate difference and opposition would appear, at least at start, well developed. They are open in communicating their solution and they welcome suggestions coming from all possible directions. The brand designer explains for example his own contribution:

I think it used to be very idealistic six years ago because they didn't have a proper business plan or proper service around the concept. I think like they have developed the business of course during the six years. So maybe six years ago I was also a bit

challenging them. Because they were a bit naive in terms of their mission [...] I was challenging if it would actually work and how would it work and who would actually use it. Now they have better ways of actually doing the service and the right partners and clients to work with.

A further key character in the team's creative system is the IT expert, nowadays head of IT and operations. He got in touch with the team at a seminar on carbon foot printing, a common interest for all key team members. An entrepreneur himself in the field of green IT solutions, the IT expert got involved thanks to his technological background.

I think he [one of the co-founders] came with this idea that they had the [reusable package solution] and asked, okay, that because it's based on that you pay a deposit and you track the packages, so you need some kind of IT-system to do all this. And he asked for an offer from my company to come up with that kind of solution. They had some grant to implement that, and we did that! And that was like the first version of [the solution] and they started using it and got their first clients and so on.

At this point the solution had acquired both a physical form and its technological functions. But despite governmental grants and prizes still further funding was necessary. Expertise is vital, but it comes with a price hence the need for a more financial way of thinking. One of the forces when it comes to this aspect of the work was one of the board members, a character that got involved on a very early stage and has remained attached to the team adopting a role that he wishes to define as 'advisor', but that the three co-founders see as the fourth musketeer. With his solid background in consultancy at agencies such as Capgemini and Accenture, a former senior manager at Nokia engaged in areas such as for example technology management and new product development, and an education in philosophy and political sciences, the advisor joined the initial trio armed with a broad approach that allowed him to see the solution from different perspectives, further adding a new style of thinking to the team and an additional ingredient to fruitful creative differences.

But being kind of an outsider, I think that has helped a lot. Outsider in the sense that you are not there on a daily basis, doing things, but you will be doing that on a weekly basis, every other week or something like that. And not worrying about the daily, daily operations in that sense. [...]

Daily business tends to be so intensive that you might get blind in it. So naturally my role has been kind of trying to keep everybody's eyes open and just pumping in the ideas like 'Hey, this, have you seen this?' or something like that. A kind of business intelligence or something like that, about where we could go and the like. But also facilitating the discussions and decision making, I think.

4.2.2 **The importance of a shared value base**

It looks like the talents the start-up had attracted so far were more than just skilled and experienced in the domain fields. They sound passionate and motivated by the values and the mission on which their whole business idea is based on: to reduce packaging waste in e-commerce. The IT expert, who has been an entrepreneur working on green IT solutions for some years, tells about his decision to join the start-up:

[The values are] the reason I have been staying here...there had been other chances to join other IT companies with a really good salary, and regular working hours. And now I have a family so I considered these options. But still I would say that they [other IT companies] didn't really meet my values.

As such, he not only has experience in the IT sphere, which is relevant in his current position as head of operations, but he is also motivated by the team's values and the mission of the business. Team members are likely to be strongly driven by intrinsic task motivation. One of the founders recognizes the importance of sharing values among team members:

[Espousing the mission of sustainability as a team member] is very important because we find that people who are drawn to work with us always say that it kind of fits their values. Just the approach of less trash and less crap, kind it's... they're motivated by the idea rather than status or money. (Co-founder A)

Shared values and motivation to achieve a common goal can greatly contribute to unite the team and promote creativity since task motivation is one of the strongest components influencing creative thinking and developing domain-relevant expertise (Amabile, 1997). Bilton (2007) warns, however, about the dangers of too much consensus that could lead to 'groupthink' and suggests that consensus should be disrupted to avoid too narrow focus and lack of diversity. In this case, nevertheless, the consensus is related to the very core and essence of the business idea, not necessarily to how it is going to be improved and implemented, as we will notice further on.

What has kept us all together is the motivation behind the whole thing, the ultimate goal of [this start-up] is to reduce garbage. We have been sharing that goal and that motivation which made us a really good team. (Advisor).

4.2.3 **The significance of the work environment**

The work environment, after the joining of some new talents, provides positive impacts on stimulating and enhancing creativity and the founders all described their work environment and style of working as free and flexible. The IT expert explains that “they are like really free to try new things, so it was like well you can try and let's see how it works”. The start-up is described as “very open” with “a lot of people hanging around” of which “some stay, and some don't, and it's okay”.

In addition to the open and flexible work environment described above, the atmosphere of the start-up is regarded as flexible and autonomous even by the trainees:

The company was like, right from the first day you could like, get to do everything like and it's not like boring or so. You have always something to do, but I think it was really like nice like everyone was welcoming me well...I think was easy to start with them yeah and if I had some questions they helped me always.

[...]

I basically decided that I will work more like in the beginning of the month and then less at the end of months, and it was really really flexible that way. But of course when you're updating like social media or something, then you have to be aware of it. If some really important piece of news comes up and you're updating Instagram and you have to [do it as soon as possible].

Similar stories from both partners and employees would indicate that team members are capable and willing to work flexibly and freely, which to some extent can be considered playing a role as an environmental stimulant for creativity (Amabile, 2013).

Furthermore, team members are encouraged to question and discuss a lot, independently of their role in the organization and everybody is welcomed to different workshops. As one co-founder describes the workstyle is “lots of talking, and we must present the idea to other people, and develop ideas together: sketching, drawing, writing...”. Team members report they have plenty of opportunities to communicate and share their ideas. One founder explains that “I think

the most important thing in those [workshops] was for everybody to get really involved and present and participate to the process”. Former trainees also mention that they were able to deeply get involved in discussions and “hours and hours of brainstorming, coming up with new, potential user paths, brand messaging and content” and that they “participated in many discussions and brainstormings”.

At this stage of the start-up’s development team members express their satisfaction when it comes to communication while generating ideas to solve different issues. As one partner explains “it’s the most important thing, that you are really involved and focusing on the thing that you are discussing and trying to create together”. Provided this is the case it is consequential for the promotion of creativity that would gain from the existence of multiple ways of thinking, the combination of different ideas and the sharing of insights. In addition to personal communication, and due to the nomadic character of this start-up in which team members are not bound to one physical workplace, should anyone have any question they are able to post them on the internal social networking system where anyone could provide some advice or solution. Unanswered issues would be taken up during gettogethers or night-shifts.

The founding designers tell about the effort of sustaining an environment where people could think and act in a more creative way “that’s one of our basic metrics: to promote creativity and to make it fun.”

The startup’s atmosphere was very encouraging when it comes to creativity. As an example, the first brand book was full of humour and coming up with fun ways to create the [solution’s] tone-of-voice. Same for social media and pitching [the solution] for web stores.

Similar statements would imply that team members understood and appreciated the working climate and the opportunity to enjoy their work, which are relevant factors in the stimulation of creativity (Fisher & Amabile, 2009). Flexibility, freedom and communication as environmental stimulants of creativity would be significant in this developmental stage of this start-up and would contribute to coalition building described in Kantor’s organizational creativity process (see Figure 1.).

4.2.4 Creative diversity of the team

By now the combination of these key actors and the coalition building would imply that from being the initial invention of an individual the solution becomes a collective process (Bilton,

2007). The idea is transformed into a concrete solution that is to be implemented in practice to transit from divergent thinking to new convergent thinking, as indicated in Weisberg's thinking styles, and from a novelty to individuals to an innovation in a whole field (Figure 2-1). The team meets weekly for their legendary 'night shifts' and brainstorm with the help of some brew. Ideas and thoughts are exchanged, created, developed, ditched, challenged and contradicted. One partner recalls: "I would bet that some outsider coming to our table would not have had any chance to follow the discussion because it was kind of going anywhere". He also observes that the team had become close and familiar enough to be able to understand each other permitting that kind of unstructured conversations to be fruitful. An intermission between tension and friction, as argued also by Bilton (2007), kept the creativity going in developing something that was completely new. The team is conscious of its creative abilities and the need of coming up with solutions to any kind of issue, as the brand designer explains:

I think creative thinking is always needed, 'cause there are challenges, like, there are always problems and you need creative solutions for them. So, there may be simpler problems or more difficult problems and sometimes creativity can be to create a business plan or creating a user-friendly service. It depends on the size of the problem. [...] Like I said before, creativity can be applied in many ways like in terms of business models or service designs or just creating user-friendly websites or whatever. So you need different kind of creativity in different places, so maybe I may have contributed a certain kind of creativity that maybe the rest of the team is lacking.

The option of different kinds of creativity is mentioned in studies by Boden (1992) and Gomez (2007), which we briefly acknowledge in our literature review.

Team members also take part in different workshops to which even temporary interns and trainees are welcomed to participate, allowing everybody to present their own opinion or idea by for example writing down suggestions instead of voicing them, thus avoiding any one member to take over the conversation. The generation of ideas and different solutions to a variety of problems prospers, so much so that some start worrying about the calendar getting so filled up by all kinds of workshops and start-up training events. At times the actual work had to be done in the evenings or at night.

During the various team events however, the members get the opportunity to familiarize with each other, learn to know each other better, learn from each other's way of thinking. Supposedly this would offer them the opportunity to apply a more varied knowledge and

further dimensions to their expertise. Just as is common for entrepreneurs, team members take on different roles, something which is required even from creative teams in which members need to be able to comprehend others' mind without however discharging one's own beliefs (Bilton, 2007). Everyone needs to be able to do everything and anything at some level: understanding how to design new solutions, marketing, sales, pitching, product development, budgeting, calculating business effects, developing business models, managing, networking, public relations and what not. The staff of CEO is passed from one co-founder to the next, and back again. The previously outsourced IT expert gains a formal position as part-time head of operations. The 'fourth musketeer' becomes a board member. The learning curve is steep and the team that never thought inside the box to begin with was expanding the limits of that box further. Supposedly everyone got to broaden their comfort zone by acquiring new skills, taking on unfamiliar roles (e.g. from industrial designer to company CEO) and facing each other's diverse ways of thinking and expressions of creativity.

This formulation I like: creative in different ways. Yeah. Yes. Most definitely. Most definitely. [...] So, there are so many phases in that [business] circle definitely there is creativity needed in different ways. [...] So many things come into play. But I think what you mentioned there is that being creative, different kinds of creativity in different kinds of situation. This I think is very important.

Following this expansion of skills and types of thinking will later show, however, to be strenuous on the team and cause tensions that will eventually lead to internal fragmentation.

4.3 IDEA OVERLOAD – UNCOORDINATED STYLES OF THINKING

In this chapter we follow the business growing and the ensuing need to take a break in new idea generation. The team continues to be highly creative, but after seven years as a start-up the business needs rather to be implemented on the global market and scaled. At this point the 'breakthrough thinking' favoured by some appears to be misaligned with the need of incrementally reconfiguring an existing pattern (Bilton, 2007) and make the business work. Some of the reasons behind the difficulties of scaling are described as the context of the situation. Strong personalities clash because of financial restraints that obstruct creative freedom and symptoms of over-specialization start to appear.

4.3.1 Idea overload

Despite the efforts and success in combining different kinds of thinking that would develop further the solution in all its aspects some team members, albeit respectful about the role of creativity, are not completely convinced about the actual power and efficiency of the different formal methods of exercising it.

Yeah, brainstorming is of course, one what we have done. Often is that rather than people talking about it they write down their ideas, so we don't have someone dominating the discussion and impacting others. [But] the best ideas always come when you're not thinking about it. So, a full day working on something, feel like you have done... that you've got nowhere and then you have a beer afterwards and there you have it (clacking his fingers). I'm not a great believer in in methods in the end. (Co-founder A)

I participated to one, like, start-up development workshop for two or three days where they had this methodology of how you try to think on your core value and how to solve problems you encounter and so on. So, maybe being a start-up, because it's been, especially a few years ago it was such a buzzword that they were all kind of, the internet was full of all these kind of things that start-ups do and should do and shouldn't do, and then we also had these trainings, and maybe even had a little bit too much of it. (Partner)

At the same time others have a more natural, matter-of-fact approach to creative thinking and idea generation, however also distancing themselves from any so called 'qualified method'. The brand designer leans on his formal education and states "Well, I'm a designer: naturally I use my own processes to come up with an idea. For this one it was kind of experimenting, and coming up with ideas, and iterating. Making the ideas better". While one co-founder, an industrial designer, underlines the importance of combining what suits one best, without sticking to anything in particular:

Yeah, I was really inspired about the Lean Start-up method. And I think that, yeah the Lean Start-up method, that's our main method, but we are not strictly following that method. We are trying to avoid to think that we can get the best idea together inside a room. It's always, the ideas comes when you are with the client in in the real situation, in the real bases. But we both have really, for us it's really, the long walks are really important, and we do the hiking in Lapland, and I think that's a really important method

as well. If you have a problem and you go for a long walk then you come back with a solution.

To add to the collectiveness of the creative process is the team's openness about the project from start. Everyone is included, feedback is welcomed, new ideas are listened to. The public recognitions add to the team's conviction of its viability. The solution is awarded the Fennia Prize in 2014 for designing and creating a responsible and innovative business concept joining other award winners the likes of Nokia and Wärtsilä. In 2015, they win the Climate KIC Nordic Venture Competition for their innovative business model for marketing their reusable packaging system. In 2017, the team is awarded the Nordic Council Environment Prize for its ability to turn an environmental issue to a business opportunity highlighting the unnecessary production of waste. And, to top it all, in 2017 they get a substantial grant from Tekes, the Finnish Innovation Fund. All the while new customers within e-commerce jump on board, each sharing a strong environmental conviction.

4.3.2 The business grows but the big clients don't jump on board

Despite all the recognition and the business slowly growing the big volumes necessary to get it flowing and take it from the start-up category are not actualizing. The reasons are sought after for example in a general, cultural status quo, something that all team members seem to agree upon. Big organizations have difficulties in welcoming the solution because of their rigid systems and processes, or because of technological system applications that need to be implemented into their e-commerce platforms. Once a new platform has been implemented a new feature appears too much of a hustle and decisions are shot years ahead. Despite their enthusiasm corporate sustainability managers do not seem to have a significant impact on the adoption of sustainable solutions in front of the numbers presented by the heads of logistics, whose say appears to weigh more. For the time being the big companies think more about their own financial costs than how to combine them to the impact externalities have on society and the planet. Some businesses, however, wish to do good, and the number of these early adopters is growing as well as the consciousness for a more sustainable development.

The graphs look every year much better. [...] This year is three times better than the last year. I mean, three times growth! But if you start with one it will take time to get... But still it's consistently, now three years it's three times better. It's a three hundred percent growth. [...] But the concept is too advanced not in a technical or economical

sense, but on the cultural sense. [...] Status quo [is the biggest challenge of sustainable development]. People don't want change.

One co-founder confirms it and states disillusioned that “most people hate change [...] especially closer the mainstream you go, they say nice things, but that’s only talk”. A partner has even a take on the image of the sustainable ideology and those who promote it:

I would imagine that if I would be in that role [working in sales], then maybe it's mostly about the image you have, or the others have, about sustainable entrepreneurship. So they have this kind of a stereotype. At least it used to be so that like, ecological was like, visualized as this kind of hippie thing you do. That you are not really, you cannot be really organized, or that it cannot be economically sound or you are not as ‘business believable’ (laughs). Yeah, so maybe it's that kind of image thing. But I think that's maybe changing nowadays as many companies are taking sustainability more seriously.

In the case of the start-up itself, however, a pressing issue is, according to a co-founder, the need for new skills. Despite the team’s high level of knowledge and skilfulness in their own area of expertise, and the familiarization and acquisition of expertise in each other’s fields, when it comes to scaling something seems to be missing. The issue is felt very strongly by one co-founder, who sees that the focus now should lie in the business implementation of the solution and in finding the right business model that would attract and suit their potential clients. According to him more focus should be given to acquiring new expert skills, switching the weight on the business side more than the design side.

Until late last year we have always had like where this the design team and the rest and sometimes they were making money, sometimes we were making money and every time like: we need money here and we need money there and... So, it was never like focused enough for doing exactly what became natural and should be the job of that team. And also [the service] is now at a stage that it needs other skills than industrial design skills.

I also felt that the co-founding team wasn't growing in skills to do the job. We needed to meet new people, equipped with sales and marketing skills that can work on an international level.

According to him no further ‘breakthrough thinking’ is needed “[coming up with ideas] it's fun, and addictive. But afterwards you see that those ideas are just piling up, not taking you any further ... It's the execution that matters”, confirming Bilton's theory that ideas by themselves are not worth much. The solution as it is today, the co-founder feels, is applicable and functional, and the business's strategic scope does not need to grow through new initiatives. To survive and thrive it rather needs focused approaches that would permit the volumes to grow. The start-up has had a strong creative character that has led to an ‘idea overload’ which has been difficult to align to the more practical side of creativity: implementation and execution. However, when prompted on the issue of having too many ideas, one team member prefers not to be so quick in condemning the volume of creativity and is backed by the opinion of another who would point out the qualification, not quantification, of creativity. The creative professionals of the team, in recognizing the difficulties they meet when trying to choose just one of the many solutions that can come up during a creative process, are however willing to recognize the problems linked to having a multitude of open solutions. They prove, however, that creativity needs to be managed in the sense of being brokered by

Yes, it's partly true, but I disagree with the whole sentence [that there can be too many ideas] in that sense that there can be too many ideas in the wrong places, at the wrong time. So that you are working in logistics and that's kind of a more of the execution side of it. You just deliver stuff. [Our solution] need to go out and you don't redesign the package there. Where as when you are brainstorming a new kind of package, or new features or even digital features or something like that so there can't be too many ideas, but you need to be careful. Where and how to apply those ideas. (Advisor)

One partner admits to an idea overload but also reveals how extrinsic motivation, in this case the need to make the solution work and the business running for existing clients, as well as the need to acquire new clients, functions as what Bilton calls an *exit strategy* from endless generational creativity. Somewhere there must be a stop to generating new ideas, as the existing ones must be measured, reconfigured is needed, and eventually executed.

So yes, maybe we've had a quite a lot of ideas, maybe a little bit too much creativity. But then again, I think what we have learned from the start-up workshops and I think [one co-founder] has been also quite strict about this, is that if we have ideas and we want to change something or try out something new, then we have to measure it somehow. So, collect some feedback from end users or something. Because otherwise it's just, like, our opinions, that this way it works better than that way, and or we should

change this and put some hours to change our IT systems or that it works the other way.
(Partner)

The members' creative thinking skills have generated a good amount of ideas, which is usually helpful for solving problems, but an excessive amount of new ideas may cause a problem in itself. It is not possible to adopt and implement all the ideas generated. There is a need to think which idea is appropriate and realizable in each particular context. It is often the case that just having too many ideas will not proceed the implementation of those ideas although creativity can be truly realized only after new novel ideas are implemented. In this case it seems that there is an idea overload even though there is a need to concentrate more on execution and implementation in the effort of scaling the business. The start-up seems rather to be facing challenges due to idea overload as one founder admits that "I think the most difficult thing is to choose just one [solution/idea]", something that in the creative industries is known as 'killing your babies' (Bilton, 2007).

Certainly, it is a positive circumstance for creativity that many people in organization talk and communicate a lot so that they can share their insights and different ways of thinking which can lead to 'breakthrough thinking'. As described above there are several intra-individual and environmental factors stimulating creativity. However, if creativity is exercised merely for the generation of new ideas new ideas just pile up and things may not progress.

At this stage the expertise and strong personalities of the team appear not to align fully to the need of the business nor to each other, even if the support to the vision itself – minimizing packaging waste on the planet – is still fully embraced and the main driving force behind all's efforts. There is no doubt that, despite each sliding back to their own field of expertise, defined by Bilton as *over-specialization*, where they can feel their talents and abilities can be best applied and valued, the team members still feel strong ownership of the solution they have developed together. It is almost like looking at a couple that has grown apart, but still feels the love and responsibility each has for their mutual child.

4.4 IDEA EXECUTION - SPLIT

This chapter describes how the different ways of thinking within the team lead to it splitting in hope to best serve the execution of the business idea and the finding of a right business model.

4.4.1 Over-specialization

There seems to be a tendency for the more autonomous, and possibly cautious, team members to keep to their own entrepreneurship and thus choose not to join the team fully, preferring to take an ‘outsider’ role, as they themselves put it, outsourcing their expertise with or without remuneration. The flexibility and openness of the start-up allows that. Partly because it is not possible for it to employ all the people they would like to, meaning that buying in certain services is more feasible, and partly because the people that stick around do it because they really wish to keep involved, year after year, due to their shared values and the belief in the feasibility of the solution. Not being totally involved in the start-up makes it possible for them to ensure their own financial stability and allows them the opportunity to keep a more neutral eye on the big picture and a more critical approach. Not being deeply involved means they do not need to fight for their own survival and they can have a clearer vision when it comes to the big picture. As one member puts it “putting the basics in place, i.e. knowing you will have food the next day, will be able to pay your rent, take care of your bills is important for enhancing creativity, but so is complete trust and a mixture of a systematic and organized way of doing things”.

The core team, however, starts to brittle. The introduction of new individuals with new sets of skills that are needed for promoting the solution to the market mirrors the need to specialize and delineate responsibilities, as opposed to the previous entrepreneurial necessity of being able to take any role at any given moment. By growing the business becomes more complex and its demands are more sophisticated. Especially when it comes to approaching the global e-commerce arena. The development of the right business model takes priority. Making the solution work in the market, reaching the right clients and convince them to adopt the new reusable packaging solution is the main preoccupation. There is not so much need for coming up with new product and service designs now, but rather to sell what already exists and works, but is being offered on the market only by few early adopters. This appears to lead the team members to fall back to their own core competences: business administration on one part, and design on the other.

4.4.2 The split

As a consequence, two of the co-founders choose to start their own company, focusing on developing packaging solutions from a re-use perspective, while the third focuses solely on the scaling, selling and marketing of the service they initiated together. His approach is rather pragmatic and unsentimental as he says “It's like you're a coach: if you start from the lowest

division you're not going to go with the same team to the top. You just need to have a structure and ideology, and values and operating models. People will change.” At the same time the co-founding designers sound relieved about the decision, that has been taken after a long period of discomfort.

Now, when we are in 2018, the last year we started to talk with [the other designer] that we'd like to make more design projects and we feel that there's a need for the new reusable packaging solutions in the market. So now, just at the beginning of the year we split the company, there's now two companies. This is a new thing and now we are building this new company and, but we are selling the industrial design and consultancy based on this reusable packaging idea. So me and [the other designer] are back to our roots. (Co-founder C)

The mission, however, is not lost. Despite the practical reasons that led the business to split the team still exist behind the solution. The feeling of ownership is still strong and there is still a feeling of all for one and one for all, 'one' being the reusable packaging solution that brought them together to begin with and still inspires a strong passion for the cause.

4.5 EPILOGUE

The story of this start-up does not end here. One of course would wish for it to end in the sense that its goal would be met: scaling enough to break out from its start-up status and become a full-fledged organization able to fulfil its dream: make an impact in the world and say no to linear economy, no to packaging waste and, eventually, make a significant impact in world that is drowning in disposable waste.

5 DISCUSSION

The present study set out with the aim to investigate creativity and the perceptions of creativity in a sustainable start-up and understand the significance of the role of entrepreneurs as change agents in the transition towards a sustainable society.

With respect to the dual aspects of creativity the results are largely consistent with the creativity theories of Amabile and Bilton that we chose to ground our study on. The results support extant theories explaining that creativity requires a combination of different kinds of thinking, such as rational and irrational, convergent and divergent thinking (Bilton, 2007). They also corroborate the different components identified by Amabile (2013) such as *domain-relevant skills*, *creativity-relevant processes*, *task motivation* and the *social environment*. However, Bilton (2007) outlines convergent thinking, i.e. the ability to recognize and develop half formed ideas, as a necessary *uncreative* contribution in a creative team. On the other hand, this same ability is considered by Amabile a component of creativity related to *domain-relevant skills* which is necessary to test the usefulness and, eventually, the possible market value of novel ideas. Only when its applicability and viability is examined and confirmed, as stated earlier, an idea can be considered truly creative.

Hence, the results of our study would suggest that the implementation of a solution to different contexts requires the creative application of domain-relevant skills, such as the understanding of e.g. culture and environment, business models and industrial contexts: for instance, the decision to concentrate and develop the packaging service only to the fashion e-commerce and develop an appropriate business model to said purpose. It can therefore be suggested to consider the capacity to convert generated ideas into practice as one type of creativity, rather than be labeled an *uncreative* skill. Even if, by definition, creativity would imply the generation of novel and useful ideas, idea generation alone is not enough to be considered accomplished creativity. In accordance with Amabile's theory, an idea can be defined creative only after its appropriateness and usefulness has been tested and developed with the help of domain-relevant skills. Therefore, the ability to recognize and develop the validity of novel ideas, which is claimed to be the prerogative of the uncreative individual in a creative team is, in fact, a part not only of the creative team but even of creativity itself.

What emerged from our findings is that in an innovative start-up creativity can be perceived and applied differently according to each individual. Hence, we could identify a juxtaposition between the type of creativity exercised to generate ideas from zero, which in this study we

call *generational creativity*, and the type of creativity needed in the practical business application of the generated idea, which we choose to define *executional creativity*. What may further help understand what we mean with the distinction between *generational* and *executional* creativity would be to think about the former as a mode of creativity trying to answer the question “What are we going to do?” and the latter as an effort to create a solution to the subsequent question of “How are we going to do it?”. Generational creativity is exercised for the creation and development of the contents of business, e.g. a reusable packaging service. On the other hand, executional creativity is exercised for executing and realizing generated business ideas, e.g. engaging the right key global customers through appropriate application of knowledge for the sake of scaling the business (see Figure 5-1).

Generational Creativity	Executional Creativity
“What are we going to do?”	“How are we going to do?”
The contents of business	The execution of business
e.g. reusable packaging service	e.g. engaging key customers to scaling the business

Figure 5-1 Distinction of generational and executional creativity

It is possible, however, that the inability to broker between these two types of creativity and to align them with the needs of the start-up may contribute to the difficulties of the team’s efforts in reaching a final breakthrough. We conclude that it is partly for this reason that the team has fallen apart. Nevertheless, the intrinsic motivation at the origin of the creative process may still hold the team together behind a project that is based on strong shared values.

With this in mind, dividing an innovative start-up in what Bilton (2007) defines “manageable teams of *creatives* and *uncreatives*” feels problematic. Our findings suggest that the claim according to which creative teams need *uncreative* members may be difficult to apply and justify in a case in which all members of a team appear to be creative in each their own way. Even if our case company does not purely belong to the so called creative industries, that usually are referred to as e.g. industries like film, design, fashion or theater (Bilton, 2007), and even if the team includes members that may not be pure idea generators, the evidence of this study suggests that labeling any one individual as *uncreative* could be misleading: apart from generating new ideas even other types of creativity are needed in order to apply those new ideas and make them financially viable. When human resources are limited and costly each team

member in a small innovative start-up is expected to personally combine the dualistic aspects of creativity – convergent and divergent thinking – individually as well as collectively. In other words, all team members should be able to self-manage different types of creativity in respect to the project’s goal, as well as coordinate them together as a team. This implicates that each member needs to first be aware of the existence of different types and perceptions of creativity. Our findings suggest as a possible explanation for the split of the team the lack of a proper understanding of creativity and its different expressions, and the ability and chance to coordinate its different perceptions.

It could therefore be assumed that when the coordination between *generational* and *executional* creativity fails, or does not exist, the goal in this case of an innovational start-up to scale its business, i.e. apply executional creativity, may slip further away while the team focuses instead on issues that may have been caused by a lack of an alignment between types of creativity. The over-specialization ensuing the lack of brokering between different kinds of creativity, i.e. team members retreating to each his/her own core competence, may take the form of irreconcilable personal differences and leads to the split of the team. As Bilton (2007) rightly puts it “Inhabiting other realities, our own and other people’s, is stressful”. However, the existence of a strong vision and mission may still keep the essence of the team alive, and make it come together again in case of need.

According to our interpretation of the results in respect of the dual aspect of creativity, when this duality is required to combine in each member of a small creative team, it may cause disruption between team members not so much because some of them are creative and some are not but rather because they perceive creativity and its components differently. In this case, it is possible that it was this difference in perceptions that partly led to the belief that “there is too much creativity” in the team. In fact, there might have been too much misguided *idea generation*, instead of a more mutually focused and coordinated *executional creativity* in the stage of *transfer and diffusion* of the solution, as identified in the last step of Kantor’s organizational creativity process. Since the results of this study suggest the possibility of the implementation of different types of creativity suitable for different situations, it seems possible that understanding and coordinating an appropriate application of a suitable type of creativity according to context and goal could be valuable in a team rich in creative resources. But, to do that, there needs to first exist a common understanding of creativity and its different applications. Alternatively, there could be a better understanding of team members’ perceptions

of creativity and, subsequently, an appropriate coordination of these different kinds of creativity.

Our findings suggest that the tensions and differences that usually are needed to trigger and challenge creative thinking may eventually result in an overload of misplaced types of creativity. In this case, generational creativity misaligned with the needs of the business may have been the culprit of misunderstandings between team members who have different ways of interpreting and applying creativity. Creativity may be something a team of equally involved, self-managing members may find difficult to manage purposefully especially when there is not a common understanding of it. Since the split of the team had taken effect only shortly before our study, it is not yet possible to understand and evaluate its final outcome and therefore, our results need to be interpreted with caution. Yet, this organizational split may suggest the necessity to coordinate creativity in an innovative, highly creative start-up. Not the least when some members might not consider themselves that creative – which they eventually had to disclaim once having gained further awareness about the content and meaning of creativity – and may even have shown some sign of scepticism towards an overload of creative ideas.

The results suggest that the mere presentation of a creative sustainable solution that could have a significant environmental impact was not reason enough against the barrier put up by the status quo and the rigid organizational hierarchies of big corporations. The creative elements that initially may prompt a team to come together to generate an innovative and useful idea – different ways of thinking, friction, strong shared values, variety of expertise – with time may become intolerable when they no longer help the business to succeed as expected. Certainly, a great amount of creative ideas tends to be considered a competitive advantage, but an overload of ideas may have caused complications because they failed in addressing the problem at hand: how to expand the business, not how to come up with brand new ideas. Hence, creativity becomes a source of friction due to the different creativity perceptions that in the beginning were so productive.

What makes this case peculiar is the team's strong intrinsic motivation behind its creative packaging idea: despite the split, when necessary the team still gathers behind the solution they created together. Team members may work separately on different projects, each managing their own individual creativity, but when further development of the solution is needed team members are still available to contribute to its further development, albeit only in the sphere of

their own core competences. This may be interpreted, of course, as one way of coordinating different types of creativities. One further implication could be that, in similar cases in which a sustainable issue is felt strongly about, creativity is paired up with resilience and the will of putting the vision before any interpersonal issue.

The findings from this study further suggest that an unalignment and lack of coordination of creativity and its perceptions could partly interfere with the efforts of innovative start-ups as change agents in societies' transition towards sustainability and challenge the spread belief of creativity mainly as a competitive advantage. Entrepreneurs, and start-ups in particular, could learn more about the significance of creativity and its various expressions as well as consequences, be they positive or negative. An informed awareness about creativity could benefit the advancement of their efforts and help them better achieve their goals and indeed offer them a better opportunity to help societies in their transition towards a more sustainable development.

6 CONCLUSION

The purpose of this study was to explore how creativity is perceived in a sustainable start-up, the uniting and splitting implications these perceptions may have in a team and the challenges of coordinating creativity with the financial viability of an innovative start-up.

The findings of this study have shown that despite the strong case that can be made in favor of creativity as competitive advantage, creativity can also have not so positive effects and slow down the development of a start-up into a financially strong organization.

What has emerged is the issue of “too much creativity” which, in spite of the sound of it, does not seem to depend so much on an overload of creativity, but rather on the way different team members perceive creativity. In cases where only the *generation* of new ideas is perceived as creativity, a team may fail to apply *executorial* types of creativity necessary to a creative application of existing ideas. In fact, “too much creativity” can mean “too many new ideas”. Consequently, this may cause significant friction between individuals exercising different types of creativity.

The effects of team members perceiving and exercising creativity differently may be one of the reasons hindering them to reach the ultimate goal of – in the case of our case start-up – scaling the business. Challenges are interpreted and solved using different types of creativity and are thus defined differently in a way that may not suit purpose: some are generating new service solutions, while others are trying to solve the implementation of existing ones that have not yet reached the intended markets. Consequently, the team may lose sight of the end goal and focuses on solving issues more pertinent to everyone’s own field of expertise which slows down the development of the business as a whole.

This is not to say that creativity should be controlled or restricted, but rather that it should suit purpose, in this case creative *idea generation* should be followed by creative *idea execution*. The team’s inability of coordinating these different perceptions and types of creativity, something that originally pulled the team together, may have been one of the reasons that eventually led, instead, to the team splitting. In cases like this one, where different types of creativity are not being acknowledged, addressed and possibly coordinated according to purpose, creativity as a competitive advantage may turn to have, instead, not so positive effects.

Nevertheless, this study also indicates the significance of the motivational component of creativity and the role it plays in a sustainable start-up. An entrepreneurial team with strong

values and belief in a mission is resilient and ready to set aside differences to serve the bigger purpose. This highlights the significance of creative entrepreneurial teams in sustainable development.

This study may provide a deeper insight on the effects and implications different perceptions of creativity may have in a team. Creativity, despite offering significant competitive advantage as is classically implied in several studies, may even have negative implications which could be the subject of further study. A better understanding of creativity and its perceptions – especially in smaller teams of experts and entrepreneurs in which each individual covers an important role for the business – may help improve sustainable entrepreneurs' progress towards sustainable development.

One important limitation of this study is that it only focuses on one small start-up with limited staff and was conducted only under a very short period of time. Consequently, it cannot lead to any kind of generalization. Nevertheless, despite the limited number of interviews, we could at some point observe saturation of data, i.e. repetition of similar information which in turn led us to believe that either a) we got all the information there was to get in this case, or b) the team members had agreed on what to say during the interviews.

A longitudinal ethnographic study on a larger number of sustainable innovative start-ups and entrepreneurs could offer a far better insight on different perceptions of creativity and whether expert members of a team are able to coordinate creativity between themselves.

Despite its exploratory nature, this study offers an insight on the modestly studied field of sustainable start-ups which could become significant change agents in the transition toward sustainable development. Furthermore, it could assist these entrepreneurs in becoming more aware about creativity, its different expressions and forms, and about the opportunity of coordinating it within teams to prevent internal difficulties and support them in accomplishing their original mission.

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8 APPENDIXES

Appendix 1

The Interview Schedule for Email Interview ~ Lists of Questions ~

1. What is your name and how do you describe your role at the start-up?
2. What is your background (e.g. education and work experience)?
3. What made you apply to work for this start-up? or How did you end up working for this start-up?
4. What is your understanding of sustainable entrepreneurship?
5. What kind of challenges did you / the team meet working with the implementation of a sustainable solution? Could you describe them and how you / the team would solve them?
6. Did you participate to idea creation / problem solution during your time at the start-up? How?
7. Do you feel you could apply creative thinking while working at the start-up? Could you give us some examples / episodes?
8. What do you think are the main enemies of sustainable development / sustainable businesses?
9. What do you think are the key elements that enable the start-up to implement its sustainable solution? (e.g. motivation, creative thinking, teamwork, values... something else?) How?

Appendix 2

The Interview Schedule for Semi-structured Interview

Opening

[Introducing ourselves]

My name is ... We are master students at Lund University studying ...

[Purpose]

We are writing Master's thesis focusing on sustainable entrepreneurship ...

... we would like to conduct a case study for your company...

[Confidentiality Agreement]

We are going to anonymize your/company name...

If there is something you don't like to answer, please ignore the question...

(Transition: Let us start asking from general questions about who you are, backgrounds...)

Body

<Topic: Introductory Questions>

Q.A) Who are you? How can you describe your role in the start-up?

Q.B) What made you apply to the start-up?

Q.C) What is your expertise or knowledge on sustainable business?

Etc... (follow up and specifying questions)

<Topic: Values & Ethicality>

Q.A) How would you describe your orientation (ethical, purely business, mission oriented...)? Are you an eco-business, ethical business, sustainable business and how do you explain your definition? What is your understanding of sustainable business (and circular economy)?

Q.B) How strong is your persona connected to the idea of environmentally sustainable entrepreneurship?

Etc... (follow up and specifying questions)

<Topic: Creativity>

Q.A) What do you think about the role of creativity in your position? How do you apply it when working at the start-up?

Q.B) What do you think are the key elements which enable you to implement innovative sustainable business?

Q.C) What is your understanding of the difficulties and constraints of the implementation of the start-up's solution? Were you involved in solving them? How?

Etc... (follow up and specifying questions)

Closing

Is there anything you would like to add?

We appreciate a lot about your participation for our interviews...

Thank you so much once again.