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The leadership moment in circular start-ups

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The purpose of this study is to explore leadership in circular start-ups. Circular start-ups are playing a key role in involving businesses in tackling the issues of environmental crisis. However, circular start-ups have not been a common empirical setting in leadership studies so far. The scalability of the business ideas among circular start-ups is a potential way of promoting sustainable development which calls for new knowledge in terms of how to successfully lead a young circular business.

This research aims to gain insight into leadership in circular start-ups by applying the framework of the leadership moment model. As this research is a theory-elaborating study, the potential of the leadership moment model as a framework for leadership studies is tested simultaneously. The synthesis of the concepts of circular economy, circular business models, and environmental leadership into the leadership moment model constitutes the theoretical framework of this research.

The empirical research was conducted using qualitative methods. The research data comprises semi-structured interviews of five founders of circular start-ups, some of whom were also holding the position of CEO in their respective companies. A deductive content analysis driven by the theoretical framework was performed on the data.

The findings of this study show that the concepts of circular economy and circular business models define the leadership interactions in circular start-ups to some extent while environmental leadership was found to be an overarching theme in most leadership moments taking place in circular start-ups. The results support the viability of the leadership moment model as a framework for studying leadership. This research contributes to the leadership literature by presenting the leadership moment as a potential approach for future research. Additionally, this study adds to the limited research on leadership in circular start-ups and offers new directions for future research regarding environmental leadership in circular start-ups.

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Tämän tutkimuksen tarkoituksena on tutkia ja kerryttää tietoa kiertotalouden startup-yritysten johtamisesta. Kiertotalouden startupit ovat keskeisessä roolissa liike-elämän osallistuessa ympäristökriisin ratkaisemiseen. Kiertotalouden startupit ovat kuitenkin olleet harvinainen tutkimuskohde johtamistutkimuksessa tähän saakka. Startup-yritysten liikeideoiden skaalaaminen isompaan mittakaavaan on mahdollinen väylä kestävän kehityksen edistämiseksi ja siksi on tarpeellista tutkia sitä, kuinka nuorta kiertotalouteen keskittyvää yritystä voidaan johtaa menestyksellä.

Tämän tutkimuksen tavoitteena on luoda syvempää ymmärrystä kiertotalouden startuppien johtamisesta soveltamalla 'johtamismomenttia' tutkimuksen teoreettisena viitekehyksenä. Teoriaa elaboroiden tämä tutkimus tähtää samalla myös testaamaan 'johtamismomentin' soveltuvuutta johtamistutkimuksen viitekehyksenä. Tutkimuksen teoreettiseen viitekehykseen kuuluu myös kiertotalouden, kiertotaloudellisten liiketoimintamallien ja ympäristöjohtamisen käsitteiden yhdistämisen osaksi 'johtamismomenttia' kiertotalouden startup-yrityksissä.

Tutkimuksen empiirinen osio toteutettiin soveltaen laadullisia tutkimusmenetelmiä. Tutkimusaineisto kerättiin haastattelemalla viittä kiertotalousstartupin perustajaa, joista osa oli myös toimitusjohtajia. Aineisto analysoitiin deduktiivisen sisällönanalyysin keinoin. Sisällönanalyysi pohjaa teoreettisessa viitekehyksessä esiteltyihin käsitteisiin.

Tutkimuslöydösten perusteella kiertotalous ja kiertotaloudelliset liiketoimintamallit kuvasivat osaa 'johtamismomenteista' kiertotalousstartupeissa. Sen sijaan ympäristöjohtaminen yhdisti suurinta osaa havaituista 'johtamismomenteista'. Tutkimuksen perusteella 'johtamismomenttia' voidaan soveltaa viitekehyksenä johtamistutkimuksessa. Tutkimustulokset tuottavat uutta tietoa johtamisesta kiertotalouden startup-yrityksissä ja avaten samalla väyliä uudelle tutkimukselle liittyen ympäristöjohtamisen rooliin kiertotalousstartuppien johtamisessa.

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1 Introduction

1.1 Topic of the research

Leadership has been vastly studied in an academic setting, yet it has always remained somewhat elusive when it comes to definitional clarity. There are almost as many schools of thought as there are research papers trying to answer the question “What is leadership?”. However, the work done has not been in vain since the broader body of research can be utilised in varying manners while trying to make sense of what we consider the phenomenon of leadership.

In this thesis, I have taken on the task of making sense of leadership in the context of a circular start-up business. To help me with this task I use a model of leadership ‘moment’ provided by Ladkin (2010, p. 28). The leadership moment model is an illustration of leadership as a phenomenon that can be understood as a phenomenological ‘moment’. As a ‘moment’, leadership always takes place as a social interaction between its four aspects or dimensions: a leader, a follower, a purpose, and a context.

Another aspect that has shaped the topic of this research and guided the process is the phenomenon of the circular economy (Kirchherr, Reike, & Hekkert, 2017). The environmental crisis has evoked different reactions from humankind and the concept of circular economy is one of the more practical solutions offered to the problems such as over-consumption and carbon emissions of the economy. Circular start-ups as the empirical setting of this study represent the freshness of ideas required to tackle these large-scale problems and the scalability and almost limitless potential of their ideas were an interest inspiring this research (Henry, Bauwens, Hekkert, & Kirchherr, 2020).

This thesis assumes that the leadership moment is just as or even more capable of defining and dissecting leadership actions in a setting of a circular business model as it would be in the case of a more traditional business model. Concepts of circular economy, circular business models, and environmental leadership are introduced as parts of the theoretical framework of this thesis

as they are expected to explain and define the leadership moment in circular start-ups. The circular economy as a new economic system replacing the 'end-of-life' concept aiming to accomplish sustainable development is proposed to define the context in which the leadership moment in circular start-ups takes place (Kirchherr et al., 2017). Circular business models as a solution to the implementation of this shift towards a new economic system are suggested as a characteristic aspect of the purpose of the leadership moment in circular start-ups (Geissdoerfer, Pieroni, Pigosso, & Soufani, 2020).

The dimensions of a leader and a follower, as presented in the leadership moment model, are approached via the lens of environmental leadership (Egri & Herman, 2000). The research on environmental leadership so far has emphasized the relationship between leaders and followers and it is therefore a valid framework while examining the interrelation of these two dimensions of the leadership moment. By recognizing these theoretical structures, that make each aspect of a leadership moment taking place in an environment defined by circularity so distinguishable, we can come up with a model that helps us gain a deeper understanding of leadership in circular start-ups.

The research subject of this thesis can be summarised as the leadership moment in circular start-ups but the way this subject is approached is two-dimensional. This research is a theory-elaborating study (Ketokivi & Choi, 2014) which means that it seeks to elaborate on the existing general theory of leadership moment while also investigating the context of leadership in circular start-ups simultaneously. Hence, both the leadership moment model and circular start-ups are the research subjects of this study. The leadership moment model has not been properly tested in academic literature and this thesis seeks to contribute to establishing the model as a viable theoretical framework. At the same time, the research gap considering leadership in circular start-ups will be addressed as it is the context in which the leadership moment model is applied in this research. The practical implications of the findings on leadership in circular start-ups are valuable as they help the advancement and promotion of the circular transition on both organisational and societal levels.

In this thesis, leadership is approached in very broad terms comprising all actions that can be considered 'leaderly' whether it be a course of action aiming to set a greater direction for the organisation or having to deal with a problem more mundane in nature. Leadership can be a great

many things, as stated earlier, and for the sake of the explorative tone of this research, it is justified to maintain a certain openness in terms of what leadership can be and how it can manifest itself. Therefore, it is not necessary to limit anything out of the definition of leadership but to observe it take place in the moments of interaction between the four dimensions of a leadership moment and gain some new knowledge as a result of this exercise.

1.2 The purpose of the study

The purpose of this study is to increase understanding of social interactions taking place in the leadership of circular start-ups. This topic is interesting because leadership specifically in circular start-ups has not been studied to a great extent, yet circular start-ups are an integral part of the green transition, and the number of such companies can be expected to increase. I apply the leadership moment (Ladkin, 2010, p. 28) as a framework for recognizing and analysing the social interactions in circular start-ups. The framework is relevant in studying leadership interaction in circular start-ups since the model of leadership moment is based on the premise that leadership is essentially a 'moment' of social relations. The model addresses the dynamic business environment of start-ups and the uniqueness of each participant in the leadership interactions taking place in circular start-ups.

The specific features of leadership moments in circular start-ups are sought to be identified with the help provided by the concepts introduced in the theoretical framework. Simultaneously, any findings gained by utilising the leadership moment model are also collected and discussed as a part of this thesis. These findings contribute to the young body of literature on leadership in circular start-ups while they also give recognition to the leadership moment model as a conceptual framework for leadership studies. Based on the goals set above the research question is presented as follows:

"How does the leadership moment model address the leadership taking place in a circular start-up?"

The empirical setting of this thesis is unique when compared to the existing literature. The empirical setting in which this research was carried out consisted of five circular start-ups. One

representative of each company was interviewed, and the interviewees held the position of chief executive officer (CEO) or were co-founders of their respective companies. Some of the interviewees were both CEOs and founders. The interactions and critical moments in the early months and years of the companies' existence were discussed.

The conceptual framework of the leadership moment adds to the novelty value of this thesis. The leadership moment model has not been widely applied in any empirical setting, let alone circular start-ups, and thereby new knowledge can be gained when it comes to the four dimensions of the leadership moment and the three concepts explaining the interactions of these dimensions. The concepts of environmental leadership, circular economy, and circular business models are presented as explanatory factors that define the interactions of context, purpose, leaders, and followers in the leadership moment model. Since leadership in circular start-ups is a relatively new field of research, some new insights into environmental leadership, circular economy, and circular business models can be expected as a result of this study.

1.3 Key concepts of the study

The key concepts of the study include circular economy, circular business model, environmental leadership, and the model of a leadership moment. These concepts are also the building blocks of the model of leadership moment introduced in this thesis.

The definitions of the circular economy that this paper relies on are collected from the most cited publications that represent the most recent studies on the topic. One of the most comprehensive definitions is the one of Kirchherr et al. (2017) which was formulated by conducting a literature analysis of 114 definitions used in the literature before the year 2017. This definition is supported and supplemented by the definition provided by the Ellen MacArthur Foundation which can be considered an influential institution in the field of circular economy (Ellen MacArthur Foundation, 2013).

A business model depicts the logic of how an organisation creates, delivers, and captures value (Osterwalder, Pigneur, & Clark, 2010, p. 14). Circular business models are defined by

Geissdoerfer et al. (2020) as business models aiming to cycle, extend, intensify, and/or dematerialise material and energy loops, which sets them apart from business models operating under the doctrine of the traditional linear economy. Sustainable business models, perceived as modifications of conventional business models, embrace sustainability-oriented principles, goals, and concepts while also integrating sustainability into their value proposition and methods of creating, delivering, and capturing value (Geissdoerfer, Vladimirova, & Evans, 2018). The circular business model is a sub-category of the sustainable business model concept, which ties circular business models close to the principles of circular economy and environmental leadership as the means of organizing a business and managing its operations (Bocken, de Pauw, Bakker, & van der Grinten, 2016; Geissdoerfer, Morioka, de Carvalho, & Evans, 2018).

Environmental leadership is a leadership concept that remains scattered and hard to define in the recent body of leadership literature. Egri and Herman (2000, p. 572) defined environmental leadership as “the ability to influence individuals and mobilize organisations to realize a vision of long-term ecological sustainability. Guided by eco-centric values and assumptions, environmental leaders seek to change economic and social systems that they perceive as currently and potentially threatening the health of the biophysical environment.” This is one of the more cohesive attempts at defining the phenomenon and is often referred to in this thesis. However, the concept is elaborated in this thesis by a variety of examples collected from more recent studies conducted on the topic.

The leadership moment might be the most clearly presented of the key concepts included in this thesis, but it is also the least established since there have not been many papers utilizing the idea. The concept builds on the premise that leadership is a phenomenological moment by its nature and should be therefore examined as one (Ladkin 2010, p. 26). From this basis is derived the concept of a ‘leadership moment’, which is essentially a moment constructed by social relations consisting of four dimensions that are necessary for its existence: leader, follower, context, and purpose. This research seeks to gain insights into leadership in circular start-ups from the point of view provided by the model of the leadership moment. The insights on leadership in circular start-ups and the notions on the suitability of the model as a framework for research are the main theoretical contributions of this thesis.

1.4 The structure of the thesis

This thesis consists of five main chapters that are the introduction, theoretical background, methodology, results of the analysis, and a combined discussion and conclusion chapter. This introduction chapter presents the general topic of this thesis and displays the purpose and key concepts of the study.

The introduction is followed by the theoretical background chapter which sheds light on the key concepts of this study and presents them in relation to the model of a leadership moment. The theoretical concepts of circular economy and circular business models are defined and the main lines of literature on leadership in start-ups are considered. The barriers and drivers for circular economy and circular business models are examined in their respective sub-chapters as they offer some perspective on the problems that circular start-ups deal with. This offers some insight into the leadership interactions in circular start-ups since the barriers and drivers define the environment and situations in which the leadership in circular start-ups takes place and the challenges that are to be overcome with the help of leadership.

A definition for environmental leadership is provided as a part of the theoretical framework which is accompanied by a more detailed look at the more recent studies on the topic. The theoretical background is completed with the introduction of the leadership moment model. A proposed model of the leadership moment in circular start-ups is induced from the theoretical framework. The key concepts of circular economy, circular business models, and environmental leadership are presented as inseparable parts of leadership moments occurring in a circular start-up.

The chapter on theoretical background leads to the methodology chapter where the chosen methodological approach is introduced, including an overview of the data collection and data analysis, and an evaluation of the chosen methodology. The philosophical undertone defined by phenomenology, stemming from the leadership moment model as a part of the contextual framework, is carried on to this chapter. Then comes the results chapter where the outcomes of the data analysis are presented and the observations arising from the analysis are collected and sorted out.

The last chapter of this thesis is a combined conclusion and discussion chapter. In the last chapter, the study is summarised, and the findings and implications are presented. The suitability of the leadership moment model as a framework for studying leadership is evaluated as well as the contributions that this research has to the literature on leadership in circular start-ups. The findings dealing with the concepts of circular economy, circular business models, and environmental leadership as factors explaining leadership in circular start-ups are examined based on the analysis. Limitations of the study and recommendations for future research are also presented.

As this thesis is aiming to be a theory-elaborating study (Ketokivi & Choi, 2014), it is noteworthy that the philosophical inclinations of this research are carried on from the theoretical framework to the chapter dealing with methodology. The methodology is also presented in a relatively broad manner. Another point highlighting the nature of this thesis is the length of the conclusion and discussion chapter. This is justified by the highly theoretical and abstract nature of the contributions that this thesis is striving to have. To make it possible to present the findings and implications that the study has it is reasonable to make sure that these are made as clear and approachable as possible in the eyes of the reader while also positioning them as a part of the larger body of literature on the subject matter.

2 Theoretical background

2.1 Circular economy

2.1.1 Definitions of circular economy

The planetary boundaries have been acknowledged to set some restrictions for the idea of endless growth embedded in the capitalist economic system (Rockström, Steffen, Noone, Persson, Chapin III, Lambin, Lenton, Scheffer, Folke, Schellnhuber, Nykvist, de Wit, Hughes, van der Leeuw, Rodhe, Sörlin, Snyder, Costanza, Svedin, Falkenmark, Karlberg, Corell, Fabry, Hansen, Walker, Liverman, Richardson, Crutzen, & Foley, 2009). To answer these challenges involved in maintaining a prospering society while taking care of the environment there has been an academic and business interest evoked by the possibilities of the circular economy. The definition of the circular economy that I use in this thesis was provided by Kirchherr et al. (2017) and is based on their analysis of a collection of 114 definitions from previous literature.

According to Kirchherr et al. (2017), the concept of circular economy describes an economic system which is based on business models that deviate from the linear 'end-of-life' concept that has been prevalent in our economic systems to this day. The linear concept can be replaced by reducing, reusing, recycling, and recovering materials in production, distribution, and consumption processes. The non-linear, or circular, processes can be adapted at three levels of operations. Firstly, the micro level consists of individual products, companies, and consumers. Secondly, the meso level covers the different models of communities consisting of businesses, other organisations, and people. Thirdly, the macro level of the circular economy refers to cities, regions, nations, and cooperation beyond national borders. A circular economy aims for sustainable development, which promotes environmental quality, economic prosperity, and social equity of the current and future generations (Kirchherr et al., 2017).

One of the most noteworthy and most cited advocates of circular economy is the Ellen MacArthur Foundation, which already in 2013 released a report that recognised companies as a

powerful force that will drive business model innovation and create capacities for a reverse cycle (Ellen MacArthur Foundation, 2013). In these observations lies the need and potential for circular start-ups. The daringness to try something new and the possibility of scaling the ideas to change the whole landscape is at the very core of start-ups and for the sake of a sustainable future, we should strive for these start-ups to be green.

In the context of this thesis, the circular economy is used to describe the context in which circular start-ups operate. Hence it is also used as the context in which leadership takes place in the model of a leadership moment. Even though the transition towards a circular economy is de facto an ongoing process and very much in progress, in the context of this thesis it is relevant to presume it to be the system in which the studied phenomena take place based on two premises. Firstly, circular businesses already carry out a circular way of doing things, at least to some extent, and secondly, one of the main drivers of circular business models is the belief that circular economy is the economic system that we are transitioning towards, a belief, of which the sheer existence of primarily circular businesses is a proof of.

2.1.2 Barriers and drivers of circular economy

While examining the circular economy and the transition needed to live up to the principles of the new economic system, it is relevant to take into account the barriers that make this seemingly straightforward change so challenging for many companies and communities. By recognizing and dissecting these barriers to some extent, the solutions needed and the pathways to be cleared will show themselves in a better light and in a way that they might become manageable. In the context of this thesis, the barriers and drivers of the circular economy offer some perspective into the environment in which the leadership in circular start-ups takes place. The introduction of barriers and drivers of the circular economy also paves the way for the possible mechanisms of interaction that the 'context' dimension might have with the other dimensions in a leadership moment.

One of the earlier studies on the drivers and barriers of circular economy was conducted by Pacheco, Dean, and Payne (2010) as they observed the condition of entrepreneurs who seek to

make their business sustainable to be facing a problem of 'green prison', a situation, where sustainable actions of companies are rather punished by the system than encouraged, even though the outcomes of these actions would be beneficial for an entire industry or even the society. In the article, it is argued that entrepreneurs can transform the necessary institutions to change the rules of competition towards promoting sustainable economic incentives. This presents especially circular start-ups in an interesting light, having the agency to not only discover but create business opportunities, a sentiment of the research on entrepreneurial action supported by Alvarez and Barney (2007). Entrepreneurial action that affects the industry and society is a potential driver for circular transition.

Barriers and drivers of the circular economy were investigated by de Jesus and Mendonça (2018) in research on the development of a circular economy from the perspective of eco-innovation as a solution for removing obstacles standing in the way of sustainable development. By contrasting academic papers to reports and policy papers, de Jesus and Mendonça came up with the observation that academic literature focuses more on technologically based innovation that would help to overcome the hard barriers of the needed technical solutions, while "grey literature", referring to policy papers by non-academic institutions and organisations, increasingly emphasizes the systemic innovations, enhancing the driving factors behind the circular transition. The paper concludes that a collective institutional change in terms of markets, politics and social systems is called for. This conclusion can be understood as emphasising the dimension of interaction which could be classified as a systemic phenomenon rather than a technical solution.

Answering the call for research on systemic circumstances, Hoogendoorn, van der Zwan, and Thurik (2019) analysed the results of a survey on entrepreneurship, including questions dealing with start-up motivations, entrepreneurial barriers, and risks. It was found that sustainable entrepreneurs perceive the non-financial dimensions of the start-up environment more negatively than regular entrepreneurs. Additionally, sustainably oriented entrepreneurs fear personal failure more than regular ones, which is due to the complex and varying nature of the stakeholder relations they must cope with.

Sustainable entrepreneurs also perceive the lack of institutional support as more serious than regular entrepreneurs (Hoogendoorn et al., 2019). This reflects a need for additional and enhanced support from institutions influencing the private sector. The reasons behind this

disparity of support needed by sustainably oriented entrepreneurs and support provided to them by institutions are not specified in the research article. However, the reasons, whether they have to do with the lack of a level playing field or the specific needs of sustainable entrepreneurs, can be deemed as irrelevant, if the goal is to make the life of these businesses easier. From the point of view of circular businesses, the question of institutional support could be turned from a barrier into a driver by securing the sufficiency of support.

Instead of the obvious technological barriers that often get blamed for the limited progress achieved while implementing the circular economy concept, the main reasons for the troublesome transition seem to be lacking consumer interest and awareness, and hesitant company culture, according to Kirchherr, Piscicelli, Bour, Kostense-Smit, Muller, Huibrechtse-Truijens, and Hekkert (2018). The study was published in 2018, so the cultural shift can be assumed to have progressed since then. What is still noteworthy, is that even back in 2018 the most significant problems arose from the cultural dimension. This implies that the entrepreneurs would like to affect the culture surrounding the circular economy, especially the hesitant company culture which is an internal factor in the context of an individual enterprise.

2.2 Circular start-ups

2.2.1 Start-ups and leadership

The definition of a start-up has remained unclear even in the academic literature. The ambiguity is so striking that it has even prompted studies on the lack of a clear definition (Cockayne, 2019). Zaech and Baldegger (2017) chose to use a definition which uses the age of the company as the definitive factor. The period that they focused on in their study was between 5 and 12 years since it was consistent with other research studies on start-ups.

Leadership in start-ups has been researched to a limited extent. Leadership, in its more comprehensive sense, in the context of start-ups is rarely the focus of any research paper. Often the emphasis is on some specific kind of start-up and the leadership in those environments or the study

of a certain leadership theme in the context of start-ups. However, there is a limited body of research on leadership as a phenomenon taking place in start-ups which is relevant for this thesis to separate leadership characteristics of circular start-ups from other types of start-ups.

The concept of entrepreneurial leadership was introduced by Gupta, MacMillan, and Surie (2004) to incorporate the element of an “entrepreneurial mindset” into leadership in environments of rapid change and severe competition. They define entrepreneurial leadership as “leadership that creates visionary scenarios that are used to assemble and mobilize a ‘supporting cast’ of participants who become committed by the vision to the discovery and exploitation of strategic value creation” (Gupta et al., 2004, p. 242).

The needs of a start-up in terms of leadership may vary from those of a bigger and more established business. In start-ups, it has been discovered beneficial that leadership is carried out by the team as a whole rather than one individual leader, also known as shared leadership (Ensley, Hmieleski, & Pearce, 2006). Leadership as an interpersonal phenomenon was studied by Zaech and Baldegger (2017) in the context of start-ups. They found the concept of entrepreneurial leadership to be equivalent to the role that a CEO-founder of a company must take in a new business. However, their take on leadership was inspired more by traditional leadership theory, and that is why they ended up studying leadership behaviour by assessing three different types of leadership focusing on the relationship between the leader and the follower. The three types assessed were transformational, transactional, and laissez-faire leadership.

Transformational leadership was defined by Burns (1978, p. 4, as cited in Stewart, 2006, p. 9) as a type of leadership where “the transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower”. A transactional leader, on the other hand, approaches leadership as a transaction where one thing is exchanged for another, for example, jobs could be exchanged for votes or money could be exchanged for labour. This kind of transactional leadership comprises most of the relationship between leaders and followers, according to Burns (1978, p. 3, as cited in Bass, 1995). Laissez-fair leadership is defined by the leader taking no action and being absent (Bass, 1995).

These types differ from each other in the activity of the leader and the expected outcome. Transformational leadership behaviour demands the most activity from the leader while positive

outcomes in effectiveness and satisfaction are expected. Transactional is the medium version of the three taking into account the activity and the effects, while laissez-fair leadership is the leadership behaviour with the least activity and the least effects (Bass, 1995).

At first sight, transformational leadership seems to have the most in common with entrepreneurial leadership both emphasising a visionary leader who gets others inspired and committed. However, entrepreneurial leadership was not the starting point of Zaech and Baldegger (2017) as they wanted to study leadership in a specific context rather than by a certain kind of individual. They found out that one single type of leadership behaviour is not optimal for all situations. Transformational leadership was found to have a notable and positive effect on the performance of a start-up whereas transactional and laissez-faire leadership had a positive effect on the performance of larger start-ups but a negative effect on smaller start-ups. Considering that the start-ups studied by Zaech and Baldegger were from 5 to 12 years old it seems evident that transformational leadership is relevant for the smallest and youngest of start-ups such as the circular start-ups studied in this thesis.

2.2.2 Circular business models

As a start-up is a new, independent, and active company striving for a scalable business of an international level, a circular start-up is additionally pursuing a circular business model (Henry et al., 2020). Circular entrepreneurship is hence essentially moulded by the concept of a circular business model. A business model depicts the logic of how an organisation creates, delivers, and captures value (Osterwalder et al., 2010. p. 14). A circular business model is defined by Geissdorerfer et al. (2020, p. 7) as “business models that are cycling, extending, intensifying, and/or dematerialising material and energy loops to reduce the resource inputs into and the waste and emission leakage out of an organisational system. This comprises recycling measures (cycling), use phase extensions (extending), a more intense use phase (intensifying), and the substitution of products by service and software solutions (dematerialising)”.

The concept of a sustainable business model is commonly perceived as a modification of a conventional business model. Sustainable business models embrace sustainability-oriented

principles, goals, and concepts while also integrating sustainability into their value proposition and methods of creating, delivering, and capturing value (Geissdoerfer, Vladimirova, & Evans, 2018). The circular business model is a sub-category of the sustainable business model concept with additional characteristics that can be traced back to the concepts of circular economy (Bocken et al., 2016; Geissdoerfer, Morioka, de Carvalho, & Evans, 2018).

Additionally, Geissdoerfer et al. (2020) also defined circular business model innovation based on their literature review. Their synthesis of the existing definitions concluded that circular business model innovation is a conceptualisation and implementation derived from circular business models. Circular business model innovation comprises creating circular start-ups, acquiring circular business models, and transforming or diversifying business models towards circularity. Circular business model innovation can affect an entire business model or one or more of its elements and the interrelations of the elements. In some cases, the whole value network can be changed (Geissdoerfer et al., 2020). The concept of circular business model innovation is relevant to the circular transition since a way for companies to accelerate the circular transition is to find models for operating in a sustainable manner utilizing circular principles and to get to test these models. Also, for a starting company like a start-up, innovation is almost an inevitable stepping stone on the way to a prospering business.

Circular business models are practically business models that adapt the concepts of a circular economy to produce a product or service so that the circularity is something that lies in the very core of the business. The specific nature of the relationship that circular businesses have with resource loops is stated in the very definition of a circular business model (Bocken et al., 2016; Geissdoerfer et al., 2020). Since the principles of circularity are a condition for the existence of circular businesses and it is essential for their way of doing business, it seems fitting for it to be interpreted as the purpose that drives the business. In the context of this thesis, this would also translate to an aspect of the model of a leadership moment and one of the defining concepts of the leadership moment in circular start-ups later presented in this thesis.

2.2.3 Barriers and drivers of circular business models

Companies implementing circular business models face barriers that differ from the ones that more traditional businesses of linear business models deal with. The case for specific needs of sustainable businesses, acknowledged by Hoogendoorn et al. (2019), is supported by an article by Vermunt, Negro, Verweij, Kuppens, and Hekkert (2019). The article highlighted the individual needs of each company implementing or building on a circular business model. The nature of the circular business model being implemented affects the barriers that are to be faced by the implementing company. The chosen circular business model seems to influence the barriers more than the company size, the industry the company operates, or the customer segment the company serves.

Companies experience barriers while implementing circular business models at four levels distinguished as separate socio-technical levels. Those levels are the market level, the institutional level, the organisational level, and the employee level. However, circular start-ups do not seem to face the barriers at the employee level (Guldmann & Huulgaard, 2020). While there are strengths to be found amongst the circular start-ups, such as committed personnel, they seem to still struggle with barriers affiliated with the circular business model chosen as much as SMEs and even bigger companies.

Even though the focus of this paper is circular start-ups, there is a certain deficit of literature on this specific category of companies, so drawing from the literature on SMEs in general I speculate the implementation of circular economy business models in start-ups that are already based on the principles of circularity. Rizos, Behrens, van der Gaast, Hofman, Ioannou, Kafyeke, Flamos, Rinaldi, Papadelis, Hirschnitz-Garbers, and Topi (2016) conducted a study on implementing circular economy business models in SMEs and focused on the barriers and enablers. They found out that the most significant barriers identified by the case SMEs were “lack of support from their supply and demand network” and “lack of capital”.

According to the authors of the article, these points illustrate the dependency that SMEs have on their whole supply chain and the financial capacity that a disruptive transition in an organisation requires. However, companies that have started as circular companies do not have to go

through a disruptive transition, at least not internally by implementing a circular business model, so problems might come up in the stage of collecting capital and building a network to start the company in the first place. The dependency on the network and supply chain is as relevant for start-ups as it is for existing SMEs (Rizos et al., 2016).

Rizos et al. (2016) also implied that there are several enabling factors for circular transition in SMEs. Enablers, or drivers, are involved with company culture, local or regional networks, and the image of the company. 'Greening' these factors is a challenge, that according to the authors, could be supported by authorities and institutions such as the European Union. In addition to the measures already used by the EU, such as funding, training, and the use of incentives, there is a wider selection of supporting actions suggested in the article, including affecting consumer preferences, value chains, and company cultures. Also dedicated marketplaces or communities of practice could be created.

Tura, Hanski, Ahola, Ståhle, Piiparinen, and Valkokari (2019) analysed drivers and barriers for the introduction of circular business concepts and concluded that drivers and barriers for circular concepts are context specific. By this, the authors mean that companies should be aware of their internal and external business environments. Another empirical result observed in introducing circular business concepts is the central role that information technologies have as drivers. This comes from the standpoint of collaborative actions and sharing of resources and knowledge across the sectors of business, academia, and government. Clear practices, methods, and platforms can enhance the development of business in a circular economy. This observation on the dependency a circular business has concerning its environment is aligned with the previous points made about the case-specific features each implementation of a circular business model has.

2.3 Environmental leadership

Egri and Herman (2000, p. 572) defined environmental leadership as "the ability to influence individuals and mobilize organisations to realize a vision of long-term ecological sustainability". Additionally, environmental leaders are guided by eco-centric values and assumptions and from that

standpoint, they seek to change systems, both economic and social, that can be perceived as threatening the health of the biophysical environment (Egri & Herman, 2000). For this study, I was interested in finding out how leadership is represented or acted out when the organisation operates following the principles of circularity from the very beginning of its existence. To that end, the concept of environmental leadership seemed a fitting approach since it captures the specific position and attitude that people starting a circular business come from.

Egri and Herman (2000) conducted a study on leaders of North American organisations that operated as non-profit environmentalists or for-profit in the environmental product and service industry. In their research article, they aimed to delineate the differences between environmental and traditional leadership based on their definition of environmental leadership and the data collected. The interview and questionnaire data showed that leaders in such organisations have stronger environmental values, perform various leadership behaviours, and their ability as transformational leaders is significantly affected by the organisational context in which they operate. Egri and Herman were intrigued by the implications these findings have on the criteria used while selecting and promoting certain individuals into leadership positions. They raised the question of whether the personal values of potential candidates, such as ecocentrism, self-transcendence, and openness-to-change values, affect the likelihood of a promotion or recruitment (Egri & Herman, 2000).

Environmental leadership has been discovered to have positive effects on an organisation. Çop, Olorunsola, and Alola (2021) researched the effects that green transformational leadership might have on green team resilience, green work engagement operating as a mediator between the two. An employee questionnaire was conducted in the Turkish hotel industry and the results indicated that leaders articulating the organisation's sustainability goals in a seamless and approachable manner do enhance the team's ability to manage economic hostility or impending adversity against their sustainability endeavours. Transformational leadership also had a positive effect on work engagement.

When leading an organisation that is a circular start-up or otherwise striving to be eco-friendly and sustainable, any pro-environmental activity and behaviour can be found as desirable. Robertson and Carleton (2018) focused specifically on environmental transformational leadership and its influence on pro-environmental behaviour in an organisation. This relation was found not

only to exist but also to be both directly connected to and mediated by the perceived pro-environmental climate of co-workers. The relation indicates that environmental transformational leadership is a useful approach to promote pro-environmental behaviour and to get the most out of that connection pro-environmental attitudes should be made visible by leaders and followers alike.

The view of Robertson and Carleton (2018) on the relative impact that both the leaders and the employees have on the organisational behaviour that can be considered as an outcome of their interaction was supported by the findings of Kim, McGinley, Choi, and Agmapisarn (2020). Kim et al. researched the relationship between environmental leadership and employees' organisational citizenship behaviour (OCB) in the hospitality industry of Thailand. OCB is defined as actions of an individual, that is not recognised by the organisation that the individual is working for, but which are beneficial for the operations of the organisation (Organ 1988, p. 4). Their findings on environmental leadership indicated that employees' environmental beliefs mediate partially the impact environmental leadership has on organisational citizenship behaviour toward the environment. Environmental leadership can also be a tool to enhance organisational support which was found to be a key mediator to convert environmental beliefs into environmental organisational citizenship behaviours.

Leadership activity that promotes organisational citizenship behaviour was also an interest of Khan, Jianguo, Ali, Saleem, and Usman (2019) who studied the Chinese manufacturing and service sector firms in terms of the interrelation of ethical leadership and organisational environmental citizenship behaviour. The results verified the hypothesis that ethical leadership evokes organisational environmental citizenship behaviour. Another piece of their findings shed light on the mediating role of green psychological climate in this interrelation. Green psychological climate refers to "employees' shared perception that the organisation's environmental policies and procedures enhance environmental sustainability and green values" (Khan et al., 2019).

The green psychological climate was also a theme in the research carried out by Bhutto, Farooq, Talwar, Awan, and Dhir (2021). The other key concepts covered in their study were green creativity, green inclusive leadership, and green work engagement. Inclusiveness in leadership is defined by Nembhard and Edmondson (2006, p. 947) as "words and deeds by a leader or leaders that indicate an invitation and appreciation for others' contributions". Inclusiveness in leadership

has certain commonalities with shared leadership which is considered a viable form of leadership in start-ups (Ensley et al., 2006). Relevant to the framework of this thesis were findings that Bhutto et al. (2021) had on green inclusive leadership and its relation to green psychological climate and green creativity since both associations were found to be positive.

The connection that green inclusive leadership was found to have with green psychological climate by Bhutto et al. (2021) has similarities with the connection pointed out by Khan et al. (2019), apart from the slightly different kind of environmental leadership being investigated. The covariance-based structural equation modelling utilised in the data analysis also indicated that the positive association of green inclusive leadership and green creativity is sequentially mediated by green psychological climate and green work engagement (Bhutto et al., 2021).

Jang, Zheng, and Bosselman (2017) examined the role that top managers' values and leadership might have in making progress in the field of environmental sustainability while also exploring the effects that stakeholder engagement might have on environmental sustainability. Through the data collected via a web-based survey targeted at top managers of restaurants in the United States, they found out that environmental leadership and stakeholder engagement mediate the supportive yet indirect relationships between values, environmental sustainability, and both financial and non-financial performance.

Jang et al. (2017) presented various practical implications in their study. According to these implications, human resources should be managed in a manner that considers the competencies for promoting corporate sustainability amongst the applicants for a leadership position. Additionally, stakeholder engagement should be promoted to further enhance corporate practices in a pro-environmental way. Also, to utilise the positive association between sustainability performance and financial and non-financial performance, companies should consider monitoring their environmental sustainability performance to improve the likelihood of achieving the desired benefits. These outcomes direct the focus on the agency and character of a leader in the implementation of circular principles on an organisational level since it seems to matter who the leaders are and what are their tendencies value-wise.

The challenges of gaining definite answers on how to lead sustainably and environmentally oriented endeavours have been acknowledged in academic literature. The complexity of

sustainability was a focal point in the article of Metcalf and Benn (2013). In the article, Metcalf and Benn examined the disagreement and uncertainty surrounding the research of different leadership styles related to the successful implementation of sustainability initiatives in organisations. As a result, they concluded that the reason behind such confusion is the mere complexity of sustainability itself. This complexity is amplified by the multiple layers consisting of the complexity of leadership and complexity of complex problem solving, in addition to the complexity of sustainability.

Metcalf and Benn (2013) also state that these multiple layers of complexity set some exceptional requirements for the leaders taking up the challenge of leading sustainable development since their role in interpreting and executing the ways of linking the sustainability of the organisation to the wider system in which the organisation operates is of great importance. The leadership moment model introduced later in this paper can be considered as an attempt of capturing the complexity of the leadership part of sustainable development conceivably.

The complexity of striving for sustainable development in business is evident when acknowledging that an organisation itself is already a highly complex adaptive system operating within a complex adaptive societal system that operates within a complex adaptive natural system. This chain of thought can be continued or dismantled to even more levels, but the theme of complexity is present all the same. From this viewpoint, the task of environmental leadership seems an endlessly difficult job, an observation, which is further supported by Williams, Kennedy, Philipp, and Whiteman (2017) in their literature review. A meta-analysis of research papers showcased an exponential increase in the number of articles on systemic dimensions of sustainability management already in 2017. However, they also found out that the mainstream management journals still lacked representation of systems thinking when it comes to addressing sustainability issues and more transdisciplinary research was still called for by the year 2017.

As the previous research on environmental leadership shows us, environmental leadership includes many different mechanisms that can all be implemented to influence individuals and organisations on the road to a more sustainable future. Circular economy, being one of the major existing solutions to the contemporary issues stemming from our idea of endless growth, can be easily recognized as a possible vision towards which environmental leadership is trying to guide individuals and organisations alike. The research on environmental leadership also brought forth

the notion that the beliefs of followers can affect organisational behaviour just as much as leaders' beliefs (Robertson & Carleton, 2018; Kim et al., 2020). This view presents environmental leadership as a value-adding piece in the model of the leadership moment in circular start-ups since it seems to describe and capture something of the possible interaction that leaders and followers might have in leadership occurring in a circular business.

2.4 The leadership moment

2.4.1 The leadership moment

Donna Ladkin (2010, p. 28) presented a conceptualization of “the interactive and context-dependent nature of leadership” through a model based on the phenomenological category of a ‘moment’. A ‘moment’ is described by Robert Sokolowski (2000, p. 23) as a non-independent part of a whole, that “cannot subsist or be presented apart from the whole to which they belong” whereas ‘wholes’ are independent and distinguishable things serving a purpose of their own. For example, colours are moments from the perspective of phenomenology, since they cannot occur apart from a surface or spatial expanse. Similarly, Ladkin (2010, p. 26) argued that leadership is a moment by its nature because there would be no leadership without people who identify or are identified by others as ‘leaders’ and people identified as the ones to be led, therefore being a moment of social relations.

Ladkin illustrated the dimensions of leadership moment in a figure (Figure 1), which includes the previously mentioned leader and follower accompanied by context and purpose. The relationship between leaders and followers always takes a place within a particular context and the group works towards an explicit or implicit purpose. Intrinsic for the leadership moment is also the dynamic interaction of these aspects. These dynamics include the perception of context influencing the way communication is interpreted between leaders and followers, behaviours of the followers affecting the leader and both leaders' and followers' actions demonstrating the way a purpose is being understood and embodied (Ladkin, 2010, pp. 27–28).

Ladkin pointed out that despite the leadership moment model being a conceptual framework based on a very theoretical and abstract approach to leadership it does not mean that leadership is destined to be as hard to define and understand as it has been. On the contrary, the model describing leadership as a moment of social relation illustrates leadership as something complex yet distinguishable. As the setting of context, leader, follower, and purpose may be different for each expression of leadership, leadership preserves its feature of being a “collective mobilization towards an explicit or implicitly determined purpose”. However, there might never be two manifestations of leadership alike each other and that is why the complete identity of leadership will never be captured in one comprehensive definition (Ladkin, 2010, p. 28).

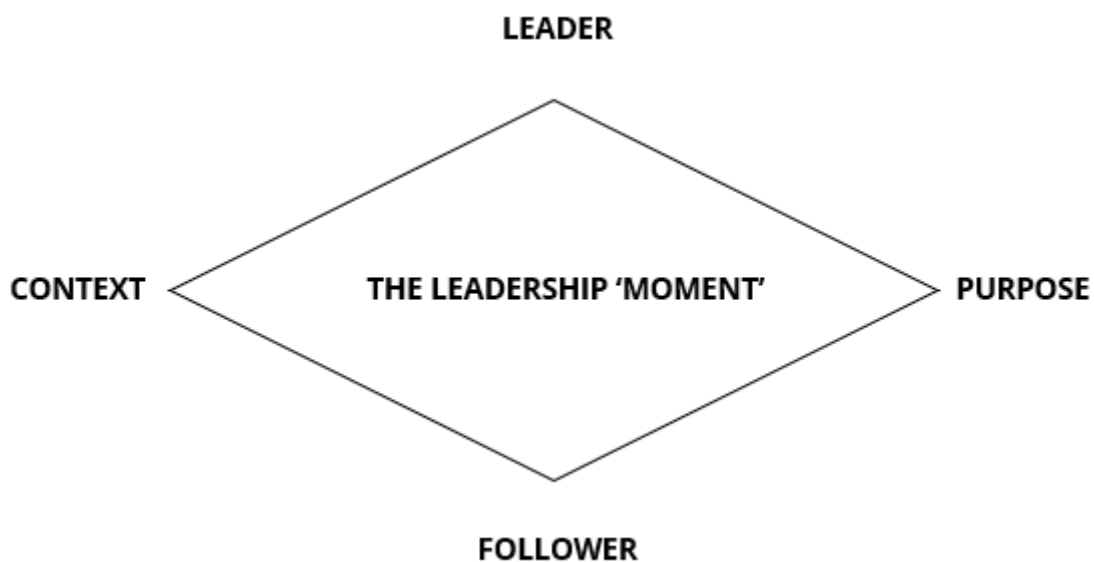


Figure 1. The leadership 'moment' (Ladkin, 2010, p. 28)

The leadership moment fits into the view on leadership tasks presented by Van Velsor, McCauley, and Ruderman (2010, p. 2). They recognize leadership roles and processes as those that “facilitate setting direction, creating alignment, and maintaining commitment in groups of people who share common work”. This can be applied to the environmental leadership taking place between leaders and followers, but also in the case of purpose being the driving force of organizing activities and work. A circular business model could be the leadership process that sets direction, creates alignment, and maintains commitment since once a business model is set it can work as a guideline to which members of the organisation can return from time to time.

The suitability of the leadership moment model for this research is further supported by a study on leading sustainability conducted by Quinn and Dalton (2009). They based their research on the tasks of leadership, including previously mentioned pieces of setting direction, creating alignment, and maintaining commitment. They found out after analysing interviews of senior executives from organisations adopting sustainability practices that even though the leadership behaviours associated with sustainable development seem very similar to any setting of leading change, the leaders of organisations striving for sustainability recognize the interconnections between their business operations, the natural environment, and society. More importantly, these interconnections are not only recognized but also respected by embedding the societal need into the way of doing business instead of reducing the initiative to a new separate operation or initiative.

Inducing changes to a whole business model based on societal needs can be interpreted as an example of the context leading the organisation. This also underlines the interaction between the context in which an organisation operates and the business model of the organisation. The environment, stakeholder relations, and societal needs set the circumstances for operation, but they can also mould the purpose that an organisation itself sees for its existence. Furthermore, as part of the “maintaining commitment” part of leadership tasks, Quinn and Dalton point out that ideas concerning the implementation of sustainability can rise from any level of the organisation. This remark foreshadows the bilateral interaction that takes place between followers and leaders in the leadership moment model (Quinn & Dalton, 2009).

This thesis and the utilisation of the framework of the leadership moment rely and build on the European-centric approaches to studying leadership context with the sociological perspective being emphasised over the psychological perspectives (Schedlitzki & Edwards, 2018, p. 113). The premises that this school of thought is based on align with the preconditions that the leadership moment model requires for its application. Leadership and the context where it takes place are products of social interaction and thus are changing and relative in their nature. Leadership does not come about through the actions of any one individual but the manifestation of it is always co-constructed by all the individuals involved and in interaction with the context (Schedlitzki & Edwards, 2018, p. 114). The leadership moment model identifies the other dimensions of this interaction by specifying the dimensions of leaders, followers, and purpose in addition to the

context, but this does not diminish the complexity of the interaction. The specified dimensions work merely as means for clearer analysis of a single instance of leadership taking place.

2.4.2 The proposed model for the leadership moment in circular start-ups

What makes the concept of the leadership 'moment' especially relevant and interesting in the context of circular businesses are the specific requirements and premises that have been highlighted in previous literature when it comes to the context, purpose, leaders, and followers forming the leadership 'moment'. The drivers and barriers of circular economy and circular business models are distinct from those of linear economy and traditional businesses, and that makes the analysing of the interactions involving the context and purpose dimensions interesting. It has been pointed out in the research on environmental leadership, covered in Chapter 2.4, that the values held by leaders and sub-ordinates, referred to as followers in this theoretical framework, tend to affect organisational behaviour and mediate some desirable phenomena. Thereby, it is of value to pay attention to the interactions between leaders and followers as well.

Ladkin (2010, p. 179) remarks that sometimes the context is the factor that makes leadership observable, and leadership in a crisis is an example of a leadership 'moment' strongly defined by the context. Unique situations which might occur due to sudden events, such as natural catastrophes, create a need for comprehensive and reactive leadership, which can address the circumstances as a 'whole'. The environmental crisis, and the economic and social environment it has created, are one of the reasons behind the rise of the circular economy as a system worth pursuing. Therefore, it can be argued that circular business models are a response to a crisis.

When a business model has its foundation in values that have concrete implications for the behaviour of individuals, that business model can be argued to 'lead the business'. In the context of this thesis, 'leading the business' could mean the broad measures that are taken during daily operations, including decision-making on both individual and organisational levels, or strategic actions and decision. The purpose can be argued to take the lead when the set principles, guidelines, and organisational culture determine how the activities and work are carried out (Ladkin, 2010, p. 179).

The 'follower' aspect of the leadership moment does not only describe the members of the organisation with no formal leadership position. As the model is systemic and dynamic at its very core, it is worth pointing out that the roles of a given leadership moment are not fixed. At a given point in time, it might be necessary for the hierarchical leader to hand over the lead to another person regardless of their position in the organisation, to allow leadership to emerge (Ladkin, 2010, p. 180).

An idea for doing a circular business can arise from any level of the organisation and the expertise needed to solve a specific problem might lie in any part of the organisation. The circular economy as a whole or the circular business model of the organisation can inspire not only the leaders, but the followers as well, and similarly, any member of the organisation can have a lesser or greater impact on society or on the way of doing business in the case of a single company. People are also known to affect each other. This interconnectedness is innate for the leadership moment model, also in the case of circular start-ups, and that is the research subject of this study.

Figure 2 illustrates my proposition for concepts that could help elaborate the dimensions of the leadership moment when applying the model in circular start-ups. Based on the theoretical framework presented in this thesis I have reason to expect that the concepts of circular economy, circular business model, and environmental leadership succeed to describe not only the different aspects of the leadership moments in circular start-ups but also make sense of the interaction between the dimensions of context, purpose, leader, and follower.



Figure 2. The proposed model for the leadership moment in circular start-ups

3 Methodology

3.1 Methodological approach in this research

In this study, the topic is approached via qualitative research methods. A qualitative approach was chosen keeping in mind the research interest and the form of the data already collected. The qualitative research method makes it possible to bring forth the personal standpoints of the research objects while also allowing the use of the researcher's discretion when it comes to data gathering and analysis (Eskola & Suoranta, 1998, pp. 16–22). Due to the abstract nature of the leadership moment in circular start-ups, which sets several requirements for the analysis, the qualitative research method allows some freedom for the researcher when it comes to capturing the whole complexity of the studied phenomena and the context they take place in. Qualitative methods also underline the interest in understanding reality as socially constructed which is very much the case in the social relations taking place in an organisation (Eriksson & Kovalainen, 2016, p. 4).

Eriksson and Kovalainen (2016, p. 11) underline the role of philosophical issues in business research. Since this thesis relies heavily on the philosophical basis of phenomenology in its key concepts, I find it important that the philosophical aspects of the chosen research approach are also covered. Ontologically this research represents the ideas of constructionism which is a consequence of the phenomenological basis of the concept of leadership moment (Sokolowski, 2000, p. 23; Ladkin, 2010, pp. 25–28). By including the concept of leadership moment in this study I also embrace the view that leadership is a phenomenon that exists as a moment in social relations and is hence intrinsically always a bit different in the ways it shows itself, depending on the people who represent the leaders and followers, on the context their interaction takes place, and on the shared purpose that they are working towards.

Phenomenology is a central theme throughout this thesis. Phenomenology has an impact on the qualitative research method I chose to use and has a notable role in the theoretical framework as the philosophical groundwork that the leadership moment model is based. From this interplay follows the remark that phenomenology defines the undertone of the whole research and

therefore the idea should be presented at least on a basic level. The history of phenomenology is vast and winding but for the sake of clarity a broad definition of phenomenology by Dermot Moran is provided here, as follows:

Though there are a number of themes which characterise phenomenology, in general it never developed a set of dogmas or sedimented into a system. It claims, first and foremost, to be a radical way of doing philosophy, a practice rather than a system. Phenomenology is best understood as a radical, anti-traditional style of philosophising, which emphasises the attempt to get to the truth of matters, to describe phenomena, in the broadest sense as whatever appears in the manner in which it appears, that is as it manifests itself to consciousness, to the experiencer. As such, phenomenology's first step is to seek to avoid all misconstructions and impositions placed on experience in advance, whether these are drawn from religious or cultural traditions, from everyday common sense, or, indeed, from science itself. Explanations are not to be imposed before the phenomena have been understood from within (Moran, 2000, p. 4).

A leadership moment does not occur in a vacuum and is fundamentally a social construct, a unique and transient phenomenon. Thus, it can be concurrently concluded that this research is conducted from the epistemological viewpoint of subjectivism as the phenomena investigated in this research are explicitly socially created and socially sustained (Burrell & Morgan, 2016, p. 306). Subjectivism has some notable similarities with the views that phenomenology has on reality and in the ways of knowing, emphasizing the interwovenness of the perception of a phenomenon and the viewpoint of the perceiver as well as the perceiver's position vis-à-vis a phenomenon (Moran, 2000, pp. 4–6; Schwandt, 2007, p. 280). This is a natural research philosophical standpoint in this study considering how the very foundation of this research setting is based on the phenomenological interpretation of leadership (Ladkin, 2011, pp. 17, 27).

The research philosophical position that this study represents could be identified as social constructionism (Schwandt, 2007, p. 39). This becomes self-evident when taking into account both the phenomenological background of the theoretical framework of the study and the fact that the leadership moment is essentially a social construct that can only be perceived in a moment where the parts of the moment are in interaction with each other. Additionally, the researcher's

position can also influence the perception that will define the research and that reflexive feature is also characteristic of social constructionism. However, it might be worth mentioning that this study does not take a strong social constructivist stance since it is not included in the interests of this study to argue that all reality is a social construct. Relevant in the context of this research is the notion of leadership as a social construct (Schwandt, 2007, pp. 39–40).

Social research often involves both deduction and inductive models of research. Deduction recognises theory as the first source of knowledge and hypotheses are deduced from what is known about the studied phenomenon theoretically. These hypotheses are then tested by conducting empirical research. Induction in research views the relationship between theory and empirical research as a process that proceeds from empirical study to theoretical results. Hence the starting point is empirical materials instead of theoretical propositions (Eriksson & Kovalainen, 2016, p. 23).

In a sense, deductive processes are dominant in this research, because the main scientific contribution of this study lies in the proposed model of leadership moment in the specific context of circular start-ups, and this pairing is a result of a purely theoretical process. Nevertheless, induction plays a natural part in the analysis of the collected data and will mould the suggested theory based on the empirical data and could prove some of the parts of the model of the leadership moment wrong or insufficient. Therefore, this research will include both inductive and deductive methodologies even though the deductive models chronologically preceded the inductive models in the research process.

3.2 Research data and methods of data collection

The interviews used as data for this research were conducted as a part of a larger research project during the spring of 2020. A pool of circular start-ups was gathered by conducting an online search and potential interviewees were picked through a selection process that included collecting data on start-ups on the internet and then evaluating the suitability of a company for the means of the research project. This selective procedure included evaluating the stage of

development that the company was at, the size of the company, and whether the company's business model could be considered as implementing some of the principles of the circular economy.

The start-ups that ended up being selected were then contacted via phone or e-mail and an interview was proposed. Due to the small size and young age of the start-ups the person contacted was often one of the founders, the CEO, or the person responsible for the themes of sustainability on a company level (Table 1). The interviews were conducted by meeting on a video conference platform. The average length of the interviews was from one to one and a half hours. The interviews were conducted as semi-structured interviews (Brinkmann, 2013, p. 21) that followed a certain formula where the company was first introduced by the interviewee and the interviewer then proceeded to ask about the story of founding the company and its relation to a circular economy. Later in the interview, the stages of development that the company had undergone to date were addressed and some of the critical events along the way were reviewed to a greater extent.

The chosen method of data collection for this research was the semi-structured theme interview. Interviewing as a method of qualitative inquiry relies on people's shared ability to make and convey meanings through language (Seidman, 2006, p. 14). At its core, interviewing aims to help understand the lived experience of others and the meanings that the interviewed people themselves give to that experience. Interviewing sheds light on the context where people's behaviour takes place and therefore allows the researcher to understand that behaviour (Seidman, 2006, pp. 9–10). Thereby, interviewing is an appropriate method for data collection regarding the phenomenological undertone of the design of this research as it provides a way to gain an understanding of the phenomena from within (Moran, 2000, p. 4).

The semi-structured theme interviews conducted during the project provided this research with consistent data that could be coded and analysed for this study. Brinkmann (2013, p. 21) recognizes that the difference between a semi-structured interview compared to a structured interview is the interviewer's freedom to make use of the knowledge-producing potential of dialogue. On the other hand, compared to an unstructured interview, the semi-structured interview offers the researcher more influence on the topic of the conversation, hence allowing the focus to stay on the issues deemed important for the research project. Even though the interviews were

conducted by various interviewers, the fact that the researchers working on the research project had expertise on the themes dealt with in the interviews makes the collected data more applicable than it would be with structured interviews.

As a part of a larger research project, the data collection was not designed or optimized for the use of this study. However, the data is sufficient considering the compatibility of the research subjects of both this research and the research project in question. Also, the sheer extent of the data in terms of each case, covering the company's story from the beginning comprising the steps that had been taken along the path, and especially encompassing the critical events, was considered to offer enough data to evaluate the adequacy of the leadership moment model in the context of circular start-ups.

As stated earlier in the thesis, in the framework of this study leadership can be manifested in any moment that is part of a "collective mobilization towards an explicit or implicitly determined purpose" where the context, leader, follower, and purpose are in interaction (Ladkin, 2010, p. 28). The critical events, turning points, and adversities of the start-ups studied here offer interesting situations characterized by conflict where the interaction between the parts specific for circular start-ups included in the leadership model can be perceived. The interviews also included specific questions about the companies' business models and their relation to a circular economy. These bits offered some data to observe the context and purpose parts of the leadership moment as they were proposed in the model of leadership moment in circular start-ups to be embodied by the circular economy and the circular business model of a company.

The companies are anonymised for the sake of protecting the businesses of the interviewees. All the businesses can be defined as circular start-ups while taking into account the size and age of the companies and the business idea they are carrying out. Five different circular start-ups were interviewed via Microsoft Teams during the spring and summer of 2020. All the interviewees were founders of the companies they represented and were still active in an operational role in their companies at the time. The information considering the date and length of the interviews and the role of the interviewee in their respective companies are presented in Table 1. The interviewees are numbered so that their quotes could be identified in Chapter 4. For this thesis, a specific definition regarding the age of companies that can be defined as a start-up is not relevant since all the companies from which the data for this research was collected had been

established no longer than 5 years before the interviews took place. Therefore, it is sufficient to say that all the companies were in the early stages of operations.

Table 1. Details of the interviews.

Interviewee	Date of the interview	Duration of the interview in minutes	Transcribed pages
Company A CEO/Founder, I1	4.6.2020	73	21
Company B CEO/Co-Founder, I2	7.5.2020	45	12
Company C Co-Founder, I3	12.6.2020	70	17
Company D Co-Founder, I4	14.5.2020	62	16
Company E CEO/Co-Founder, I5	31.1.2020	81	21

The interviewed companies represent different fields of business, but all their business models can be considered circular. The questions used were the same for each interview, but the interviews followed different paths as the conversations unfolded naturally due to the semi-structural form of the interview, and therefore the interviews ended up having variability of emphases amongst them. This does not diminish the comparability of the interviews but only offers more possibilities for analysis as the personal aspects of the interviewees offer a window to unique moments of leadership taking place. The fields of business that each of these companies operates are described in Table 2 in a manner that offers some context for the results of the analysis of each interview while also holding on to the promise of anonymity.

Table 2. The interviewed companies, their field of business, and the form of circularity of their business model.

Company	Field of business	Form of circularity
Company A	Foodstuff research and development	Reducing
Company B	Renting and leasing	Reducing
Company C	Information service and consulting	Reducing, Recovering, Recycling
Company D	Construction activities	Recovering, Recycling, Reusing
Company E	Transportation	Reducing

The data used in this research was collected for the use of the Circular Economy Catalysts: From Innovation to Business Ecosystems (CICAT2025) research project. The data used in this study was collected by the branch focusing on circular start-ups. CICAT2025 is a joint research project of Tampere University, University of Turku, University of Jyväskylä, University of Eastern Finland, Tampere University of Applied Sciences and Turku University of Applied Sciences and it is funded by the Academy of Finland Strategic Research Council. The project aims to facilitate the circular transition in support of Finland's strategic goal to become a global leader in the circular economy by 2025. The data used in this study was collected by the branch focusing on circular start-ups.

3.3 Methods of analysis, process of analysis, and evaluation of the methodology

Content analysis was the method used to analyse the research data. Content analysis is a research technique for making replicable and valid inferences from texts to the contexts of their use (Krippendorff, 2019, p. 24). The process of analysis started with reading the chosen interviews to get familiar with the data. Then the coding process was begun by developing a coding scheme

which was, in the case of this study, a deductive process based on the model of the leadership moment in circular start-ups presented in this paper. The collected data was then coded and analysed using content analysis. Content analysis is suitable for analysing data on multifaceted and sensitive phenomena such as the leadership moment (Elo & Kyngäs, 2008).

A deductive approach in terms of coding was chosen since the goal of this research was to elaborate the theoretical model of the leadership moment and by using the model gain knowledge on leadership in circular start-ups (Ketokivi & Choi, 2014). In the case of this analysis, the goal was to first identify leadership moments taking place and then classify these instances using the aspects of the leadership moment in circular start-ups. Four theory-driven codes were therefore leader, follower, context, and purpose and the used coding was chosen based on which one of the aspects was the most central or fundamental in the given moment where leadership was taking place. As the leadership moment is always about the interaction of these dimensions of the model, the coded instances were then dissected considering how the most central dimension in each moment interacted with the other dimensions.

The leadership moment in circular start-ups is a complex, interconnected, and multi-layered phenomenon and hence it was common that in every situation which could be observed as a part of a decision-making process all the dimensions could be seen influencing and altering the process. This brings an interesting aspect to the research since the focus shifted from merely noting that there was a decision-making process happening in a circular start-up to interpreting the emphases and interrelations happening between environmental leadership, circular business model, and an environment moulded by a circular economy. This also allowed the analysis to address on an even deeper level whether some of the aspects of the leadership moment are more relevant than the others in a circular start-up and whether the model is adequate to describe leadership and decision-making in a real business context in the first place.

While analysing each interview the focus was primarily on the case at hand. Hence it is possible that the way the single interview progressed influenced the way that the leadership moments manifested themselves and the emphases might vary in the transcriptions and the interpretations made based on the interviews. However, it is acceptable that the positions of the interviewee, interviewer, and researcher affect the outcome of the analysis (Krippendorff, 2019, p. 22). Acknowledging this does not make the cases incomparable in the context of this thesis.

The methodological approach of theory elaboration captures the position taken in this research with the leadership moment model and leadership in circular start-ups. Ketokivi and Choi (2014) studied case research as a scientific method in their article, and even though this research is not a case study per se, Ketokivi and Choi offered another way of describing how this thesis seeks to contribute to leadership research. As the desirable contribution of this research would be novel theoretical insight, it is the relative emphases given to theory (the leadership moment model and its complements) and empirics (leadership in circular start-ups) that make the research setting original ensuring the novelty of any findings.

As a theory elaborating study this research seeks to elaborate on the existing general theory of leadership moment while also investigating the context of leadership in circular start-ups simultaneously. The leadership moment model is treated as pliable and other concepts, such as circular economy, circular business model, and environmental leadership, are introduced as elaborations of the model in this specific context. While the adaptability of the leadership moment model is tested, all insights gained regarding leadership in circular start-ups are welcomed and treated with equal rigour. The leadership moment model and the coding scheme driven by it are the deductive part of the analysis process. On the other hand, the implications that the observed instances of leadership moments have for leadership in circular start-ups require some inductive processes guided by the concepts introduced in the theoretical framework. This is necessary due to the lack of previous literature on leadership in circular start-ups (Ketokivi & Choi, 2014).

The methodology chosen for this research has potential weaknesses of its own. Finding the balance between theory and empirics is a task that adds to the responsibilities of the one conducting the analysis and interpreting the data in a theory-elaborating study (Ketokivi & Choi, 2014). The research question of this study is ambiguous as it includes the concept of the leadership moment, which is a very fluid phenomenon that requires interpretation to be observed. This makes it possible that too excessive interpretation in the process of analysis would compromise the success of the content analysis, but that is also a risk coming with every qualitative research process (Elo & Kyngäs, 2008).

4 Results

4.1 Case Companies

4.1.1 Company A

In the case of Company A, the circular economy context was one of the driving forces during the early stages of developing the business. The interviewee stated that the technology surrounding their field of business was something that inspired him to give it a try and start to develop a business and a product of their own. The transition that had taken place in many traditional fields of business was not only an inspiration to the founder but also an indicator, that the transition will be taking place throughout the economy.

"It was not necessarily about the love of [the product] per se but rather the interest in the production technology that got me excited." (I1)

It was also noteworthy that the founder felt that the ecological aspects and the resource efficiency were not something that needed too much thought put into them since the whole business idea and technology they utilise was based on principles of circularity. This is an example of the circular business model setting the tone for doing business and the consequences of the business having values embedded in it. Therefore, it can be interpreted that two of the dimensions of leadership moment in circular start-ups, context and purpose, had their roles in leading the business and the operations.

When asked about the problem that their business aimed to solve it comes very clear that Company A had its purpose well thought-out. The interviewee thought that they were solving the problem of misunderstood customers. They clarified that they thought that consumers would understand the difference between a product marketed as eco-friendly and a product that is actually the eco-friendlier option. The problem was that markets lacked such options of truly ecological origins. By providing the market with a domestic circular economy product they simultaneously increased the awareness of consumers when it comes to available options as the

customers already possessed the capability of recognising true eco-friendliness when presented with it.

The context also leads the company in the sense of setting boundaries for certain ideas and markets. As a start-up, Company A started small with a limited circle of customers and the demand for their products was dependent entirely on the needs of a few buyers. On the other hand, the fewer contracts allowed the company to stay in touch with their customers on a more regular basis. This communication guided the product development process of Company A as their sole purpose for some time was to answer to the needs of their selected customers. As the following excerpt illustrates, this is a piece of evidence showcasing the role of stakeholders as a part of the context in which a circular start-up operates.

“Our potential customers did not only dictate what we produced but also how we produced.” (I1)

Since there are usually only the founders and maybe one or two other members working in the organisation during the early days of the business it is typical for a start-up that “everybody does everything” or rather anything that is needed to be done for the business to operate successfully at any given moment. The hierarchy remains low because the organisational structure is very simple in a young and small company. In Company A, the leadership ended up flowing between the founders depending on the situation at hand and the expertise possessed by each member of the organisation.

The specialization led to a decision-making process where the owner of an area of responsibility, first, presented a desirable course of action, and then, also made sure to have the team’s approval on the actions taken. The way the interviewee described this was as avoiding a silo effect by including the whole team in decision-making while also respecting the opinions stemming from expertise inside the team. The start-up team aimed for agile decision-making and endorsed open discussion. However, there had been moments where the interviewee, as the CEO of the company, had decided to act against the opinion shared by the majority of the team, yet these instances were not specified by the interviewee. These situations represented a more traditional way of leadership taking place in an interaction between a leader and followers.

Another example of the followers leading the business came when the interviewee was asked about some critical turning points during their time doing business. The interviewee stated that each time when they had added a new member to their team had been an important moment along the way. The competencies that new members brought with them were allowed to have a serious impact on the way of doing things in the organisation. Openness to new ideas from new members is something that Company A had knowingly cherished. In a way, they were eager to be led by followers who bring to the table something new that they might have been, to some extent, lacking before.

When it comes to funding, the troublesome process of applying for funding from public institutions appears to be a barrier to circular business. Company A's business idea and industrial classification had complicated their efforts to apply for governmental support. From the point of view of leadership, this had made it necessary for them to build a network including private financiers.

Company A had made use of external knowledge in the form of advisors and financiers. Especially an advisor that had tagged along a few months before the interview had brought with him a kind of knowledge that the company did not have before. When asked about benchmarking their developing process the interviewee pointed out that a start-up should contact financiers and start to build a network as soon as possible. The knowledge that could lead the business to fulfil its goals should be sought after from the very beginning, whether it would be found in the environment (context) or a from the inside of the organisation through recruits (leaders and followers).

4.1.2 Company B

Company B had its business idea rooted deeply in an efficient way of using resources and that was also the thing that came first to mind to the interviewee when asked about what circular economy means to them. The interviewee thinks that their company operated in the field of sharing economy which, they stated, is a sub-field of the circular economy. Their business idea was to provide rental service to customers who wished for more efficient use of their property

which had a low utilisation rate. The idea manifested itself when the interviewee, who was also a founder, had a personal realization of the low utilisation rate and that they had the technical proficiency to develop a platform to digitize the act of renting one's property when not used by the owner. This indicated that the demand for this kind of service rose from the environment and from the people's want to use their property more efficiently. From the aspect of the leadership moment model, leadership manifests itself through the aspect of context, that is circular economy. To further recognise the opportunities for digitalisation, the company set out to do some market research.

The interviewee gathered two peers whom they had met during his previous career as co-founders and together they started to build the platform. They ended up having a total of four co-founders. They all had technical competencies that complemented each other's skill sets and proficiencies while some of them had also some matching digital capabilities, which eased the communication in terms of what things should be solved while building the platform.

The business model of Company B relied on the presumption that the needs of all people interested in the field that they operated in could be met by increasing the utilisation rate of the existing base of products owned by the population. This was essentially a matter of connecting the people in need and the people ready to provide. After a while, the company expanded their business to provide joint-use services by renting products owned by the company. This possibility became evident after noticing the problems of connecting owners and renters. By providing joint-use services, the burden of owning a product with a low utilisation rate was completely removed from consumers. This interaction was an example of the interconnectedness of the dimensions of leadership moment, in this case, the context affecting the purpose which in a circular setting means circular economy having an impact on the circular business model. When the purpose is to serve customers in a certain way, the business model can be reformed in service to that purpose. Thus, customers can be a part of both the context and the purpose aspects of the leadership moment model.

The circular economy might not only be 'the leader' during the development of the business but it can also be a driving force in the founding of the business. When asked about the importance of circularity in their business idea the founder interviewed was adamant about its role:

"It definitely was [important], it is one of the most interesting phenomena in the world, the way we think... - - we will not survive this [course of] development if everybody is having the stuff of their own... - - we need to learn to share and those old ways of thinking that "I need to own things by myself", I think they are a bit, or should be, a thing of past, even though it is not like that yet." (I2)

The CEO and founder of Company B recognised that they represented a school of thought which prefers to release the software rather earlier than later to get some feedback from the end-users while also letting the customers know that the product is still under development. The commonality of this practice was also something that supported the view of the interviewee regarding their company's advocacy of sharing economy. The leadership is not only shifting between leaders and followers inside the company but also the customers were invited to share ideas about the service. In a way, the customers could be the party enacting leadership considering some specific problem with the service they use.

Similar to the other case companies, the roles of the original members, the co-founders, were a bit more flexible and a bit unclear, whereas by the time of the interview, as the team had grown, the roles had also become more clearly defined and fixed. The organisational hierarchy was, in the words of the interviewee, a low one, since that was something that they had found to be preferable during their earlier tenures in organisations with different organisational structures and cultures. Self-regulation was important, even though the interviewee stated that some ground rules must be set for a self-regulating organisation to avoid chaos. In terms of the connection between leaders, followers, and decision-making the interviewee had this to say:

"Decision-making took place quite naturally when the people needed to make a certain decision are present and they discuss it through and decide. We do have this idea that everybody has a right to make decisions and if it ends up being a wrong one, then we apologise, but it is always easier like this than it would be going around asking permissions from everyone..." (I2)

The words of the interviewee painted a picture of an organisation with a low hierarchy where the leadership flowed naturally to the parts of the organisation where the expertise lay and where the problem had been identified and understood. The leadership moment (Ladkin, 2010, p. 28)

manifests itself in a decision made by a member of the organisation without a formal leadership position and at that moment the leadership of a follower can end up influencing the leader, purpose, or the context. Of course, these other aspects of the leadership moment had simultaneously and inevitably also influenced the decision made by a follower. For example, the sheer fact that the organisation had these ground rules confirmed by the formal leaders allowed decision-making on different levels and parts of the organisation. This is an obvious example of a situation where the leadership of leaders had made the leadership of followers possible in the first place.

The people of Company B had also learned that the circular economy context could also set boundaries in addition to creating opportunities. The regulation of sharing economy had made it necessary for the company to lobby for changing laws that had been enacted decades ago with no mind paid to the circular economy. This showcases an interplay of the context and the purpose, the circular economy and the circular business model. It had not been included in the initial business idea that Company B was to take on the role of a lobbyist, but the circular economy was not the prevalent economic system that all the regulation was designed to support, so there are situations where some adaptability is needed from circular businesses to change the environment in which they operate.

4.1.3 Company C

To the interviewed representative of Company C circular economy meant a “resource-based economy” which, to them, referred to an economic system in which the quantity of resources is the starting point which dictates every other action taken economy-wise. The interviewee stressed that they did not provide circularity consultation per se, but their business was still closely related to a circular economy as some of the solutions they offer are from the field of circularity. The business idea of Company C dealt with spreading information and offering consultation about climate issues to both consumers and businesses. Therefore, it could be argued that the business relied heavily on the environment and society changing, affected by ideas of circularity, which created a demand for services making this kind of transition easier.

The three co-founders of Company C had different competencies which were important in both bringing credibility to their services and having the tools and know-how in the implementation of their business. Company C's case was yet another example of how the roles in a start-up are often unclear and flexible in the early stages when the team is also small. In Company C, like in many other start-ups, the roles became clearer along the way. This development created a fruitful platform for the flow of leadership amongst formal leaders and followers. Even when the co-founders were equal when it comes to formal positions the leadership would shift from one to another depending on the expertise needed in solving the problem faced.

An interesting feature in the business model of Company C was the educational nature of their business, sharing information about the climate impact of the actions of consumers and businesses alike and offering tools to promote more eco-friendly ways of living and doing business. This formed an interconnectedness between the dimensions of context and purpose of the leadership moment model. The context in which the leadership took place in Company C was not circular economy per se but addressing the environmental crisis in general, but the interviewee felt that making the knowledge about existing solutions to influence one's impact on climate change accessible fed the interest in the matter even more. One interpretation of this is that spreading information about the ways of fighting climate change also moulds the business landscape more suitable for the services they offer. It is, in a sense, an interactive relation in which the execution of their business model however circular moulds the context of the economy to an even more friendly one for their business and sheds light on possible paths for scaling and expanding their business. The interviewee also felt that this is the only way to have a true impact on the whole problem:

"- it is a phenomenon that is growing through Europe, and everybody wants to educate themselves on how they can act on climate or "live better", so it is not until we get that trend generated, I believe, that any kind of greater change takes place in the world." (I3)

Another point about the purpose of the business and the impact that Company C desired to have on the context in which they operate was brought up by the interviewee later during the interview. For them, as one of the founders, it had been clear that they try to do two things simultaneously: to test whether their business idea has potential while also trying to have an impact on the whole economic system. While looking at this notion through the lens provided by the

leadership moment model (Ladkin, 2010, p. 28) it seems that it was integrated into the purpose of the company to affect the whole economic system, in other words, the context aspect of the leadership model. This was directly implicated during the interview when it came up that during some of their early pitches, they were asked if they had thought about the possibility of turning their business into a non-governmental organisation. They rejected these proposals as they wanted to set a precedent on both being able to change the system while also making a business out of it.

This observation raised a question about whether circular businesses are special in their dynamic where it is intrinsic to their purpose, in the framework of this thesis to their circular business model, to not only carry out a business idea for the sake of economic profit but also to change the prevalent economic system towards circularity. The most interesting part of this question is whether this premise holds even in the cases where it is not directly and openly stated by the circular start-up itself. In the case of Company C, it came up naturally during the interview due to the nature of their business as an educator and communicator of the themes of climate change.

4.1.4 Company D

Company D differed from other case companies by producing a product in a more traditional field. What made their business circular was the reused material that their recipe was based on. Since their business was very material-dependent it turned out that to become a profitable producer in their market it made more sense to use the cheaper circulated and re-used materials that, according to the interviewee, made up to 95 per cent of their recipe. The most modern materials would have been way more costly. The context, in the form of material prices, had therefore been an inspiration and set boundaries for the business.

Also vital for the business was the knowledge of the existing side flows of resources that the interviewee possessed. Hence, the context for a business, referring to the surrounding system of resource flows and the business opportunities lying in that system, was there to be discovered. Possibly due to the described nature of the business, when asked about what circular economy

means to the interviewee, the efficient use of natural resources that had already been collected and avoiding the waste of vast amounts of energy contained in the resources once used were heavily emphasised by them.

Due to the highly sophisticated technical and practical dimensions of product development, the roles were perhaps clearer in the early stages of Company D's existence than they might have been in the case of many other start-ups. The flow of leadership between the leaders, followers, and formally equal members of the team was natural depending on the part of the business that required some decision-making or problem-solving. The people responsible for product development made many decisions regarding their area of expertise and then offered rather complete answers to the other sections of the organisation. This sort of specialised decision-making from early on was made possible by the very different competencies among the founders and other early members of the organisation. According to the interviewee, the divergence between economic expertise and technical expertise in the team, for example, was very clear and well-acknowledged from the very beginning.

While it might not be the case for every circular start-up, or a circular business of any age or size, the innovation behind the product of Company D seemed to attract the people of its niche to offer help and their know-how for the betterment of their product. As the interviewee put it, there had been dozens of people who had provided them with guidance at different points of their journey and that willingness to help often stemmed from mere interest in the topic. The curiosity of people from outside the organisations might not be a circularity-specific thing but it seems more probable for businesses with innovative business ideas and a lively network surrounding them.

Company D's role as a circular manufacturing business made it natural for them to form a network with other companies that had circular elements to their business in the form of utilising their side flows or manufacturing circular materials ready-for-use. This was an instance of the purpose of the business leading to a formation of a whole circular ecosystem in the context and environment in which they operate. This ecosystem involved different operators who contribute to the circular flow of resources whether it means providing resources, producing recycled material, or manufacturing a product from these resources and materials. Similar to the notion made in the case of Company C, the circular business model seems to create opportunities for itself by

encouraging other businesses to seek and take advantage of circular opportunities generated by other businesses with circular elements.

On the other hand, this interaction between purpose and context, circular business model and circular economy, might also have some unwanted consequences over time. Since it was stated by the interviewee that the price of circular materials was one of the drivers behind the decision to strive for circularity in their business endeavours, their effect on the promotion circular economy might end up accelerating the rise of prices of circular materials thus making their own business that much less cost-efficient. However, the development of the market regarding supply and demand is hard to predict and the prices of the resources and materials could also not end up being a problem. Leadership-wise, this could lead to a change where in the leadership model (Ladkin, 2010, p. 28) the emphasis shifts from the purpose leading the business to the context leading business. That shift cannot be deemed as a solely bad thing for a business, but the consequences of giving up too much of the agency to one part of the leadership moment model are unforeseeable.

4.1.5 Company E

Company E was a circular start-up offering transportation as a service. A familiar pattern from the previous cases, the founder came up with the idea for this circular business by going through a thought process dealing with the feelings of significance and meaningfulness in work:

“- there are times in life when there is stress and whatnot, and it is at those times when you ask the question: why? - - and then I started to think that there might be something interesting about this, seeing what is happening in the world, big trends such as urbanization, climate change, health and well-being trending etc. and it all indicates that there are big changes ahead in transportation.” (I5)

An important leadership dynamic in the initial stages of the company's journey was the positive feedback from potential clients that indicated a potential market gap for a business like this. In

the words of the interviewee, it was not only about the pure need for a service like this, but also about wanting to be a part of the movement of sustainability:

“- the reception was mostly positive... - - The trends of the time and all are so that this is seen mostly a very positive thing and something worth supporting.” (I5)

Like Company B, which collected plenty of data from their customers already during the early stages of their company, the customers and partners of Company E were also a great influence during their product development. Rather than waiting out which decisions will end up having positive outcomes and which will not, the CEO-founder of Company E preferred to have an open and ongoing conversation with their customers and to ask their opinion before making any decisions with long-lasting consequences. These decisions had to deal with, for example, pricing and expanding the catalogue of the services produced by the company.

“For the most part, the customers have been very helpful and understanding and helped us to become better in this thing. Much more barriers to development have been inside the minds of our own, like “can we do this”. When we have proposed something to the customer, they have said that it is just fine.” (I5)

The customers could influence decisions and therefore had a role in enacting leadership in some moments. This was another example of an agency that customers can possess, especially in start-ups. In terms of the leadership moment model (Ladkin, 2010, p. 28), the customers can be construed both as a manifestation of purpose and context since they can be included in either one of the dimensions depending on the specific instance of a leadership moment and the way the company wishes to see their customers. For Company E, the customers were simultaneously a part of the environment in which the business operates but also at the very core of the purpose of the business as the organisation had chosen them to be their purpose. This also sets apart the purpose aspect of the leadership moment model in circular start-ups and the circular business model, since in the case of Company E they chose to expand their service catalogue to answer the requests of their customers, even if it meant that they had to revise their business model.

The extent to which the followers were involved in decision-making was not directly addressed in the interview, but the interviewee described their attitude towards recruiting and decision-

making in a manner which suggests that the atmosphere they are trying to create encourages the flow of the leadership between leaders and followers in a leadership moment. The word the interviewee used was 'validated learning' which, in their words, referred to daringly taking action but learning from the occasional mistake made. At the same time, there was a certain requirement of self-guidance towards all the members of the organisation, since the number of personnel was still small, and some things had to be done regardless of the formal roles. This conception involved the attitude of not being afraid to "get one's hands dirty", an approach that was applied to formal leaders as it does to personnel in no managerial position.

When it comes to the model of a leadership moment this brings about the viewpoint of leading oneself. An interaction could be distinguished in the case of Company E, where the purpose of the company, which affects the organisational culture, made it clear to the members of an organisation that they were assumed to lead themselves to get the purpose of the business realised. Simultaneously, this positioned the follower and the leader in an equal position regarding leadership behaviour and responsibilities.

Practicalities can also be the defining factor in a leadership moment taking place. The need for leading oneself is necessary for the *modus operandi* where the decisions are made regardless of formal roles or position in the hierarchy and instead valuing the knowledge of the acute situation and the conditions for quick decision-making. In other words, for Company E this meant that everything that can be decided at the site should be decided there. This is another example of a firm policy and organisational culture moulding the leadership moment.

The interplay between the purpose and context is also evident in the case of Company E. As the context of circular economy and sustainable development made it possible for the business to exist in the first place, their purpose, deeply rooted in their values and carried out by their circular business model, was also changing the way people think about the questions of transportation that they provide their circularity-themed solutions to. Hence, the purpose had at least partly changed the context while the context had made the purpose viable business-wise.

The adaptive business model of a circular start-up had specific implications for the stakeholder relation of Company E. They had difficulties applying for institutional support since the plans of the company would change too rapidly to put together a coherent and up-to-date application.

Much like with Company A, this meant that private investors and financiers were necessary for the network of Company E. In addition to the purely financial side of the network, an advisory board was also founded to help the company address the stakeholder relations which were deemed to be important for a circular start-up.

4.2 Analysis of the leadership moment in circular start-ups

4.2.1 Context taking the lead

In the previous section, I presented several examples of context leading the business. From the point of view of the leadership moment model, the dimension of context could be perceived as affecting the other dimensions of people and purpose. In all the analysed companies, the purpose of the business can be traced back to the transition towards a circular economy taking place in the world around them. On one hand, the founder of Company A named the interest in the technology surrounding their field of business as one of the drivers for establishing the company while the representatives of Company B, Company C, and Company E stated their values and the perceived need for change as one of the reasons why they wanted to become entrepreneurs and do it as a circular business. On the other hand, Company D's interview showed no signs of the context influencing them value-wise. These views, on the state of the world and the felt need for action, shared by the majority of the interviewees, are not adopted in a vacuum. Context always plays some part in the formation of personal motivation. This can also be interpreted as an interaction between context and the people, leaders and followers, in a leadership moment.

The context also presents the business opportunities that are capitalized on by the circular start-ups. Personal experiences on the lack of service provided by the markets, such as in the case of Company B, is an example of the context offering openings for doing business. Company C utilises the broader transition towards circularity and spread awareness of environmental issues by setting up a new field of consultation business aimed at businesses and consumers in general. The founders of Company D were inspired by the idea of circularity, and they had the idea of

using side flows even before they had their accurate business idea figured out. Even though the interviewed co-founder did not state the context affecting them in terms of personal values, the context nonetheless provided them with a business idea and a market gap. These are all examples of context-induced business, or in the terms of leadership moment model, purpose.

The boundaries and barriers set by the context, whether it be regulation set by authorities, predominant behaviour of consumers, or some feature of the markets, may shape the business or force it to do things in a certain way. The lack of governmental support was pointed out by Company A's representative, but the perceived lack of financial support from the government was not a sentiment shared by all companies. Company B had to adopt the role of lobbyist to reach their goals in a market that was regulated unfavourably for them whereas Company D have to operate prone to the possible rise of costs of materials vital for their business since the recycled materials and side flows are gaining popularity over time as the trend of circularity keeps on gaining momentum.

The circular economy can shift the focus and points of interest when it comes to the question of which industries are trending. Company E was founded based on the observations of the entrepreneur about what is going to change following the transition towards a circular economy or at least towards an economy with more circular traits. This thought process, which was also a decision-making process of sorts, was also influenced by the entrepreneurs' search for a deeper purpose in their work. This is an example of the context of circular economy interacting with the leader by giving them the vision to work towards and making them motivated to inspire others to do so as well.

There are signs of an intrinsic communality or a sense of community in the circular economy and that seems to have some implications for the interaction that the companies have with their customers and other stakeholders. The extent to which this can be credited for the start-up nature of the businesses is another question but the phenomenon itself is evident. All the interviews analysed in this research contained some remarks on the importance of networks, financiers, and open interaction with customers. Company A, Company B, and Company E all engaged their customers in the development of their products, and they had an ongoing conversation about their customers' wishes and needs considering the services provided by the companies.

4.2.2 Purpose taking the lead

As stated in the previous chapter, context often shapes the purpose that a business acquires as its own or that it is given by its founders and other members of the organisation. However, this purpose has implications of its own as the business sets out to carry out its purpose. The purpose was proposed to be represented by the circular business model of the company in the model of the leadership moment in circular start-ups. The validity of that suggested model is addressed in Chapter 5, but the circular business model was the initial framework when making observations on purpose taking the lead.

In many of the interviews, it was stated directly or indirectly by the interviewee, that the idea of the business was to be a part of the transition towards circularity or make it easier. This sets some clear conditions for the business that it needs to play along with to maintain its identity as a circular business. The interviews contained some examples of decisions guided by the purpose of the company. Company A was based on a technology that the interviewed founder found interesting, and that technology set the standard for circularity in the company which is not to be compromised by the business operations. Likewise, Company D had to put some additional effort into the search for a complementary material to stick to the principles of circularity which they chose to stick to no matter the circumstances.

In some cases, communality might be part of the purpose of the company, especially if the circular business model deals with the themes of sharing economy. This is particularly apparent in the business models of Company B and Company C. Company B brings together the owners of the unused property and those in need of this property without having it in their possession. Company C's business is partly about connecting consumers with the provider of an eco-friendlier solution to their problem. Communality is also unavoidable because of the circular nature of businesses. The materials or innovations needed in the products or services produced by the circular businesses must come from somewhere.

When the circular business based its existence essentially on finding a solution to a problem or a need identified in a specific market or community, the company often ended up expanding or

modifying its business to provide additional services to the customers of the original service, which was the case with Company B and Company E. Therefore, it can be argued that the purpose of these businesses was not to solve only one problem but to serve and answer to the multiple needs of the identified customer base. This challenges the proposed model for the leadership moment in circular start-ups by pointing out the differences between a strictly defined circular business model and the deeper purpose of the business. In a sense, these companies had customers being a part of two dimensions in the leadership moment model, context and purpose.

The business model of a company does not usually change from day to day but whether the purpose of a business can change or not is an interesting question that became relevant during the process of analysis. This was evoked by the notion of the adaptability of the business model during the early stages of the company which is often the case among start-ups. Returning to the concept of the leadership moment and its phenomenological foundation, it seems unavoidable to acknowledge that the purpose aspect of the leadership moment cannot be invariably connected to the circular business model. The purpose of a business may or may not change over time and the uniqueness of each leadership moment would not hinder the inclusion of a circular business model as an explanatory factor to leadership in circular start-ups. However, in some leadership moments, even in circular start-ups, the circular business model might not have even the slightest significance, when the purpose shared by leaders and followers is something deeper that can be entirely separated from a business model.

4.2.3 People leading other people and themselves

Leaders and followers, representing the dimension of people in the leadership moment model, had a vast range of 'leaderly' effects on the businesses based on the interviews. A part of these leadership mechanisms can be explained by the start-up identity that the companies represent. A mentality that can be described as "everybody does everything" was prevalent in all the companies talked about in the interviews, especially in the early stages of their development. The low number of members in these organisations explains the need for "getting one's hands dirty"

regardless of the formal position in the company. Based on this research, it seems to be more of a rule than an exception that roles are fluid in the start-up team. Over time the roles get clearer, and the different competencies of the team members tend to stick out when distributing tasks.

A certain flow of leadership was a striking phenomenon amongst the ranks of the start-ups. This can be guided by the competencies, situational knowledge, or the physical location of the team members. As the leadership moment, which could be a very casual or mundane decision-making situation or some 'leaderly' action with more severe repercussions, takes place in a certain place at a given time, the leadership can 'flow' to the person who happens to be there, has the most information about the situation, or has the competency to solve the problem. This might or might not be the same person, but there were great examples of this kind of flow of leadership in the interviews.

In the case of Company B, the interviewee stated that "it is easier to apologize than to ask permission" and therefore making decisions on the spot is encouraged in the organisation for the sake of efficiency. The interviewee representing Company E stated that since their operations are located in multiple different places, it is important that the team members even with a formal position that makes them considered a follower must have the courage and know-how to solve problems at the spot since it would be unpractical to always reach out for the leaders who could be in a different country altogether. This has had some implications for recruiting as stated by the representatives of Company A and Company E, in terms of what they have experienced as unsuccessful recruitment and what are they focusing on when recruiting in the future.

There were often different competencies present amongst the founders and accumulated along the way in the form of recruits. Examples of this variety in skills among the start-up teams were to be found in all the interviewed companies. A lack of expertise in some field of operations seems to be often acknowledged along the way as it shows itself in some form and is then tended to through recruits or consultation. In a sense, while a specific kind of expertise is looked for, also a need for a certain kind of leadership is sought to be fulfilled.

Innovations from all levels of the organisations are called for by the interviewee representing Company A. Also, in the interviews concerning Company B and Company E, the self-regulation and self-guidance of the team members are underlined as a condition for the business to

succeed. This is needed due to the low hierarchy and the small size of the organisations. Leading oneself seems to be integral for the operation of a start-up and something that is not only encouraged but also expected. This brings an interesting viewpoint to the leadership moment model since the mechanism affecting the leadership moment taking place when one is to lead actions of one's own can be highly complex. The data used in this research does not allow the analysis of this process when it comes to followers leading themselves, but this is a phenomenon worth noting as part of the leadership moment model.

However, the leadership moment can be approached from the personal level by observing the leaders' inner motives and their effect on the leadership carried out. The interviewees representing Company B, Company C, and Company E all implicated that their personal values considering the environment, society, and meaningful work had impacted the decision to start doing circular business. These views and values all contributed to the way how the business and therefore also the purpose of the business were shaped. In a way, it can be argued that the purpose of the business is a way of not only to realise the values of the founders but also to communicate and share them with others, followers and stakeholders included. This is an interpretation that supports the proposition of environmental leadership as the concept explaining the human interaction in the leadership moment in circular start-ups since the described communication is a way of influencing others and mobilising an organisation to realise a vision of sustainability (Egri & Herman, 2000).

Both, the involvement of all team members and the way of using the purpose of the business as a tool for communicating values, add to the evidence of the exceptional communality at the core of start-ups. Another notion worth pointing out was the way how the interviewees described what circular economy meant to them. It turned out that without exception the idea that the interviewees had of circular economy captures the business model of their own business and describes adequately what they are doing in terms of circularity without necessarily capturing the holistic idea of the circular economy.

In some cases, it appears that the fact that they are part of the circular economy only had become clear to the interviewees after they had started doing business, but it is nonetheless interesting that their identity as a circular business was that much clearer to them than the concept of circular economy as a whole. The interview question on the conception of the circular

economy did not seem very fruitful for the research of the leadership moment model, but when considering the interpretation of purpose being a tool for the leaders to share their values and goals with the organisation, it settled into a new light. It seems that a circular business model is a useful tool for the leaders themselves to figure out how their business positions itself to other businesses and as a part of society.

The roles of the interviewees as the founders and CEOs showed in the way they addressed leadership and responsibility. As the start-up teams are relatively small and all the members are very much involved in the business, a consensus in decision-making is often desirable but also reachable. It was common in the interviews that the flow of the leadership described earlier was mentioned taking place, but the representative of Company A mentioned that they “of course had the ultimate responsibility as the CEO” and sometimes ended up acting against the opinion shared by the majority of the team. This cannot be taken as a clear indication that the traditional leadership behaviours of the high hierarchy are unavoidable, but more of a reminder that the formal roles of a leader and a follower are prevalent everywhere where leadership takes place and can be defined by the responsibility for the outcome of decisions, for example.

4.2.4 The interplay of context and purpose

One of the clearest manifestations of leadership taking place that can be taken away from the interviews is the constant interplay of the context and purpose aspects of the leadership moment model. In the initial proposition for the leadership moment model for circular start-ups the context was defined by circular economy and the purpose was represented by the circular business model of the start-up. Whether this proposition holds through this research will be evaluated in Chapter 5, but the broader interpretations of context and purpose offer some interesting observations.

The context in which these circular start-ups operate is defined by the society surrounding them, including people, institutions, other companies, authorities, and the natural environment. All these factors shape the business environment in which each of the research subjects operates and are also building blocks of the world in which each member of the organisation lives. There

were indications in all five interviews of the context being one of the focal points behind the original business idea founded by the interviewees.

For some, the motivation and inspiration for doing circular business stemmed from the realisation of the environmental crisis or the downsides of modern consumer culture, whether this information was received by reading research papers or by simply following the news or the general discussion around the matter. In the case of Company D, the environmental aspects were not the driving force but rather the notion of potential in the industrial side flows in terms of the material availability and cost. Nonetheless, the context, as in the environment and surroundings of these people, was the foundation for the business.

During the analysis of the transcribed interviews, it became clear that the recognition of one's values or a business opportunity was often very integral in the formation of the purpose of the business. This was eminently evident in the interviews of the founders of Company B, Company C, and Company E. The purpose of the business is not solely, but to some extent, conveyed by the business model of the company. The desire for working towards sustainability, offering resource-efficient solutions, or developing and utilising new technologies have been a great influence on the business models taking form according to the interviews. These desires do not emerge in a vacuum and the context is always a factor.

Interestingly there seems to be a built-in feature in the circular business models of the companies under study. The intentionality of this mechanism varies, but in every interview, it was either directly expressed or indirectly indicated that the business aims to affect the environment in which they operate or that at least some kind of an effect is possible or likely to take place. Even in cases where the product manufactured or service offered was not literally about influencing people and markets or providing informational services, the interviewees mentioned their desire to change the existing system or help develop more sustainable technologies and ways of doing things based on circularity.

This goal of changing the system, the way people think, and the way how people see businesses often could be predicted to change the business environment towards a state that is also more favourable for the business itself. There lies a self-reinforcing cycle in this mechanism where circular businesses promote a circular economy which is also a more fruitful system for a circular

business to find success. Company C was an example of this influential pioneering being an important motive for leading a circular business instead of becoming a non-governmental organisation. Their interest was not only to become a profitable business but also to pave the way for others and prove that such a circular business was something that could be done.

An interesting interconnectedness takes place in the case of Company C where the interplay leads to a formation of a circular ecosystem. The circular business model of the company was heavily influenced by the existence of side flows in the industries familiar to the founders, which can be interpreted as the context influencing the purpose. The business is dependent on the materials while the providers of the materials would profit from the side flows which might otherwise be considered waste. Some businesses process the materials from side flows into a form which can then be made use of by other businesses. The circular form of interaction is evident: context gives a purpose to a business and that purpose creates a new context for others to thrive in.

4.2.5 The leadership moment and environmental leadership

The findings of the empirical analysis support the proposed model for the leadership moment in circular start-ups (Figure 2) when it comes to the interaction of the dimensions of the leadership moment model in leadership taking place. However, the concepts of circular economy, circular business model, and environmental leadership that were introduced as explanatory pieces of the model describing the interaction of the four dimensions have varying roles in defining the leadership moments examined in this research. Instances of the context and purpose aspects of the leadership moment model 'taking the lead' were introduced in the previous sections with clear indications that the concepts of circular economy and circular business models captured the essence of those dimensions of the leadership moment in circular start-ups.

Where the proposed model for the leadership moment in circular start-ups fails to capture the phenomenon according to the empirical analysis, is the way environmental leadership is applied in the model. When the instances of 'leaderly' action were analysed and examined from the standpoint of each dimension of the leadership model while simultaneously evaluating the

applicability of the explanatory concepts, it became evident that environmental leadership could be applied to most leadership moments. Since the leadership moments in the data were numerous, I present here only selected examples.

Company A had its existence rooted in a circular technology and the utilisation of that technology was the principle that, according to the interviewee, set the standards for circularity that were not to be compromised by any of their business operations. From the perspective of environmental leadership, this was an example of a leader guided by eco-centric assumption (Egri & Herman, 2000) who seeks to change the system by mobilising their organisation to realise a vision of sustainability. Although the inspiration for the leader was the technology and not eco-centric values per se, the vision remains the same. The interaction in this leadership moment involved the context which provided the leader with the technology and that technology also defined the purpose of the business. Noteworthy is the fact that the interaction of leaders and followers was not the only and not necessarily even the most central of interactions of this leadership moment.

Like in the case of Company A, the establishment of Company D was not solely based on eco-centric values. Instead, the most focal driver for the company was the market gap consisting of cheaper circular materials and a demand for a circular product. Nonetheless, the business idea and the purpose of the business were uncompromisingly circular and working towards a circular vision. Hence, the part of environmental leadership describing a leader seeking to change the system is relevant for this leadership moment since the motives of the mobilisation taking place do not have to affect the goal of the mobilisation. The goal, in this case, would be circularity in their field of business (Egri & Herman, 2000). Additionally, the dimensions of context and purpose are involved in this leadership moment as well. The circular market gap is part of the context while the circular business model inspired by the context is, in a sense, the purpose of the business.

For the representatives of Company B, Company C, and Company E the eco-centric values were an important factor in their interest in starting a circular business. Thereby, the leadership moments taking place in their companies are in line with the complete definition of environmental leadership (Egri & Herman, 2000). From the viewpoint of environmental leadership manifesting itself in leadership moments in circular start-ups, the exact circular business model of the

studied company does not matter as the pieces of environmental leadership are there, nevertheless. In these companies that typify environmental leadership, the leaders motivated by eco-centric values utilise their ability to influence others and organise operations to realise a sustainable vision by changing systems threatening the health of the biophysical environment (Egri & Herman, 2000). Like in the previous examples, environmental leadership defines these leadership moments comprehensively including all the dimensions. There are multiple ways to the interactions among the dimensions of the leadership moment. For example, eco-centric values are acquired while interacting with the context and the context also affects the purpose of the company and the way it is manifested by a circular business model. Similarly, the purpose is a way of communicating the values of the leader to the followers while it also operates as a guideline for the operations of the organisation.

These instances of the leadership moment in circular start-ups, analysed from the viewpoint of environmental leadership, add to the evidence that the leadership moment model with its four aspects is a viable tool for studying leadership but, more importantly, the role of environmental leadership as a defining and describing concept for the leadership moment in circular start-ups proves to be the focal point in the model. Based on the results of this empirical analysis, it is justified to increase the emphasis that environmental leadership has in the model of the leadership moment in circular start-ups. Therefore, in the model developed from the basis of the proposed model for the leadership moment in circular start-ups (Figure 2) environmental leadership is illustrated as the overarching concept in the leadership moment in circular start-ups. The final model for the leadership moment in circular start-ups is presented in Figure 3.

To acknowledge the phenomenological undertone of this research it is worth pointing out that the analyses of the instances of leadership moments observed in the research data are not all-embracing or complete descriptions of the leadership moments that have taken place. There are two reasons why this is the case and why it does not undermine the relevance of these findings. Firstly, the reason why the leadership 'moment' model was introduced as the framework of this study is the fact that it is impossible to capture the true and total identity of leadership in a definite manner (Ladkin, 2010, pp. 28–29). However, the model is useful in figuring out what there is to be understood about leadership in the first place and one of the results of this study is that leadership is just as complex and pliant a phenomenon as the multidimensionality of the model

leads us to think. The model allows us to observe leadership from a chosen point of view and that is why some of the multiple perspectives are always left out of the examination.

Secondly, every leadership moment is different depending on its four dimensions of context, purpose, leader, and follower, and the researcher is always observing the phenomenon from the outside. Thereby, there is only a glimpse that is captured of the phenomenon in its entirety. This glimpse is limited by the scope of the theoretical framework, the knowledge of the phenomenon that is shared during the interview, and the interpretation of the researcher (Moran, 2000, p. 4; Seidman, 2006, pp. 9–10; Elo & Kyngäs, 2008; Krippendorff, 2019, p. 22). In this section, I tried to include enough examples to prove that the model for the leadership moment in circular start-ups is a viable framework for observing leadership while acknowledging that not only could the same leadership moments be approached from numerous different viewpoints but still only a part of the phenomenon would be grasped.

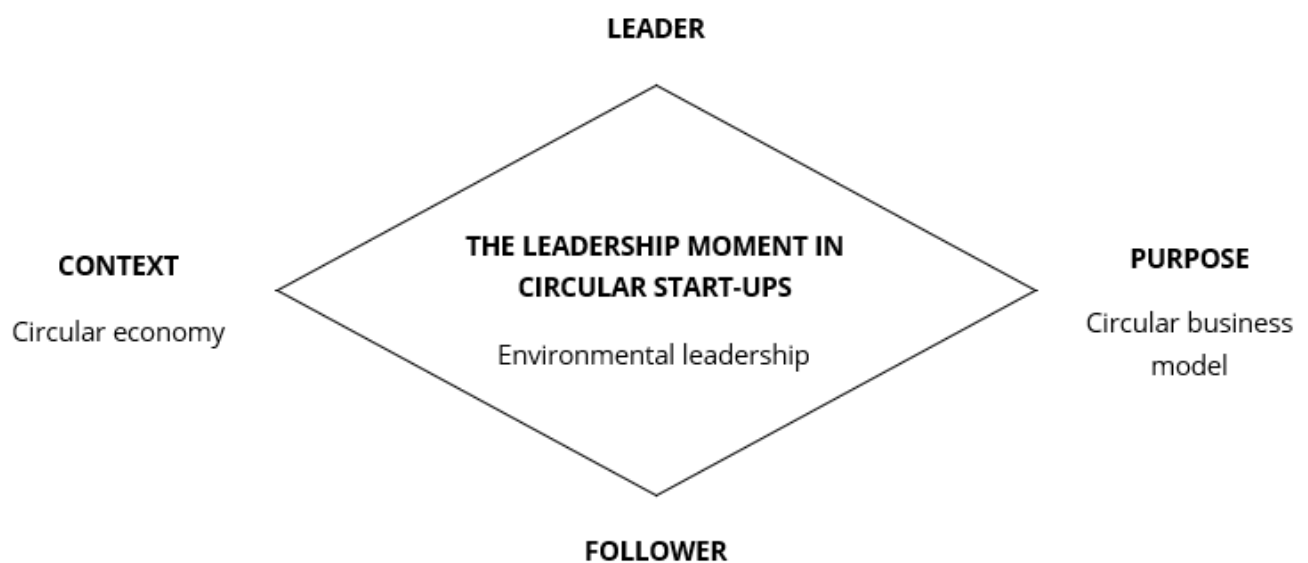


Figure 3. The leadership moment in circular start-ups

5 Conclusion and discussion

5.1 Summary of the study

The purpose of this study was to examine how the leadership moment model (Ladkin, 2010, p. 28) addresses the leadership taking place in a circular start-up and simultaneously evaluate the suitability of the model as a framework for studying leadership. The contributions that this examination had for leadership in circular start-ups were collected. Due to the research subject and the theoretical framework used to examine the phenomena this study also sought to contribute to the knowledge of circular economy, circular business models, and environmental leadership. The leadership moment model is a relatively new way of approaching leadership and that has the greatest effect on the novelty value of this research.

The theoretical framework included the introductions of the concepts of circular economy (Kirchherr et al., 2017) and circular business models (Geissdoerfer et al., 2020) which were integrated into the proposal for the model of leadership moment in circular start-ups (Figure 2) as defining factors for the context (circular economy) and the purpose (circular business model). Another integral part of the theoretical framework was the concept of environmental leadership (Egri & Herman, 2010) which was proposed to be the concept best defining the interaction taking place between leaders and followers of the leadership moment. The proposed model aimed to utilise the adaptability and multidimensionality of the leadership moment model to increase our understanding of leadership in circular start-ups. The interconnectedness of the four dimensions, purpose, context, leaders, and followers, resonated with the previous literature on the concepts of circular economy, circular business models, and environmental leadership and thereby it seemed initially suitable to introduce those concepts into the proposed model of leadership moment in circular start-ups.

The viability of the proposed model was put to test by applying it to real life through the empirical research setting involving circular start-ups and interviews of the co-founders and CEOs of those companies. The interviews of the five CEOs and co-founders were conducted as semi-structured theme interviews. Interviewing as a method for this qualitative inquiry supported the

phenomenological undertone of this research as it provides a way to gain an understanding of the phenomenon from within while respecting the view that phenomenon is to be viewed at its truest as it manifests itself to the experiencer (Moran, 2000, p. 4; Seidman, 2006, pp. 9–10).

The research data was analysed by using the method of content analysis guided by the theoretical framework (Krippendorff, 2019, p. 24). Hence, the coding process was mainly deductive, but the analysis and interpretation of the research data required some additional inductive processes. This was necessary because of the theory-elaborating nature of the study which meant that this research sought to elaborate on the existing general theory of leadership moment while also investigating the context of leadership in circular start-ups simultaneously (Ketokivi & Choi, 2014).

As a result of the analysis of the research data, the conceptual pairings of the proposed model for the leadership moment in circular start-ups still seem adequate frameworks for conceptualising the phenomenon of the leadership moment in circular start-ups, but it is also worth mentioning that none of them is an absolute description of the dimension they were suggested to stand for in the model. The empirical analysis showed that reducing environmental leadership to cover only the dimension of human interaction was an unfounded decision overlooking both the vastness of the concept of environmental leadership and the complexity of the leadership moment. Thereby, in the final model for the leadership moment in circular start-ups (Figure 3) environmental leadership is illustrated as the focal point of conceptualising leadership moments in circular start-ups without restricting it to define only one of the dimensions whereas circular economy and the circular business model of a business remained as the conceptual pairings of the context and purpose dimensions of the leadership moment model.

The final model for the leadership moment in circular start-ups makes it possible to examine leadership moments in circular start-ups while taking into account the phenomenological stance on leadership as a 'moment' which underlines that each instance of leadership taking place is unique (Sokolowski, 2000, p. 23; Ladkin, 2010, p. 28). Allowing the concept of environmental leadership to be used in examining not only the human interaction but all the interaction between the dimensions of leadership moment adds value to the model. The empirical analysis provided examples of the interplay of the context and purpose dimensions of the leadership moment in circular start-ups that were in line with the definition of environmental leadership.

The application of environmental leadership also presented the purpose of a circular start-up as a way of mobilising the organisation to reach its goals and communicating values inside the organisation.

As a result of the research, the leadership moment model proves to be a viable framework to study and analyse leadership in circular start-ups. The research subject of the study was specified as circular start-ups which leaves some ambiguity about whether the model is viable for analysing any other types of companies. Some of the findings might be applied to other start-ups, circular businesses of any size, or companies that are not circular or a start-up, but that cannot be proved based on this study. The theory of leadership in start-ups was covered as a part of the theoretical framework which makes it possible to address some of the findings considering the companies are also start-ups in general. Hence, this study has also limited contributions to the theory of start-up leadership. The knowledge gained using the concepts of circular economy, circular business models, and environmental leadership in the model for the leadership moment in circular start-ups is addressed and the suitability of the leadership moment model itself as a framework for studying leadership in circular start-ups is further discussed in the next section.

5.2 Findings and implications

5.2.1 Context and circular economy

Circular economy was proposed to be a defining factor for the context in the leadership moment model applied to circular start-ups. Based on the empirical analysis the role that circular economy can be interpreted to have in explaining the leadership moment in circular start-ups goes beyond that and is essentially two-fold. Originally, I tried to fit circular economy as the context in which circular start-ups choose to operate by their own choice encouraged by their strong belief that it is the economic system that will become prevalent. A perspective that I overlooked while making these presumptions was the inarguable and integral feature of a circular start-up and its purpose which is its aspiration to change the system and practically shift it towards a circular economy. This does not overtake the proposed premises of the circular economy's role in the

leadership moment model but adds to the relation that the circular economy has to the context dimension of a leadership moment in circular start-ups.

As illustrated in Chapter 4.2.4, the interplay of context and purpose, represented by circular economy and circular business model, respectively, was a clear outcome from the empirical analysis of the data. This interplay was not only focal for defining the purpose of a circular start-up but made it necessary to reassess the relationship between circular economy and context. The actual context at the time of a leadership moment taking place might not be accurately defined by circular economy even though those are the rules that the business has set for itself through its purpose and business model. Not even the belief of circular economy as the system of the future, embraced by the organisation, would alone assess the meaning of circular economy to a leadership moment in a circular economy sufficiently. The context may vary from time to time but what remains true to the relation that the organisation has with the context is its aspiration to change the context.

Regarding the role of circular economy in the leadership moment model in circular start-ups, it still seems that circular economy can be seen as tied to the context aspect of a leadership moment, but the interconnectedness of the model shapes the ways the circular economy can be argued to manifest itself in a leadership moment. The hypothesis of circular economy as the defining factor of the context in the leadership moment model in circular start-ups is supported by the findings of this study but the relationship proved to be more complex than in the proposed model.

The barriers and drivers of circular economy, introduced as a part of the theoretical framework, ended up projecting the mechanisms that the context can have on a leadership moment in circular start-ups. The problem of 'green prison' (Pacheco et al., 2010) described the situations standing out in the analysis where the legislation was unfavourable for a company and that is why they needed to lobby for the regulation to change. There were also examples of the circular principles narrowing the choices a company has and of the commitment to circularity forcing the company to become exposed to the harms of volatile prices.

Alvarez and Barney (2007) described creation and discovery theory as two internally consistent theories on the formation of entrepreneurial opportunities. The creation theory gets affirmation

from the interplay of the context and the purpose dimensions of a leadership moment. As the work of a circular start-up can be interpreted to create new opportunities for itself and in the field of circular economy in general, it seems evident that entrepreneurial action creates opportunities, that would have not otherwise come into existence. In a way, circular start-ups do not simply spot a market gap and seek to profit from it but sometimes they create and expand a gap of their own by affecting their whole business environment. The whole premise of a business might be an outcome of a context-driven leadership moment where the leader has been inspired by the environment to find a way to change the system and find meaning in one's work. The aspiration to change the system supports the view present in the existing literature on the systemic rather than technical nature of the circular transition (de Jesus & Mendonça, 2018; Kirchherr et al., 2018).

Communality, which emerged as a distinct feature of a circular start-up, appeared as an important driving factor for the circular start-ups, according to the interviews. Networks were seen as an enabler for circular transition in previous literature (Rizos et al., 2016) while the importance of stakeholder relations was also showcased as a source of uncertainty among sustainable entrepreneurs by Hoogendoorn et al. (2019). The central role of stakeholders is further affirmed by the fact that these circular start-up companies that were doing well at the time of the interviews pointed out the necessity of the support they had got from their network implying it had not turned out to be a barrier at that point, but it could have. The lack of institutional support could be one of the reasons for the emphasised importance of a network and stakeholder relations among circular start-ups, but there were not enough examples of this relation in the data to conclude this based on this study.

5.2.2 Purpose and circular business models

Circular business models were proposed to stand in for the purpose aspect of the leadership moment model in the case of circular start-ups. After analysing the data that proposition seems a rather cursory take on the purpose dimension of a leadership moment even though it cannot be dismissed as inaccurate since the findings do not disprove the hypothesis of a business model representing the purpose of a business to some extent. However, it seems unreasonable

to reduce the purpose of a circular start-up solely to its circular business model based on this research. The purpose aspect in each leadership moment can be uniquely interpreted by the people taking part at that moment, but that is part of the interaction in the leadership moment model and does not necessarily mean that the purpose has essentially changed between moments. A circular business model is a more definite concept and therefore it seems reasonable to assume that the circular business model is changed over time in service to the purpose of the business and not the other way around.

An implementation of a larger goal is certainly a part of the purpose of an organisation, but it does not catch the entirety of such a complex phenomenon as purpose. The circular business model is, however, a practical and observable instance of the interplay of context and purpose taking place as it is literally a business model that is about “cycling, extending, intensifying, and/or dematerialising material and energy loops to reduce the resource inputs into and the waste and emission leakage out of an organisational system”, meaning it is realising circularity (Geissdoerfer et al., 2020, p. 7). Therefore, circular business models are inarguably a way of carrying out principles of circular economy in practice for a circular start-up and hence an example of a purpose influenced by the context. When it comes to the purpose of a business, the business model appears to be more of a way to implement the larger purpose of an organisation than the actual purpose itself. The meaning of the purpose of the business must be shared among the leaders and followers alike for leadership to take place, whether it is explicitly or implicitly determined (Ladkin, 2010, p. 28).

Where the circular business model can be found lacking as a representation of a purpose, is in the way purpose interacts with other dimensions of the leadership moment model. The circular business model does not capture the mechanisms of the purpose of a business changing the context or working as a tool for communicating the values of the leaders to the rest of the organisation. This is highlighted in the cases where the business model might have changed, but the purpose of the business remained roughly the same. Additional support for the view of the purpose exceeding the business model was offered by the interviews where the interviewee had directly stated the purpose of the company. These conceptions of the purpose of the company, as stated by the founders and CEOs, rarely were strictly derived from the definition of the circular

business model the company could be associated with. More often the purpose was connected to the context by having the customers rooted in the core of the purpose.

The barriers that each company with a circular business model faced differed from each other which was expected based on the existing literature (Tura et al., 2019; Vermunt et al., 2019). Even if the circular business model describes the purpose of a business only partly, this does support the fact that purpose does affect the leadership moment. There were no instances of difficulties arising from the employee level when it comes to implementing a circular business model, which is in line with the observation of Guldmann and Huulgaard (2020) on circular start-ups. This could be explained by the purpose taking the lead in some situations since it seems that the followers must have some understanding of the values of the company and where they stand in terms of circularity. The purpose of the company is recognised by the followers and thus there are no surprises and no resistance to doing circular business. In the case of a circular start-up, the company has been 'born green' and there is no disruptive implementation of new eco-friendly values taking place, so it would be a wonder if the employees did not know what they had signed for.

While the important role of the network was acknowledged by the interviewees, the undertone remained positive and no examples of the network becoming a barrier were given. This is a difference when compared to the previous notions made on circular SMEs (Rizos et al., 2016). The sample used in this research is small and the reasons for this phenomenon cannot be strictly induced based on the interviews, but the start-up status of a company could be a factor that explains the functionality of the network. After all, the start-up would not have been founded and survived the very first years of its existence without a functional network.

5.2.3 Leaders, followers, and environmental leadership

Environmental leadership ended up not only describing the interaction between leaders and followers in a leadership moment but also the various interactions between all the dimensions in the leadership moment model. Environmental leadership was described by Egri and Herman (2000, p. 572) as "the ability to influence individuals and mobilize organisations to realize a vision

of long-term ecological sustainability. Guided by eco-centric values and assumptions, environmental leaders seek to change economic and social systems that they perceive as currently and potentially threatening the health of the biophysical environment.” Considering this in the light of the results of the analysis the description includes several implications for the leadership moment model. The two sentences of the description can be dissected through the lens of leadership moment as follows.

Firstly, the dimension of influencing and mobilising the realisation of a vision of ecological sustainability already contains several points of reference to the phenomena recognised in the analysed interviews. As stated in Chapter 4.2.3, the purpose of the business is a means of communication for the founders to share their values and drive the change they want to see in the world. In this described interaction we have a system where all four dimensions of a leadership moment, leaders, followers, purpose, and context, are involved. The clearest takeaway from this interconnection is the mechanism in which the leader uses the purpose to mobilise followers to change the context, but as stated earlier, the interplay between the four aspects of leadership moment is a complex phenomenon and an ongoing process. This way of thinking also addresses the challenge that environmental leadership has in interpreting and executing the ways of linking the sustainability of the organisation to the wider system in which the organisation operates is of great importance (Metcalf & Benn, 2013). The purpose of the business, if it is made clear to all the members of the organisation, can operate as a guideline in daily operations and as a comprehensible link between the business and its meaning for society.

Secondly, the notion of environmental leaders being guided by eco-centric values and wanting to change economic and social systems aligns with the notion brought up in Chapter 4.2.1 highlighting how the context unavoidably affects the formation of eco-centric values, since there would be no need for action felt if there was nothing perceived as being off with the world in the first place. Noteworthy is also the fact that people also tend to be influenced by each other when it comes to personal values shifting, changing, and taking form. The change-seeking nature of the circular start-ups is evident in the relation of purpose and context dealt with in Chapter 4.2.4. The way circular start-ups aim to change the system towards a circular economy fits the description of environmental leadership.

Transformational leadership and other leadership behaviours that can be included in environmental leadership were to be found in the analysis. Largely shared duties and an attitude of “everyone does everything” accompanied by the eco-friendly values of a circular start-up create a setting in which the followers are engaged, and they also get to satisfy their higher needs, matching the description of transformational leadership. Additionally, most of the interviewed CEO/founders expressed their environmental values. These remarks are similar to the ones made by Egri and Herman (2000) on the environmental product and service industry.

The pro-environmental beliefs and values of the leaders are integral to fostering environmental commitment (Jang et al., 2017). This condition seems to be fulfilled by most of the circular start-ups surveyed during this research and even in the cases where this sentiment was not brought forward by the interviewee personally, the environmental themes were embedded in the business model of the company. Through the lens of the leadership moment model, it can be perceived that environmental values are either guarded by the people or by the purpose, depending on the situation. The purpose can be interpreted as a form of organisational support and environmental leadership that mediates environmental beliefs into environmental organisational citizenship behaviour (Khan et al., 2019; Kim et al., 2020). Stakeholder engagement as a part of environmental leadership was also brought up by Jang et al. (2017) and that was supported by the accounts of the interviewees.

Reflecting the findings of this study on the existing literature on environmental leadership, it seems that transformational leadership has some fruitful contributions in explaining and describing the interactions of the leadership moment in circular start-ups. Part of transformational leadership is inspiring others and communicating the vision that the organisation is working towards. This is known to enhance team resilience and commitment (Çop et al., 2021). A manifestation of transformational leadership as a part of environmental leadership is the role that the circular business model and the purpose of the organisation have as a mediator of the values of the founder.

Interesting common ground was to be found between the findings of this study and the literature on both start-up leadership and environmental leadership. In addition to the previously mentioned and explained presence of transformational leadership in circular start-ups, there are leadership concepts that could be described as sharing a theme of communality appearing in

circular start-ups. The interviews included many examples of the interviewed leader describing the organisational culture as inclusive and encouraging when it comes to followers taking action, making decisions and innovating. This has traits of shared leadership, common in start-ups (Ensley et al., 2006), and inclusiveness in leadership, which has positive effects on psychological climate and creativity in environmentally oriented contexts (Bhutto et al., 2021). This kind of leadership, based on crowdsourcing of sorts, allows the followers to affect the course of an organisation with their pro-environmental behaviour (Kim et al., 2020).

Another aspect of leading people in circular start-ups is the leading of oneself. This aspect might not be obvious from the viewpoint of the leadership model, but the model and the concept of environmental leadership still offer the required tools to observe this kind of leadership taking place. The data included many examples where the leaders accentuated the need for initiative and self-direction among the ranks of a start-up team. When the leadership moment is approached from the point of view of an individual, some moments might consist of a person making a decision on their own without any direct contact with another person. When a decision of that kind is made by a person in a follower position, the influence of the leader has taken place before the actual moment of decision-making and has been conveyed mainly by the purpose of the business that communicates the vision of the leader. These kinds of leadership moments emphasise the interaction between the follower and purpose dimensions of the leadership moment model but still include the dimensions of leader and context having their effect on the form that the purpose has taken and the position of the follower as a decision-maker.

5.2.4 The leadership moment in circular start-ups

The leadership moment model was presented by Ladkin (2010, p. 28) as a conceptualisation of “the interactive and context-dependent nature of leadership”. Based on the phenomenological category of a ‘moment’ (Sokolowski, 2000, p. 23), the model was designed to address the complexity of leadership while also offering a tool to distinguish and discern an instance of leadership being expressed. Considering the complexity of sustainability, which could be argued to be

a central theme in environmental leadership, the leadership moment seemed like a fruitful tool to study especially leadership in circular start-ups (Metcalf & Benn, 2013).

The leadership moment in circular start-ups proved to be a model that could help to outline any instance of leadership that was found in the analysis of the data used in this research. There were examples of all the aspects of the leadership moment taking the lead at some point in the early stages of circular start-ups. With the help of concepts of circular economy, circular business models, and environmental leadership the interaction of the dimensions of context, purpose, leader, and follower could be described. The interplay of context and purpose, defined by circular economy and, to some extent, circular business model, turned out to be one of the most interesting interactions with practical implications for the creation of business opportunities among circular start-ups. In a sense, a leadership moment took place even before the company was established in the creation of the business opportunity. The barriers and drivers of circular economy and circular business models were handled with 'leaderly' actions that could be observed using the leadership moment model.

Environmental leadership supplemented by the concepts of transformational leadership, shared leadership, and entrepreneurial leadership capture the multi-dimensionality of the leadership moment model in terms of interaction between the dimensions. As environmental leadership aims to the realisation of a sustainability-driven vision and a change in the system by influencing individuals and mobilising organisations (Egri & Herman, 2000), this premise already includes leaders, followers, and context influencing each other. Shared leadership shifts the leadership amongst the team members and in some instances that means the follower taking the lead (Ensley et al., 2006). The context influences the vision that is manifested as a part of entrepreneurial leadership (Gupta et al., 2004) and one of the means to get others committed to that vision is transformational leadership (Burns, 1978, as cited in Stewart, 2006) and can be communicated by the purpose of the business. The ability to influence others to work towards a goal of ecological sustainability brings us back to environmental leadership.

The interaction described is only one simplification of leadership taking place that can be captured using the leadership moment model and other concepts deemed suitable in the specific context. The leadership moment model addresses leadership in circular start-ups to a degree that allows new paths for research to be taken and supports the validity of the model as a

helpful tool for studying leadership. The way the model embraces the fluidity of leadership and a certain flow of leadership between the dimension seems very suitable, especially in the context of circular start-ups.

Based on the experience of applying environmental leadership and circular themes in the leadership moment model gained during this research, additional valuable features of the model proved to be its acceptance of the complexity of leadership as a phenomenological 'moment' and acknowledgement of the impossibility of creating a definition of leadership that would render all other definitions useless (Sokolowski, 2000, p. 23; Donna Ladkin 2010, p. 28). A systemic approach is the only valid choice to examine a phenomenon that takes place in a complex adaptive system like an organisation, that can be argued to operate within another system of complexity in society (Williams et al., 2017). In that regard, the leadership model is not a theory taking on too much to become feasible but an approach with the right amount of humility towards the grandeur of the phenomenon it tries to make sense of, and therefore a highly useful framework.

5.3 Managerial implications, limitations, and future research

The findings of this study have managerial implications that are not limited to those members of organisations that hold a formal leading position. Community in the form of stakeholder relations was found to be vital for the success of a circular start-up and networks should thereby be cherished by the whole organisation. The purpose of a business can be explicitly or implicitly determined, but it must be conveyed to leaders and followers alike so that the meaning of that purpose is shared. Only in that way can the purpose work as a guideline when decisions are made by an individual. Therefore, an open dialogue on the values, goals and guidelines of the business is encouraged. Openness about one's pro-environmental values and pro-environmental behaviour originating from these values should be urged since it can inspire and prompt others to act in ways deemed useful for the organisation.

There are some limitations to this research. This study was conducted by interviewing the CEOs and founders of five circular start-ups based in Finland. The start-ups represented different

fields of business but since leadership is a complex and ever-changing phenomenon more insight into it could have been gained by having a bigger sample for analysis. The geographical homogeneity of the interviewees offers contributions to the literature on Finnish circular start-ups which are not necessarily relevant to different cultures and economies.

As a theory-elaborating study, this research contributes to the existing general theory of leadership moment while also examining the context of leadership in circular start-ups. It is clear, that even if these two approaches were in balance in this study and the general was reconciled with the practical, a wider array of detailed findings to the leadership moment model or leadership in circular start-ups could have been achieved by focusing on one of these research subjects individually. Therefore, the quality of the contributions this research has depends on the accuracy of applying the theory to the context and studying the two simultaneously in harmony.

Partly due to the theory elaboration strived for in this research, the directions for future research are numerous. The leadership moment model could be applied to any environment where leadership takes place. This would not only offer further validation to the model but perhaps also provide new aspects to leadership in any kind of setting. The leadership moment model proved to be an adaptive tool for studying leadership and therefore it should be put to a test in different kinds of organisations and systems. The application of different concepts into the leadership moment model was successful in the context of this research and that offers some flexibility for future research to freely experiment with the flexibility of the leadership moment model.

Leadership in circular start-ups had not been studied to a great extent before this research and there is much more knowledge to be gained from these pioneers of change. For example, the leadership moment model could be utilised to analyse views that non-leaders of circular start-up teams have on leadership. The way circular start-ups find or create business opportunities in modern society would be a topic of great interest in the literature on entrepreneurial behaviour. As a single dimension of the leadership moment model, the purpose of a circular start-up could be studied as a process of sharing meanings and values.

Different approaches could also be taken to study the context of the circular economy and its communality. Whether this tightly knit network of circular start-ups and their stakeholders is a consequence of the lack of institutional support or not, it could hold some helpful practical implications to study the reasons and the results of this kind of networking. These implications do not

have to be limited to circular start-ups or start-ups alone, since the responsibility for efforts aiming to resolve the environmental crisis is shared by all. Additionally, if institutional support for circular transition would be discovered as lacking, the measures needed to fix this could be taken.

Environmental leadership conceptualised the leadership behaviour and practices of a circular start-up more than sufficiently. The theory of environmental leadership could be further studied in circular start-ups or businesses of any size and age aiming for sustainable development. On a more general level, environmental leadership as a way of promoting circular transition should be given a deeper look since the transition is very much needed on a systemic level. Environmental leadership seemed to share many themes with other leadership concepts such as entrepreneurial leadership, transformational leadership, and shared leadership. This overlapping could be researched to create definitional clarity and distinct relations between these leadership theories.

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