



LUND UNIVERSITY
School of Economics and Management

The Incompatibility of Two Systems

A qualitative study on incumbent firms and small entrepreneurial companies' attempt to transition from a linear to a circular economic system

by

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June 2020

Master's Programme in International Strategic Management

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Abstract

Title: The Incompatibility of Two Systems - A qualitative study on incumbent firms and small entrepreneurial companies' attempt to transition from a linear to a circular economic system.

Seminar date: 2020-06-04

Courses: BUSN09, Degree project in International Strategic Management.

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Keywords: circular economy, circular business model, institutional logic, systemic change

Purpose: The purpose of this study is to explore what logics incumbent versus small entrepreneurial companies follow as they attempt to transition into a circular economy. The aim is understanding the mental and institutional barriers for circular economy adoption.

Methodology: In order to fulfill the purpose of this thesis a qualitative comparative multiple-case study was conducted with an abductive reasoning. The empirical data was collected through eight online semi-structured interviews and observation of a company's sustainability report.

Theoretical Perspectives: This study is based on theory of circular economy, particular circular business model theory. This is combined with institutional theory of conflicting institutional logics.

Empirical Foundation: The object studied in this research is one incumbent firm who has the ambition to change into a circular business, and five small entrepreneurial companies with circular business models; both types of cases operate in the furniture or closely related industries.

Conclusion: The conclusions drawn from this study highlight the need for nuance and critical analysis of circular business models, due to the fact that companies' patterns of thought and practices still follow a traditional business logic when implementing them. Furthermore, it is concluded a transition to a circular economy cannot be driven by companies alone, instead requires systemic change.

Acknowledgements

In general we would like to thank everyone who in any way supported us in this process; it being valuable discussions over lunch with classmates, phone calls with older sisters who went through the same process, or lovely friends who volunteered to proofread our thesis.

Further, we are very grateful for all participating firms and experts that made this study possible. First, we are much appreciative of our participants from IKEA for their openness and valuable insights into the company. Equally, with great thankfulness we acknowledge the valuable time of the passionate participant of the five small entrepreneurial companies. Also, a big thanks to Jan and Ann-Charlotte, two experts that greatly contributed to our thinking process of setting up the study.

Last, but certainly not least, we want to thank our supervisor, Ester Barinaga, for the very much appreciated guidance. Ester has the ability to ‘infect’ people with her passion, which really helped us through the process.

Thank you all,
Annique and Olivia

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1 Introduction

1.1 Background and Problematisation

While the world population is growing and the per capita consumption is increasing, the global natural ecosystem is shrinking in size and volume: deserts are expanding, the sea level is rising and biodiversity is depleting at an unprecedented fast pace (Korhonen, Honkasalo & Seppälä, 2018). The problem of an exponential population and economic growth within a finite planetary resources supply has become increasingly urgent (Meadows, Meadows, Rander & Behrens 1972). An economy that extracts resources at increasing rates, without consideration for the environment in which it operates, cannot continue indefinitely (EMF, 2013). Therefore, a solution to the current linear ‘take-make-waste’ economy, in which natural planetary boundaries are not taken into consideration, has been suggested to come from a physical flow concept in which resource flows are reversed; the concept of the circular economy.

The Ellen MacArthur Foundation (2013, p. 7) has introduced what is the most accepted definition of circular economy: “An industrial system that is restorative or regenerative by intention and design”. “Restorative and regenerative” are key to understanding circularity in the circular economy; two ideas that refer to the restoration of natural resources used in production processes and regeneration of the natural ecosystems. There is a similar consensus on these two traits of the circular economy among scholars (Geissdoerfer, Savaget, Bocken & Hultink, 2017). The circular economy is identified to be understood as a continuous flow of materials and products. Instead of the current system of ‘take-make-waste’, the line is bended into a circle. Products are resold, repaired and finally recycled, so materials can be fed back into the system, with zero-waste as the ultimum ambition.

Within the last decade, the circular economy has received increased attention in academic research, however, the research field is argued to be far from saturated, and lacks cross-fertilisation from other research fields (Geissdoerfer et al. 2017). Research within the

topic of circular business models (hereafter CBM) has especially gained increased attention, showing multiple ways for organisations to create and capture new value (Kraaijenhagen, Van Oppen & Bocken, 2016; Lacy, Long & Spindler, 2020). However, whilst scholars are united in their general understanding of the circular economy, common understanding of what is considered a CBM is only gradually emerging (e.g. Lewandowski, 2016; Bocken et al. 2016; Lacy et al. 2020). What most of these new models have in common though is their aim at demonstrating businesses that they can combine social, environmental and financial values; a so-called triple bottom-line perspective, which was first introduced in sustainability research (Elkington, 1997). For example, CBMs are argued to enable less resource extraction, create jobs and generate new revenue streams for companies (Korhonen et al. 2018). However, some scholars argue that CBMs remain superficial and lack critical analysis, especially in terms of actual environmental impact (Korhonen et al. 2018). Potentially this is due to few empirically based research published on the appliance of the CBMs in practice (Geissoerfer et al. 2017). The research that does exist does not appear to be considering contextual differences between organisations. For example, some studies regard incumbent firms adopting the circular economy in an existing linear setup (Hopkinson, Zils, Hawkins & Roper, 2018), while other scholars study small entrepreneurial companies (hereafter SECs), building circular businesses from the ground up (Henry, Bauwens, Hekkert & Kirchherr, 2019); however, no comparisons are made between incumbent and small entrepreneurial companies' appliance of CBMs. Moreover, these studies have the tendency to remain firm-centric, without putting emphasis on contextual linkages (Fehrer & Wieland, 2020). Consequently, one could wonder whose role it is to drive the change towards a new system.

Not only academia took notice of this required new way of doing business, as shown by the ambitious goal that is set by the EU of becoming a climate-neutral continent by 2050. To achieve this, the EU has launched a circular economy action plan for a system change towards a circular model (European Commission, 2020). In this plan the EU argues that a circular system will open up new business and job opportunities in Europe, but on a global scale will even provide an economic opportunity of \$1 trillion. This promise of economic potential, and the linkage to environmental stewardship and social gains, has created interest in circular initiatives on a global scale (Ranta, Aarikka-Stenros, Ratila & Mäkinen, 2018). However, despite pressing sustainability issues, increased interest from scholars, and promised business opportunities, the actual implementation rate of circularity in businesses remains low (Ranta et al. 2018).

Some scholars (Abbeya & Guide, 2018; Hopkinson et al. 2018) relate the low implementation rate to practical barriers, such as the difficulty of dealing with reverse logistics. Yet, a smaller stream of research has recently made use of institutional theory to explain the low implementation rate (Levänen, Lyytinen & Gatica, 2018; Stål & Corvellec, 2018; Ranta et al. 2018). It has tried to explain circular economy-oriented transitions beyond their practicalities, and instead is focused on the underlying social processes occurring in the organisational environment that can hinder the transition to a circular economy. For example, it could be mental barriers, such as norms and cultural aspects (Ranta et al. 2018), that are preventing societies from accepting and adopting circular thinking or from recreating the rules of the current industrial system (Kraaijenhagen et al. 2016). Those barriers have also been studied in terms of how the activities of the CBM relate to the preexisting business activities (Stål & Corvellec, 2018). Consequently, it is argued they are ingrained in either organisations' systems or cross-organisational systems (Kraaijenhagen et al. 2016). Changing to a CBM requires companies to make sustainability an integral part of their business (Kraaijenhagen et al. 2016), hence may include fundamental changes of how they operate. Subsequently, the circular economy alters the traditional way of doing business, by, for example, taking responsibility for products after the initial sales. A last level of mental barriers is argued to stem from a more institutional environment, and includes socially accepted behaviour and barriers ingrained in law, regulation, and fiscal and financial incentives (Kraaijenhagen et al. 2016). Therefore, Levänen et al. (2018) argue that it is important to assess how the institutional environment may support certain business logics and hamper other logics.

What can be drawn from this is that institutional theory can offer precision in understanding how individual and organisational behaviour is located in a social context and the institutional mechanisms that influence that behaviour (Thornton & Ocasio, 2008). With this and the earlier notion of the lack of empirical proof of CBM appliance, one could wonder whether it is easier for SECs to lead the change to a circular system, rather than incumbent firms who potentially are more embedded in systems where those mental and institutional barriers exist. Coming back to the critique that circular economy research lacks cross-fertilisation from other research fields (Geissdoerfer et al. 2017), this study will follow the smaller stream of research using institutional theory as a lens to explore the various logics occurring in companies as they attempt to transition to a circular economy. This leads to the following research question:

What patterns of thought and practices do incumbent firms versus small entrepreneurial companies follow as they attempt to transition into a circular economy?

1.2 Research Purpose

The purpose of this study is to explore how the logics of current economic systems influence organisations' patterns of thought and practices when attempting to transition into a circular economy. The aim is to understand in what way these logics occur and whether they conflict with each other. Through the use of a multiple case study with both an incumbent firm and SECs in the furniture industry and closely related industries, the contextual differences and common grounds will be explored, when driving the change to a circular economy. The sight is set on contributing to the emerging stream of research on the mental and institutional barriers for circular economy adoption, that are studied through an institutional theory perspective.

1.3 Research Limitations

Theoretical limitations

This study is grounded in theory on the circular economy [section 2.1.], however among the various topics covered by circular economy scholars, it is limited to theoretical frameworks of CBMs [section 2.1.3.]. Instead of, for example, covering topics such as supply chain and product design, which are two other prominent circular economy research streams, it was prioritized to increase cross-fertilisation from other research fields (Geissdoerfer et al. 2017), hence institutional theory [section 2.2.] was included. Furthermore, since the analytical focus is to identify ideas of the current economic system in patterns of thought and practices, rather than analysing the nature of the current economic system itself, theory of a traditional business logic will not be presented in detail. However, throughout the theory chapter the circular economy concepts will be linked back to the ideas of a traditional economy to give the reader an understanding of how they differ.

Empirical limitations

This study can only account for a snapshot of reality, to really understand what kind of logics organisations follow as they attempt to transition into a circular economy, it is believed that it would be interesting to do a study with longitudinal design, where one could analyse the whole change process. Furthermore, even though this study aims at contributing to the emerging stream of research on the mental and institutional barriers for circular economy adoption, it is limited to empirical examples within the furniture industry. Therefore, the conclusion drawn from this study should be carefully applied to other contexts outside this setting. However, to increase the transferability of the findings in other industries, a wide description of how the study was proceeded will be included.

1.4 Outline of the Thesis

Going into the second chapter, the research commences with a theoretical foundation including an outline of the historical context and development of the circular economy following a description and review of CBM literature. Moreover, an overview of relevant institutional logic theory is given. In the third chapter the utilized research methods to conduct this study will be described. The choice of a qualitative, multi-case study design and semi-structured interviews as data collection method will be argued for. Moreover, considerations for the iterative data analysis approach taken will be outlined. Hereinafter, in chapter four, a short description of the setting of the research objects is given to help the reader later contextualize the findings. The fifth chapter then highlights the empirical findings as gathered through the multiple case-study. The sixth chapter serves as a broader discussion of the presented empirical analysis; it relates back to the initial problematization of few CBMs being implemented and the lack of critical analysis of them. Moreover, it considers suggestions for further research. The final chapter ceases the research with a conclusion, covering theoretical and practical implications.

2 Theoretical Background

This chapter will provide the theoretical foundation for the succeeding parts of this study. First, an outline of the changed sustainability approach of organisations' over a period of time will be given, leading up to the origin and development of the circular economy. Thereafter, a review of literature on current approaches to circular businesses will follow. Secondly, institutional theory will be reviewed with a focus on conflicting institutional logics, as an exploration of the various logics occurring in companies, in a perspective of the circular economy transition.

2.1 Introduction to Circular Economy

2.1.1 Sustainability in Organisations: from Obligation to Business Opportunity

Kraaijenhagen et al. (2016) argue that the transition in sustainability paradigms in organisations has gone from being a compulsory task to a competitive edge. The authors present a maturity model for sustainability in business, including five stages going from inactive to integral thinking. In the first stage, they argue sustainability is largely driven by governments who imposed legislation upon organisations. With that, organisations often place sustainability within the legal department in order to comply with minimum expectations and minimize negative publicity. In the second stage, they state arising consumer awareness causes organisations to increasingly take their own responsibility in regards to sustainability. The communications department is usually responsible for the sustainability aspect and companies establish *corporate social responsibility* programs. In the third stage, the authors argue that companies have started to realize that environmental awareness can lead to cost savings, hence they take a more active role, by, for example, establishing their own sustainability departments. Organisations' focus is mostly on the production process, on reducing waste and minimising emission, for example. In the fourth stage, the authors state, R&D departments instead have become more involved in sustainability, emphasizing goods that are initiated to be more environmentally and socially responsible, aiming at product

stewardship. The authors argue that companies operating in this sustainability paradigm continue to have a linear approach, where focus lies on minimizing negative impact and becoming efficient in doing that. Finally the authors argue that differentiation and resource scarcity is driving organisations into the fifth stage *integral*. They conclude that organisations in this stage often have sustainability integrated in strategy and innovation departments, and generally have realized that sustainability requires integral thinking and doing things differently.

Borland, Lindgreen, Vanhemme and Ambrosini (2019) explain a similar development of sustainability in organisations, however, do it in terms of three general business strategies. First they describe *Traditional strategies* as business strategies where companies assume the economy is a closed system, in which ever abundant resources, products and services can forever flow from businesses to households without interaction, interrelationship or responsibility towards society or the natural ecosystem, they explain. The processes involved in applying these strategies are linear and static; they begin with procuring component parts and finish with the use of the product by the end customers, they argue. *Transitional strategies* are strategies that introduce the 5Rs: reduce, reuse, repair, recycle, and regulate, the authors state and argue that this is a positive approach, since it encourages reductions in the use of commodities and considers what should be done with waste. However, these strategies still operate within a closed business system with very little interaction and responsibility towards society or natural ecosystems, they state. These strategies have similarities to Kraaijenhagen et al.'s (2016) third and fourth stage in which businesses try to reduce their negative impact on the environment and society rather than eliminating it. The final category of strategies Borland et al. (2019) call *transformational strategies*, which can be most compared to Kraaijenhagen et al.'s (2016) final stage *integral*. Borland et al. (2019) argue that transformational strategies embrace ecocentric assumptions and work within the constraints of natural ecosystems. They state a different set of 5R activities are required; rethink, reinvent, redesign, redirect and recover. Thus, sustainability in organisations has evolved from being an obligation to integral thinking and changing the status quo. Kraaijenhagen et al. (2016) conclude that the dawn of this integral thinking has contributed to truly launch the circular paradigm. However, circular economy is not a new concept, as is described in the next section on the origins of circular economy thinking.

2.1.2 The Origins of Circular Economy Thinking

Kraaijenhagen et al. (2016) argue that the circular economy finds its origin in the 1960's when Boulding (1966) in his essay argued for a future economy in which humans approach the Earth as being a closed spaceship and have to find their place in a cyclical ecological system, and when Meadows et al. (1972) drew attention to the problem of exponential economic and population growth within finite planetary resource supplies. Furthermore, Pearce and Turner (1990) described the economy in terms of inputs and outputs, and explored its interlinkages to the environment. According to them there are several economic functions of the environment, being amity values (e.g. beauty of landscape), resource supply, and a sink for outputs in the form of waste. They argue, however, that society should not be led into believing that natural systems do not have their own waste. Trees dispose of their leaves, for example, but the basic difference between the natural and economic system is that natural systems recycle their own waste; the leaves decompose themselves and convert into organic fertilisers for other plants. The authors argue that the economy has no such build-in tendency to recycle. By disposing waste in a linear manner, the natural capability of the environment to absorb waste could even be harmed, consequently, the economic function of the environment as a waste sink would be impaired (Pearce & Turner, 1990).

The modern concept of circular economy cannot be traced back to one single date or author, however, it is often argued to have its origin in five schools of thought: Industrial symbiosis, Industrial Ecology, Cradle to Cradle, Performance Economy, and Biomimicry (Korhonen et al. 2018; Kraaijenhagen et al. 2016; Svensson & Funck, 2019). Taking those ideas together, it is about a new way of designing products, coming from criticism against the design goals of industrialists that argue products should be affordable and operable by anyone, anywhere in the world, last a certain amount of time and are cost effective. These design goals of industrialists were reliant upon an endless supply of 'natural capital' not seeing their products as part of a large system, outside the economic one. Instead, designing products, according to those five schools of thought, entails not including anything toxic in products and processes, with consideration to how one can recover those products and to how waste of one industry can become the input to another. The products should flow through the economy following an performance economy perspective, emphasizing on selling a service rather than products, decoupling turnover and profit from resources depletion and manufacturing volume (Benyus, 2002; McDonough & Braungart, 2002; Stahel, 2010). One area of circular economy research in which these schools of thought have been developed

further and put into more precise concepts is CBM theory, which will be presented in the following section. Since the interest of this study lies in understanding companies' attempt to transition into a circular economy, this research area is relevant to emphasize.

2.1.3 Circular Business Models

The concept of business models facilitates the analysis and explanation of 'the way business is done' (Magretta, 2002; Bocken, Short, Rana & Evans, 2014). Since the mid 1990s the concept of business models has received increasing attention from scholars and business practitioners (Zott, Amit & Massa, 2011). Zott et al. (2011) argue that although perspectives on the concept and definition of business models are widely dispersed, a recurring theme in discussions of business models is value. Richardson (2008) discusses the idea that a firm's business model describes the way it delivers its products and services to customers, and the way it makes money doing so. Therefore, he introduces a business model framework around the concept of value, of which the three components are value proposition, value creation or delivery, and value capture (Richardson, 2008).

Returning to previous sections [2.1.1.] and [2.1.2.] on the circular perspective being an extension of sustainability development within organisations; sustainable business models differ from the 'traditional' view on business models by incorporating a triple-bottom line approach, including environment, society, and economics, and thus considering a wide range of stakeholder interests (Chandler, 2017). Since the introduction of this approach by Elkington (1997) it has been generalized to many industries. More recent literature builds on this, for example, according to Bocken, Short, Rana and Evans (2013) sustainable business model innovation is an approach to how environmental and social issues can be integrated into the objectives and processes of organisations on a strategic level. Extending this triple bottom-line perspective on sustainable business models in a circular context, CBMs are focused on value creation and capture in closing and slowing resource loops (Antikainen & Valkokari, 2016; Bocken, De Pauw, Bakker & Van Der Grinten, 2016). More specifically, in the existing CBM literature the value creation is seen to be described in four distinct logics: [1] Efficient material-technical loops, [2] effective product-service loops, [3] social-collaborative loops, and [4] symbiotic ecosystems (Fehrer & Wieland, 2020). The first three of those logics could be regarded as 'mainstream' approaches, whereas the fourth logic follows a more critical perspective.

Mainstream approaches to circular business models

First, *efficient material-technical loops* consider value creation by closing, slowing, and narrowing biological and technical lifecycles (Bocken et al. 2016). Examples can be found in the business models *Circular Inputs*, *Product Life Extension* and *Resource Recovery*, as proposed by Lacy et al. (2020). These authors state that Resource Recovery has become the most widely adopted CBM and focuses on the end stages of the value chain, namely the recovery of materials and resources from products at the end of use that are no longer functional in their current application. Secondly, they state the Circular Inputs model focuses on the resources that go into products at the design, sourcing, and manufacturing stages. To implement this model, the authors argue organisations must replace a “linear” type of resource in its supply chain with a “circular” alternative, which can include renewable, fully recyclable or biodegradable resources. Thirdly, with the Product Life Extension model companies optimize the use of a product in its original form and for its intended application. The authors conclude that instead of being disposed of, landfilled, or at best recycled, the item is repaired, reconditioned, or updated to extend its use.

Secondly, drawing from the ideas of the performance economy (Stahel, 2010), *effective product-service loops* create value by replacing product ownership with access to the products and services, for example through renting, leasing and pay-for-use approaches (Fehrer & Wieland, 2020). Lacy et al. (2020) introduced two CBMs in this category; the *Product as a Service* and *Sharing Platform* models. In the Product as a Service model, they explain a company shifts its focus from volume to performance, in other words, selling the function of the product instead of the product itself. The Sharing Platform model is about optimizing utilization rates of products and assets, by enabling owners to maximize how assets are used and providing customers with affordable and convenient access to products and services, typically through digital technologies they argue.

Thirdly, in the *social-collaborative loops*, collaboration rather than competition is the central practice for transitioning toward a well-functioning circular economy (Todeschini, Cortimiglia, Callegaro-de-Menezes & Ghezzi, 2017). In other words, social-collaborative loops are focused on creating value by linking actors to perform sustainable practices effectively (Todeschini et al. 2017).

Critical perspectives to circular business models

It does not become clear from the above presented theory how these CBMs will solve the issues raised in the beginning of this study, such as depleting biodiversity, created by the

current linear ‘take-make-waste’ economy. In general, the CBMs so far presented in theory are argued to lack clear results in terms of environmental impact (Korhonen et al. 2018), and the triple-bottom-line approach it includes is therefore criticised to lack reliability (Sridhar and Jones, 2012). Moreover, the triple bottom-line is argued to be more focused on the process rather than the outcome and shows little demonstration of interdependence between the three bottom lines (Sridhar and Jones, 2012). This could be related to how Borland et al. (2019) and Kraaijenhagen et al. (2016) described sustainability development in organisations, going from obligation to creating a positive impact, it is perceived to be very simplistic. They focus on one stage over another in terms of how firms mature in their sustainability approach, thus it could be argued that they are missing the relationship and cross-stage effects. One could wonder how these different sustainability approaches can coexist within organisations and influence each other.

Building on this, Fehrer and Wieland (2020) argue that much of the above presented literature on circular logics is limited to a focus on efficiency and effectiveness of individual firm activities. Thus, even though existing CBM literature broadens the traditional business model literature, as introduced in the beginning of this section, the underlying value creation logic of many CBMs is still fundamentally rooted in and centred on competitive advantage and profitability, and therefore remains firm-centric they argue.

Therefore, Fehrer and Wieland (2020) presented the fourth logic of CBM value creation *symbiotic ecosystems*, which creates value by closing resource loops. This logic differs from the above explained logics, because it builds on collective action and collaboration of various actors in their value creation logic. Symbiotic ecosystems consider broader institutional structures and horizontal network integration, meaning collaborating beyond existing supply chain networks (Fehrer & Wieland, 2020). However, this requires designers to think differently, by thinking in systems around products, instead of thinking about the product itself, and reinvent the revenue streams by creating and maintaining value over time (Bocken et al. 2016). The few studies (Levänen et al 2018; Stål & Corvellec, 2018; Ranta et al. 2018) within the sphere of *symbiotic ecosystems* combine CBM concepts with institutional theorization. Thus, cross-fertilization use of another theoretical area seems to give a nuance picture of the CBM, leading up to the next part of this study's theoretical background.

2.2 Institutional Theory

Scott (2008, p. 48) defines institutions as “[...] regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life”. Thus, he argues that institutions are multifaceted, durable social structures, made up of symbolic elements, social activities, and material resources. Institutional logic was first introduced by Alford and Friedland (1985) as a way to describe the contradictory practices and beliefs inherent in the institutions of modern western societies. Since then the concept of institutional logic has been developed into several definitions and used in different contexts. However, generally the institutional logics approach offers precision in understanding how individual and organisational behaviour is located in a social context and the institutional mechanisms that influence that behaviour (Thornton & Ocasio, 2008). Described more imaginably, institutional logics could be understood as “rules of the game” that direct organisational behaviour (Kraatz & Block, 2008).

2.2.1 Conflicting Institutional Logics

Multiple institutional logics can often coexist in organisational fields and organisations thus face multiple “rules of the game” at the same time. In other words, an organisation might be multiple things to multiple people (Kraatz & Block, 2008), hence may be imposed by very different and potentially conflicting demands (Marquis and Loundsbury, 2007).

D'Aunno, Sutton and Price (1991) show in their study that when an organisation decides to combine logics from two fields, they will inevitably face multiple demands. They argue that organisations will adopt at least some practices and beliefs from their traditional and some of the new institutional logic. However, they argue, since organisations have limited ability to respond to conflicting demands, organisations will either partially conform to these institutional pressures in terms of a hierarchy, or organisations will adopt and combine practices on the basis of their visibility to external groups. When external actors outside organisations represent a certain logic, the organisation only acquires legitimacy when it complies to widely held expectations of those external actors, the authors further state and provide examples of companies getting resources and financial support from the external actors when complying to their favored logic.

Building on this, Reay and Hinings (2005) argue that actors within society hold different institutional logics, and therefore all fields can be characterized by conflicting institutional logics. However, they also argue that field-level actors have the power to shift from one dominant logic to another. This development to a new dominant logic takes time and must be worked out among all field-level actors. From their case study they conclude that even though the dominant institutional logic in a field can shift, the previous dominant logic does not have to disappear and can maintain a strong presence.

Nonetheless, D'Aunno et al. (1991) and Reay and Hinings (2005) only describe to a limited amount what happens internally when organisations face those conflicting demands. Pache and Santos (2010) build on this critique and explain that organisations can experience conflicting demands through two central mechanisms: first external actors, as D'Aunno et al. (1991) already highlighted, but also internal actors. Pache and Santos (2010) agree with previously mentioned literature that external actors could be regulatory bodies or funding agencies in the field level, on which organisations are resource dependent. Contrarily, internal actors are people inside organisations that promote certain practices, norms and values they have been taught to follow or been socialized into. Moreover, Pache and Santos (2010) argue that these two mechanisms interact, for example the internal actors could legitimize their belief by referring to the logics of external actors.

Pache and Santos (2010) similarly to other scholars (Greenwood, Raynard, Kodeih, Micelotta & Lounsbury, 2011; Kraatz & Block, 2008) describe how the organisation internally responds to conflicting demands. Kraatz and Block (2008) argue that organisations can adapt to pluralism in several ways; they could try to eliminate pluralism, meaning that internally employees can completely neglect one logic and only focus on another. They could also compartmentalize different logics, for example by creating separate units and let them run according to different logics, the authors argue. However, they state, such initiatives are viewed as decoupled from the core of the organisation and as rather symbolic. Also, the different units might have very different operative goals that conflict with each other. Furthermore, organisations could try to find more cooperative solutions, where they balance disparate demands. Lastly, they argue that organisations can comply with multiple logics by becoming a self-directing entity, institutions in their own rights who can legitimize their own actions.

Moreover, Kraatz and Block (2008) stress that an organisation cannot only be seen as responsive to the demands of its pluralistic external environment and the employees' wills, but is also responsive to its defining commitments and its history. Thus, when within

organisations these pressures balance each other out, organisations get stuck and become unable to comply with one logic, the authors argue. Multiple logics are likely to affect organisational response differently in an organisation that has developed a stronger sense of itself, such that organisations have chosen commitments that will become anchors, constraining it in a similar way that an externally imposed logic might, they conclude. Kraatz and Block (2008) four strategies seem to be quite generic responses to conflicting demands, and do not explore the conditions under which specific responses are mobilized. Pache and Santos (2010) and Greenwood et al. (2011) build on this argument and make a distinction between mature and emerging fields. Greenwood et al. (2011) describe mature fields as more settled fields where one dominant logic prevails, or it might include multiple logics with a well understood and predictable relationship between the logics. In emerging fields, on the other hand, they explain, the institutional rules defining legitimate activities are still ambiguous, unpredictable and not widely understood, they state. It is not as simple to say that mature fields will pose less conflicting demands on organisations, as emerging fields can also let organisations unconstrained spaces to work in, given the lack of specification of institutional demands, they argue. Thus, a field could instead be analysed in terms of fragmentation and centralization, they continue. In fragmented fields multiple uncoordinated actors and their respective logics coexist, hence increasing the likelihood that institutional expectations may compete, they argue. Furthermore, similarly to the theory of Reay and Hinings (2005) who state that field-level actors have the power to shift from one dominant logic to another, Pache and Santos (2010) argue that once conflicting demands emerge in fragmented fields, the chance that they will actually be forced on organisations depends on these external actors' ability to centralize and enforce their demands. A decentralised field is poorly formalized and characterized by the absence of dominant actors with the ability to constrain organisations' behaviours, they explain. In such decentralised fields, they argue, institutional pressures are rather weak, and, when incompatible, they can be easily ignored or challenged by organisations, since the actors exerting them have little ability to monitor and enforce them. Finally they conclude that the field aspect of studying multiple institutional logics is important because if conflicts have already been resolved at a higher level, conflicts will most likely no longer arise at an organisational level.

2.2.2 Institutional Logics in Circular Economy Theory

Few studies within the topic of circular economy combine CBM concepts with institutional theorization. For example, Stål and Corvellec (2018) argue that CBM implementation must be explained by the regulative, normative and cognitive processes occurring in the organisational environment. They studied traditional clothing retail firms' CBM implementation and showed how the firm kept the CBM completely separate, 'decoupled' from their 'normal' business activities in order to comply with the very different demands, hence the value creation remained primarily linear. Ranta et al. (2018) likewise studied these three processes, but in relation to recycling firms working towards a circular economy. From their cross-regional comparison they could conclude that the preconditions (e.g. laws, norms and beliefs) vary from country to country, subsequently the CBM implementation could also become more or less supported by its environment. Levänen et al. (2018) additionally argue that it is important to assess how the institutional environment may support certain business logics and hamper other logics. They developed Richardson's (2008) value creation framework, as introduced in the beginning of this section, beyond firm-centricity and explained how these business model activities –value proposition, value creation, value capture– relate to CBM activities, and how these activities are influenced by institutional features such as laws and culture. Nevertheless, one could question how transferable these findings are to other contexts, since they all study a very specific circular activity, such as recycling.

2.3 Summary of Theoretical Background

This chapter introduced the reader to theories of circular economy and institutional logics. Starting with circular economy, the origin of the concept was introduced and how organisation's sustainability approach in organisation's have changed over the years, lately adopting CBMs. In line with the research question, the logic of a traditional and circular business was compared.

Traditionally, sustainability has been driven by compliance, customer expectations and cost savings. Even if companies are in a further sustainability adoption phase, they continue to have a linear approach with a focus on minimizing their negative impact on the environment. In a circular logic, sustainability requires integral thinking and doing things differently, companies are even driven to make a positive impact. They want to eliminate

environmental impact and work within the constraints of nature. Companies' strategies have been developed to concepts such as "rethink" and "redesign" (Borland et al. 2019; Kraaijenhagen et al. 2016).

In a traditional perspective products are designed to be affordable for everyone, produced cheaply and designed to only last for a certain period of time. Circularity, instead, entails that products are designed in high quality so they will last for a long time, with consideration to how they can be repaired and recycled. Also, companies focus on selling the usage of products to decouple the profit from resource depletion (Benyus, 2002; McDonough & Braungart, 2002; Stahel, 2010).

In traditional business model literature, value is explained to be created by a firm individually without much consideration of other stakeholders, compared to CBMs where value is created by several actors who work together in a network (Kraaijenhagen et al. 2016) to address environmental, societal and economical needs (Chandler, 2017). However, CBMs have also been criticised for being firm centric (Fehrer & Wieland, 2020) and lack of proven environmental impact (Korhonen et al. 2018).

The second part of the theoretical background covers institutional theory. In short, institutional logics can be understood as different "rules of the game"; often organisations face multiple institutional logics at the same time (Kraatz & Block, 2008). These logics are imposed by internal actors, by being embedded in the organisation's own history, and by external actors from the field level, for example, regulators (Pache & Santos, 2010). The structure of the field is argued to be crucial for how the external actors influence the organisations (Greenwood et al. 2011); fields are dominated by one logic, however, subdominant logics can have a strong prevalence (Reay & Hinings, 2005). There are several strategies in which organisations can respond to conflicting demands ranging from ignorance, to partial compliance, and full compliance (Kraatz & Block, 2008). Recent circular economy literature has started to use this type of institutional theory to explain the complexity of CBM implementation, and conclude that companies are to a large extend both hampered and supported by the institutional features in its environment when adopting a CBM (Levänen et al. 2018; Stål & Corvellec, 2018; Ranta et al. 2018).

3 Methodology

This chapter presents the research approach this study is based upon, reason why a multiple-case study is used, how the data is gathered and how it is subsequently analysed. Furthermore, the choices made regarding the process will be explained, and the advantages and shortcomings of the chosen method highlighted. Throughout the entirety of this chapter reflections on the research quality and ethical considerations are made, as an important part of the research process.

3.1 General Research Approach

3.1.1 Abductive Reasoning and Qualitative Research Design

This study is based on the observation that few CBMs have been implemented, despite the many benefits it portrays to include. We sought to develop an explanation for this, by exploring how the logic of the current economic system influences organisations' patterns of thought and practices when attempting to transition into a circular economy. Therefore, this study's foundation lies in abductive reasoning, as it seeks an explanation for a surprising phenomenon (Bell, Bryman & Harley, 2019). Due to the exploratory aim of this study, after data was gathered the theoretical background was revised and changed according to the insights that were found relevant and complementary. The advantages of having such an iterative approach is that it both enables existing theory to be confirmed as well as establishment of new theory (Bell et al. 2019). The choice of a qualitative research design is based on the interest in the perceptions organisations hold in their transition into a circular economy. The aim is to understand the 'mental' and institutional barriers for CBM adoption beyond its technicalities. Therefore, a qualitative study design that enables an in-depth exploration of the patterns of thought and practices that can hinder a company's transition to a circular economy, seems appropriate. Furthermore, the lack of in-depth empirical support for the circular concepts (Geissdoerfer et al. 2017), motivates the choice to conduct an explorative study of qualitative design.

3.1.2 Quality Assessment

To assess the quality of this study the criteria *trustworthiness* and *authenticity* were used, in line with what Guba and Lincoln (1994 in Bell et al. 2019) write is equivalent to validity and reliability in quantitative research. Trustworthiness includes conducting the research according to good practice, staying objective as researchers, giving thick descriptions of how the study was conducted to increase its transferability in other contexts. Authenticity involves giving a fair impression of the social phenomena studied.

Due to the aim of this study a qualitative design was chosen, as explained in the section above. However, this design also makes the study's conclusion dependent on interpretations, hence that could be debated in terms of trustworthiness. To compensate for the fact that qualitative research cannot be unbiased the aim was to be as transparent as possible in terms of how the data was collected and analysed; also with the ambition to increase the study's transferability in other contexts. In the coming sections it will be explained further how the trustworthiness and authenticity and authenticity criteria links to each part of the process.

3.2 Research Design

3.2.1 Multiple-case Study

A multiple-case study was executed to enable a comparison between the patterns of thought and practices of an incumbent firm and SECs. A comparative design enables the generation of theoretical insights as a result of contrasting findings uncovered through the comparison (Bell et al. 2019). Studying an incumbent company and SECs that are potentially positioned differently within the current economic system can enable us to uncover the institutional barriers for a circular economy adoption. The primary focus is to investigate and draw conclusions from the two different organisational contexts; on the one hand changing an incumbent linear business into a circular one, and on the other hand building a circular SEC from the ground up. The risk associated with multiple-case studies is the need to forge comparisons, which can lead to an explicit focus at the outset (Bell et al., 2019). However, since a more open-ended and unstructured approach was chosen in terms of the data collection method [see section 3.3.], it is believed that contextual insights are retained.

3.2.2 Research objects

The incumbent firm that serves as a research object is IKEA, and the SECs are five businesses operating within a comparable industry as the incumbent firm. The aim was to conduct case studies within an industry that is highly affected by the concept of circular economy; the furniture industry, among others such as clothing and packaging, is often used as an example of a suitable industry for the circular concept since it entails products with a high environmental impact during extraction of materials or production phases (Gullstrand, Lehner & Oksana, 2016).

IKEA was selected based on its clear stated vision of becoming a circular business, since the interest of this study lies in companies who attempt to transition into a circular economy. The respondents were then chosen based on their involvement in the organisational transformation towards the circular economy and introduction of new business models. They were found both through LinkedIn-searches and through references from previous interviews. Table 3.1 provides an overview of the interviews with IKEA.

Table 3.1 The incumbent firm interviews

Interviewee	Title	Interview time
Larsson	Circular Business Designer	60 min
Berggren	Sustainability Innovation Manager	75 min (one interview)
Lundqvist	Project Leader of New Technology Innovation	
Holm	Business Navigator Analyst	60 min

In one of the interviews two employees wished to participate in the same call, one of them being directly superior to the other. This could have affected the respondents' sense of comfort and thus the reliability of their answers. Furthermore, studying more than one incumbent firm could have increased the generalisation of the findings, however, having multiple interviews with people in various functions and roles in one firm was prioritized to get an in-depth understanding and thus, increase the trustworthiness of the study.

Various SECs were found through existing or past collaborations with IKEA.

This sampling strategy increased the probability of finding companies operating in the same industry, meaning that it would allow for a more reliable cross-case comparability. Thereafter, five SECs were selected based on both their own portraiance of being a circular business and relation to the by scholars proposed definition of CBMs. If only one SEC had been selected, representing one type of CBM, the case would only be comparable to a small part of the incumbent company's attempted transition into a circular business. Besides the variations in business models, it is important to mention that the companies operate in different regional markets, providing the opportunity to analyse how circular economy works in different contexts and markets. Correspondingly, the business model and market diversity are seen as an advantage that allows to assess the experiences that these businesses share, regardless of their differences. Table 3.2 provides an overview of the interviews with the SECs.

Table 3.2 Circular Small Entrepreneurial Companies Interviews

Company	Interviewee Title	Interview time
Alpha	Smith	CEO + Co-founder
Beta	Carter	CEO + Co-founder
Gamma	Brown	CEO + Co-founder
Delta	Jones	CTO + Co-founder
Epsilon	Baker	CIO

One interview was held with each SEC. It would have increased the trustworthiness of this study if several employees per firm were interviewed, however, since the respondents were generally the founders and had a managerial position, they were believed to be representative samples for their company's attempt to transition into a circular economy.

All respondents in this study are held anonymous, and in addition have been given randomized fictional names to minimize readers' gender bias. Due to the well-established character of IKEA, it was decided to not anonymize the company. After getting approval from the respondents, all interviews were recorded and transcribed to ensure the used quotes were as trustworthy as possible. Additionally, in accordance with Bell et al.'s (2019) ethical guidelines, the respondents were informed of their possibility to interrupt the interview and of

their choice to not answer questions, at any time. The purpose of these formalities was to increase the authenticity of respondent's answers, by creating awareness of their anonymity.

3.3 Data Collection Method

3.3.1 Semi-structured Interviews

Due to the exploratory and abductive nature of this study, semi-structured interviews were believed to be appropriate. In order to ensure cross case comparability and in the end increase the trustworthiness of the answers, some structures were believed to be needed (Bell et al. 2015). An interview guide divided in themes was used to ensure all areas of interest with all respondents were covered, while leaving space to ask specific questions to each respondent, which was important as each case has different business models and experiences connected to their unique contexts. This interview guide gives the respondents a high degree of freedom and leaves room to express their own opinions as well as enables researchers to steer the interviews in the most interesting direction (Bell et al. 2019). The interview guide also made sure the questions were not formulated in a leading manner, thus increasing the trustworthiness of the answers.

The interview guide of IKEA and the SECs can respectively be found in appendix A and appendix B. Concerning the SEC interview guide, it was decided to exclude all company specific questions to ensure the respondents' anonymity. In preparing for a qualitative study, Lofland and Lofland (1995 in Bell et al. 2019) suggest various activities to stimulate generation of questions, for example, through discussion with colleagues and by reading existing literature on the topic. In line with this recommendation two unstructured expert interviews were conducted with one consultant and one senior researcher within CE.

Table 3.3 Expert Interviews

Name	Organisation	Position	Expertise
Ann-Charlotte Mellquist	RISE Research Institute of Sweden	Senior Researcher	Finance and Accounting in Circular Business Models
Jan Agri	Tricircular AB	Senior Advisor	Sustainable Business Strategies

3.3.2 Online Interviewing

With consideration to the covid-19 virus, all interviews were conducted online through the platforms Skype, Microsoft Teams or Zoom. The main experienced benefit of this process was that it eliminated time consuming traveling to participating companies, thus enabling us to effectively conduct a multiple case study within a short period of time. Furthermore, taking potential technological deficiencies into account (Bell et al. 2019), prior to every interview the settings of the used platform were verified. Moreover, while scheduling the interviews the respondents were offered to set up the meeting themselves, to provide them with the opportunity to communicate through a preferred platform, hence decreasing the risk of, for example, loss of time. In general, it was experienced that the respondents were used to working online, therefore none technological deficiencies occurred, resulting in uninterrupted interviews and recordings. Even though the opportunity of studying the respondents in their natural working setting was lost, it is believed that this was outbalanced by the respondents being in a familiar setting, hence likely felt more comfortable sharing experiences.

3.3.3 Company Reports

Prior to interviewing the respondents from IKEA, the annual sustainability reports were studied, the purpose being: [1] to gain a general understanding of IKEA's circular work, to enable more in-depth discussions with the respondents, and [2] to decrease the subjectivity of the findings. When considering what reports to use as a source of data the quality of the documents was assessed, following the recommendation of Scott (1990 in Bell et al. 2019). Only the latest sustainability report (year 2019) was used, to match the snapshot gained from the interviews. The report used was found to be of authentic origin, since the source of the report was the company's website. Furthermore, only chapters of the sustainability report connected to IKEA's circular business strategy were taken into consideration to increase the comparability with the interview findings. However, keeping in mind that a sustainability report can be written with the intention to provide an external audience with a favorable view of the organisation and therefore contains a limited representation of the company's challenges (Bell et al. 2019), the report has not been given as much reflection in the analysis as the semi-structured interviews have. Nevertheless, the sustainability report is considered to be complementary to the interviews, thus enabling the opportunity to draw more generalizable

findings for the organisation as a whole, and for that reason is believed to enrich the empirical data.

3.4 Data Analysis

This section describes how the analysis of the empirical data was conducted and the intentions of the data analysis process. The process was based on Bell et al.'s (2019) recommended strategy "thematic analysis" for analyzing qualitative data. Additionally, inspiration was taken from a grounded theory sequence: a three-step process of thematization that requires the researcher to reflect on the initial codes to find continuities and linkages between them, and finally can produce higher order conceptual categories (Bell et al. 2019). Furthermore, the analytical approach was of iterative character, by constantly going back and forth between collection and analysis of data, meaning that the analysis process started after the first data was collected, enabling to adapt to the next steps of data collection based on the ideas that emerged from the initial analysis (Bell et al. 2019). This also enabled to confirm and challenge the views presented by one interviewee in the succeeding interviews, and ultimately to the ability to determine what was unique and what could be seen as a "trend" worth analysing.

Further, after transcribing the recorded interviews the transcripts were uploaded to NVIVO, a qualitative data analysis software that was used with the intention to make the process of handling a large amount of unstructured data more efficient (Bell et al. 2019). Using the software, the first step was to go through the material individually to sort the data into codes according to individual perceptions. The coding was conducted in the same language as used in the data collection, it being English. Thereafter, the codes were checked with the purpose to screen and crop the collected material to what was relevant to the research focus, without reducing the complexity of the material. In the second step, themes were established based on codes that recurred repeatedly, as well as on the relatability to the theory found in the initial literature search. Then a comparison was made of the two individual sortings and both the differences and overlaps were discussed. This shift from individual to group-coding was done to not bias each other at an initial step, and to enable the identification of particularly prominent themes that individually were sorted in the same way, thus reducing the subjectivity that is otherwise often related to qualitative data analysis (Bell et al. 2019). Up to this point the thematization for IKEA and the SECs was kept separately, however, in

the third step the themes were compared with each other to identify differences and similarities, which is in line with the comparative design of this study.

Based on the abductive reasoning, the steps of collecting empirical material and theoretical work were taken in a back-and-forth approach, as well as the specification of the research question. When studying the overarching themes from IKEA and the SECs, it was realized that in both cases there were tensions between a traditional approach to doing business versus a circular way of doing business. Therefore, to explain these tensions the decision was made to add institutional theory to the theoretical foundation of this study. After having reviewed the literature on institutional theory, the empirical data was assessed again to examine whether more tensions between a circular and traditional logic could be identified from this particular theory perspective.

After deciding on what quotes to use to illustrate these tensions, it was verified in the interview transcripts that the quotes were not taken out of context. Subsequently, this increases the trustworthiness of the data analysis. Furthermore, if quotes were found to be ambiguous, the respective respondent was called or emailed to verify that the statements were not misinterpreted, to increase the trustworthiness of the analysis. The sustainability report was analysed through a similar process; first the report was read and coded individually and then overreaching themes were discussed, and later linked to the empirical data.

4 Setting

In the previous chapter a brief introduction of the participants of this study was given, including a motivation for the selected. However, for the reader to get a better understanding of the findings in the succeeding chapter it is believed necessary to present these participating companies in more detail. Principally, this setting is used to present the background information needed to contextualize the case discussed. Moreover, the contextualization increases the trustworthiness of this study.

4.1 The Incumbent Firm

The Inter IKEA Group is an of origin Swedish multinational group of companies, registered in the Netherlands. IKEA is owned and operated by a complicated range of for-profit and not-for-profit organisations, but is divided into two main business areas: intellectual properties and retail. INGKA Group is responsible for 90 percent of all IKEA store sales and owner of 374 out of 425 IKEA stores worldwide, and therewith the largest franchisee (Ingka Group, 2020).

This research is conducted with the INGKA Group. Although the INGKA Group sold its design, manufacturing and logistics subsidiaries to Inter IKEA Holding in 2016 (the current owner of the IKEA concept), as largest franchisee it still has innovation hubs that continuously work on improving the business model. The interviewed innovation department specifically works with new business development for IKEA's transformation to become a circular business. This is aligned with the overall IKEA strategy and goal of becoming a fully circular business by 2030 (IKEA, 2020). So far, IKEA has implemented something they refer to as "circular design principles", requiring every new product to be modular and durable, designed with considerations to its full life cycle, making it easy to later repair and recycle (IKEA, 2020). The department interviewed are testing several initiatives at the same time, trying out different CBMs that can replace their current linear model. For example testing to offer customers a repair service at some of the warehouses, trying to turn waste from the

foresting site into fabrics and trying to rent out parts of their furniture sortiment (IKEA, 2020).

4.2 Small Entrepreneurial Companies

In the following table 4.1 the setting of the SECs is described, including firm size, geographical location of the main business, and business type. Compared to IKEA, no references to company sources will be provided to ensure the anonymity of the participants.

Table 4.1 Small Entrepreneurial Companies' business type

Firm			
Company	size	Country	Business Type
Alpha	1-10	Denmark	A platform for giving away furniture. Through their app people can give away furniture and the person taking over the product handles the pick-up from the previous owner.
Beta	1-10	Germany	Offers home products made out of coffee grounds. They collect coffee grounds from cafes and then use it as a raw material for the production of coffee cups.
Gamma	11-50	US	Rents out home furniture. They retain the ownership of the product, handle the logistics side and product maintenance.
Delta	11-50	Netherlands	Sells colouring machines for textiles. They have invented a new technology to colour textiles; instead of using water they use carbon dioxide (CO2).
Epsilon	51-100	Sweden	Handles refurbishment and re-selling of used goods. Offers to renovate products, for example furniture and electronics, after being used and then resell them on an online platform, either on their own or through other companies' platforms. Another part of their business is consultancy within the CE.

5 Empirical Analysis

From the interviews five dimensions were identified that in this multiple case-study appear to be conflicting in the attempt to transition into a CE. Those dimensions represent how the respondents' patterns of thoughts and practices either include traditional or circular business logic, or both. The dimensions of conflicting logics identified are: Mission: financial versus environmental values [section 5.1.], Approach to sustainability: reactive versus integral [section 5.2.], Offering: selling ownership versus performance [section 5.3.], Value creation: individual versus shared [section 5.4.], and Scaling: global efficiency versus multi-localisation [section 5.5.]. It will be discussed how the logic of a traditional way of doing business in a SEC arises mainly through external demands, while IKEA is influenced by both external and internal forces.

5.1 Mission: Financial versus Environmental Values

In this section it will be described how the interviewees reason around their organisations' mission. From the interviews it seems that IKEA is 'trapped' in a traditional logic, because even though they have committed to becoming a circular business, the financial logic is higher valued than other logics. Some of the SECs seem to have a very clean circular economy motive, however, others seem to be similarly to IKEA led by a financial motive.

The incumbent company

The following quote illustrates IKEA's consciousness of what it means to transit into a circular business, but also shows the prevalence of a traditional logic. Larsson, a circular business designer, describes:

We already have enabled a lot of people to live a better life in an affordable way. People with less money are also able to afford a certain life standard. We have really been excelling in this from a linear perspective, and we build success on that. But now

we need to take a bigger responsibility on how this impacts the planet and ecosystems. I think it's a must that this goes hand in hand, otherwise we won't be existing in the 20 years coming. So it will change no matter what, so if we don't change with it, we can't grow ourselves in it. - Interview IKEA Larsson

First, Larsson elaborates on how IKEA has to move away from their traditional way of creating value, by taking responsibility for the planet and ecosystems. The three ambitions of the triple bottom-line Larsson points at – attending the economic, social, and environmental goals (Chandler, 2017) – are seen as going “hand in hand”, as if they could be attended simultaneously without compromising, as if in synergy. This is in line with the criticism of Sridhar and Jones (2012) on the apparent co-existence of the three bottom-lines, without demonstration of interdependence between them. The by Larsson supposed alignment between these diverse goals, however, appears not to be the foundation once decisions need to be taken. Instead, a different priority comes to light when Holm, a business analyst at IKEA, was asked how they assesses the ideas of circular initiatives:

First of all you need to identify revenue and cost drivers [...] So sort of make an assessment of the viability of the whole thing: okay where's revenue generated, what costs are driven. And how does that look in the end, or is there an investment.

- Interview IKEA Holm

This example illustrates the way incumbent organisations, such as IKEA, prioritize when taking investment or development decisions. When confronted with conflicting demands – such as prioritizing the low costs and high returns connected to traditional business logic versus prioritizing a circular logic that puts the environment and the planet first, at any cost – it seems the more established, financial logic comes to dominate. This highlights the limited ability of organisations to respond to conflicting demands (D'Aunno et al. 1991). As Holm implies, they will prioritize investments in terms of a hierarchy of institutional demands (D'Aunno et al. 1991), as “revenue and cost drivers” are prioritized over the impact on the planet and ecosystems that Larsson in the previous quote highlighted. One could argue that Holm in this case serves as an example of an internal actor that promotes certain values (Pache & Santos, 2010), because Holm has been taught and given the task to prioritize a

financial logic. Thus, individual patterns of thought cannot be seen as separate from the context in which individuals act. Rather, they are influenced by the institutional context and the individual's position within that context (Pache & Santos, 2010), as shown by the following example:

From an idealistic perspective say, well, that [the financial incentive] shouldn't matter. Well, but then it comes to speed of implementation [of circular business models]. If it's profitable, it's gonna happen. If it's not profitable, it's going to be forced. [...] Companies are very idealistic when it comes to economics, even IKEA; we need to earn money, otherwise we cannot transform. - Interview IKEA Holm

In this quote Holm is clear in the extent to which Holm perceives a contradiction between profitability and circularity, and even points at the idealism of thinking that both ways of thinking could be aligned. To get the circular ideas to be prioritized Holm sees the need to push the financial logic first, because otherwise IKEA will not implement them. Moreover, the other alternative would be that “it's going to be forced”, meaning that external actors, such as governmental legislation, forces the circular environmental-value logic on them.

Small Entrepreneurial Companies

The SECs, compared to IKEA, seem to express a combination of both traditional and circular patterns of thought. Beta explains their drive to start their business as follows:

It's also a lot about promoting circularity by setting our product as an example, because people learn to understand that they are part of a larger circle and they should recycle more. - Interview Beta Carter

Beta points to the need for people to “learn to understand”, implying that the transition to circularity goes through educating the people at large (as customers) into a particular behaviour. Indeed, Carter suggests that Beta's products originate from an ambition to set “an example” that can help people understand. By producing coffee cups out of coffee grounds,

Beta repurposes a resource that is no longer functional in its current application, what one could define as a resource recovery CBM (Lacy et al. 2020). With this, Beta aims to inspire people to a circular way of thinking, hence they seem to be driven by something beyond a traditional logic; it is not about reducing bad impact, but about re-educating people, which is in line with “rethink” as Borland et al. (2019) argue is a circular value. Rather than focusing on the individual firm’s financial performance, their focus is on impact at a larger social scale. This broader social logic was also highlighted by Alpha when we asked them to describe in what way they view their business as circular:

What we see is that there is no garbage, we don't call things garbage [...] So circularity is also social. It's also like social behaviour what we see right now. It's also a community. It's tying things better together and that is what I really love about Alpha; the social aspects of it as well. - Interview Alpha Smith

Alpha stands for the “zero-waste” logic of a circular economy by seeing nothing as “garbage”. In offering a platform where people can give away furniture to someone else in the community [see setting 4.2.], Alpha appears to have an urge to serve a social mission, by stimulating “social behaviour” through a “community” solution of decreasing ‘waste’. Alpha’s solution can be recognised in the CBM literature (Lacy et al. 2020); through its platform Alpha enables product owners to maximize how their assets are used, and provides community members with free and convenient access to products.

Similarly to Beta and Alpha, Delta also highlighted that a transition to a circular economy is not merely about how they as one single company strive for change and create value, but instead considers several actors involved:

I would love to have a good competitor, because then the technology is getting more accepted by the industry. We don't have to fight this battle by ourselves. - Interview Delta Jones

Delta describes the challenge of getting their clean textile dyeing technology [see setting 4.2] “accepted by the industry”. This points at the fact that circularity is inserted into a larger

social change that involves the whole industry adopting cleaner technologies. While the previous two quotes illustrate how the circular logic integrates the people at large (educated customers and a community), this quote illustrates how Delta tries to include the whole industry in its logic, with competitors as allies. One could wonder whether this is because they see circularity not as a business model (for one company's returns) but as an economic model for society as a whole.

Furthermore, Gamma rents out furniture to customers, while remaining responsible for maintenance and end-of-use treatment, thus shifts focus from volume to performance (i.e. selling the function of the product instead of the product itself). In CBM literature this would be defined as a product as a service circular model (Lacy et al. 2020). Consequently, Gamma could be perceived to be initiated with a circular logic. However, the following quote shows that Gamma does not highlight the circular aspect of their business model:

Convenience [of the product as a service model] That's a big value proposition for our service in the States. I think that the sustainability side of things is important to people elsewhere in the world. But for us, it [sustainability] has been an important part of our team, and why we do what we do, but for our customers the number one reason that they use our services is because of the flexibility that we offer. - Interview Gamma Brown

Compared to Beta, who actively tries to educate consumers, Gamma seems to highlight other values than circularity to attract external groups. This is, according to D'Aunno et al. (1991), a common reaction when organisations have limited ability to respond to conflicting demands, and consequently adapt to them on the basis of their visibility to external groups. Even though Gamma portrays to internally value the environmental aspect of a circular logic, they convince customers based on a completely different logic, hence one can question whether their motive is to grow impact, or to grow their customer base.

Lastly, Epsilon repairs and resells used items, and takes care of products returned from e-commerce that otherwise might go to waste, which Lacy et al. (2020) define as a circular business model, since it extends a product's life and decreases the need for new products.

However, creating an impact in terms of less resource extraction for new products was not something emphasized by Epsilon itself, as comes to light in the following quote:

When it comes to recovering and returns from online [sales], we just see a growing pain. A growing potential in that sense [...] not only because it's business in it, but also because the mega trend towards sustainability will create consumers; like the generation you represent that will put demands on whom they're buying from. - Interview Epsilon Baker

From this example it occurs that Epsilon sees its CBM as a “growing potential” and something that “creates consumers”. Baker relates the growing potential to the business and the customer base, and no mention was made of the growing potential in, for example, an environmental impact perspective. One could wonder if a business that portrays sustainability as a "consumer trend", regards environmental impact as part of its core mission. Therefore, even though Epsilon prolongs the life of products by repairing goods after customer use, one could question whether their mission is really embedded in a circular logic, or rather in a traditional logic.

To summarize, while IKEA, due to its impact on the planet and ecosystems, seems to acknowledge a need to change the current way of doing business, when evaluating circular ideas revenues and costs are prioritized over the environment. Yet, the belief was held that there is no conflict between those missions. Similarly, the financial logic also occurred within some of the SECs. Nevertheless, part of the SECs were founded with a drive to re-educate customers into a circular lifestyle, change the perceptions of a whole industry and drive social impact. An organisation’s prioritized values could ultimately be seen as a reflection of its view on its interlinkage to the environment, which leads us to the next section: approaches to sustainability.

5.2 Approach to Sustainability: Reactive versus Integral

This section will analyse how the research objects view their relationship with nature and society at large. According to McDonough and Braungart (2002) traditional businesses perceive the earth as an unlimited source of resources, and only undertake limited action against the consequences of resource depletion. Consequently, the purpose of businesses' sustainability agenda is minimum compliance to expectations. Contrarily, a circular business works within the limits of nature, doing more with what nature can produce and even aims to make a positive impact on it (Kraaijenhagen et al. 2016).

The incumbent company

In IKEA's sustainability report it can be read that they are aiming for just that; creating a positive impact, focusing on the root-cause of issues and not only treating the symptoms. An approach that can be seen as a mature view on sustainability; organisations that have reached this stage of maturity are no longer talking about minimizing their negative impact, but instead creating a positive impact (Kraaijenhagen et al. 2016). This attitude can also be identified among the interviewees, for example when Larsson, a circular business designer, says:

I think it's a lot about rethinking and reflecting upon how much of things you're using yourself [...] I would say it is about taking a bigger care about the things, not only for yourself, but also for others. For people now, but also for next generations, and the planet and the animals. We as humans, I think, are quite responsible as well to take care of that, and then I think that those who can take responsibility should take greater responsibility, because there will be others that might not always be able to take that same responsibility role. - Interview IKEA Larsson

This quote illustrates that an understanding of circularity implies a vision that is much larger than simply one company. It involves making it “for others” (not only for IKEA’s benefits), and it entails thinking on the “next generations” (a long-term perspective not considered in short-term returns). This wider perspective seems to be perceived as a moral obligation by

IKEA; “who can take responsibility should take greater responsibility”. However, returning to the sustainability report, at the same time IKEA states:

To reach more of the many people with affordable products and solutions for a better everyday life, we continue to set ambitious growth goals. - IKEA Sustainability Report 2019

IKEA seems to interpret organisational growth as an opportunity to create more impact, by offering affordable furniture to the many people. However, this vision can be compared to the general design goals of the first industrialists: products should be affordable and operated by anyone, anywhere, and able to be produced cheaply and quickly. These principles are built on an assumption that there is an endless supply of natural resources (McDonough & Braungart, 2002) and for that have received criticism, from which the ideas of a circular economy originate. The fact that IKEA aims to transform into a circular business and to create a positive impact, but on the contrary sets goals that contradict the circular economy approach, can be argued to be proof of conflicting institutional logics. Even though society's understanding of the environment has dramatically changed since the first industrialists operated, some logics might be historical contingent (Kraatz & Block, 2008). IKEA might, in that sense, still be influenced by the principles that were developed at the founding of the company, when society had a very different sense of the world. Moreover, IKEA's drive to change into a circular business reveals the prevalence of a traditional logic, as comes to light in the following quote from Lundqvist, a project leader of new technology innovation:

Internally within IKEA we can see that in the future we would only survive as a company economically if we are circular, because we can see that resources could be more scarce, and expensive. And there might be legislation in place forbidding us to produce products that will be disregarded in the future. And we foresee for example that in the world we're operating things might change, also legally, or the costs of things. So we need to be prepared for that. We want to be able to run our business. - Interview IKEA Lundqvist

From this quote it seems like IKEA's circular transition is primarily driven by a belief that legislation will soon come, a drive Kraaijenhagen et al. (2016) define as a characteristic for a linear approach to sustainability. It is not a drive of wanting to contribute to the environment or societal change, but rather a drive that is embedded in a traditional business logic. It is the foreseen future hinders, like "resources could be more scarce, and expensive" and "things might change, also legally" that seem to drive IKEA. This reactive and traditional approach towards sustainability was also highlighted by Holm, a business navigator analyst, when asked whether the circular initiatives are directed to where they can create most impact:

If we're talking about most impact in terms of environmental impact, no, not yet. -
Interview IKEA Holm

By revealing that the circular initiatives are not pointed at creating "most impact in terms of environmental impact", this quote does not show a circular logic where businesses are working in the constraints of nature, rather a traditional approach to sustainability where the environmental impact comes as a second priority. Furthermore, as Korhonen et al. (2018) point out that some CBMs lack proof of created environmental impact, one could wonder how much impact IKEA's circular initiatives that are currently tested [see setting 4.1.], actually make. This tension became prominent when Holm, business navigator analyst, described a well sold IKEA product, that is not suitable for a circular life:

It is also some kind of an official secret that not all our goods are good for a circular life. You can take one of the famous products [...] the Lack table. An impressive piece of production and machinery, I can assure you today they sell like 20/30 million tables a year [...] and it weighs like one kilo or something like that. But it is probably not a great product to repair or refurbish - Interview IKEA Holm

From this quote one could argue that IKEA is going around the issue, by not 'grasping the nettle' and continuing to sell products that make good revenue, "20/30 million tables a year", but do not contribute to their circular goal. If their goal is to make a positive impact as stated in their sustainability report, one could wonder why they do not focus their circular initiatives

in places where the changes might be needed the most in terms of environmental impact, for example starting to look at how they can dismantle “the Lack table” that is not made for a “circular life”.

Small Entrepreneurial Companies

In contrast to IKEA’s reactive and in some cases contradicting approach towards sustainability, the SECs appear to have a more proactive approach and integral perspective in regards to the environment. This integral perspective comes to light in the following quote by Delta:

If you look at using carbon dioxide we constantly recycle the same CO₂. So in that sense, our process with the solvent we use is completely circular. However, the last bit of CO₂ we have to throw away because it costs more energy to clean it than it would save. - Interview Delta Jones

This example illustrates the prominence of a circular logic; the “costs” Delta is mentioning are not in a financial sense, rather in a sense of energy consumption, that is, the use of natural resources. The careful consideration of whether to keep recycling CO₂ or throw it away, shows a proactive approach to sustainability. This is comparable to the considerations of Beta to recover a previously wasted resource, as the following quote shows:

I was very surprised about the amount of waste and leftovers from the coffee industry. Before I didn't really see it in the quantities, so I started to ask the barista in the coffee shops about the daily consumption, and it was quite high. And then I was very motivated to challenge myself and dive into new material development, and to find a solution for something very odd and very hidden, and very overlooked. - Interview Beta Carter

The above quote shows that Beta was “motivated to challenge” an overlooked issue and to rethink a very specific waste stream to come to its current business; a mindset similar to what Borland et al. (2019) argue as business strategies that embrace ecocentric instead of firm-

centric actions. In contrast to IKEA and equal to Delta, Beta started its business with the issue of resource recovery in mind, instead of with a business model. This approach was also taken by Alpha:

We just wanted to build a digital product that did good in the world, to start. So we didn't start out with a business model. And that is our biggest regret. After four years we have to say we don't find it, we're not going to find it [...] then it's you know it's a pro bono beneficial product for the world - Interview Alpha Smith

Alpha started the business to do “good in the world”, which demonstrates an ecocentric perspective. However, the quote highlights that over the years Alpha has been struggling to turn their platform into a profitable business model. Later Alpha explained that since there is no clear business model, it is an insurmountable challenge to get partners and investors on board. A company without a business model, i.e. without a clear strategy how the company itself can capture value (Richardson, 2008) does not seem to fit in the current institutional structure, therefore it just becomes a “pro bono beneficial product for the world”.

To summarize, while IKEA has an ambitious circularity goal, their approach towards sustainability seems to stem from a traditional firm-centric logic. Becoming circular seems to be driven by the idea of company survival and the circular initiatives only seem to steer the focus away from the root-cause of IKEA’s negative environmental impact. Contrarily, the SECs express to be built up and driven by an integral environmental and social perspective, that highlights their adoption of a circular logic. Despite the SECs willingness to make a positive change, Alpha shows that this collides with the dependency on other actors who put the profitable business model as priority. The interdependencies between an organisation and external actors pushing a certain logic will be further discussed in the following dimension.

5.3 Offering: Selling Ownership versus Performance

This section will deepen the understanding of how the traditional logic of new product sales contrasts the circular logic of selling usage of products. In a traditional model products are

generally designed to only last for a certain period of time, however, in a circular economy products are supposed to be designed for repairability and recyclability (McDonough & Braungart, 2002).

The incumbent company

During the interviews with IKEA it became clear that both internal structures, such as accounting methods, as well as external aspects, such as customer expectations, are based on the traditional business logic of new products sales, hence creating hindrances in the transformation to a circular economy. Shifting from selling furniture to leasing furniture [see setting 4.1.], meaning changing from retail to a “product as a service” (Lacy et al. 2020) circular business model, is not without impediments for IKEA, as seen in the following quote by Holm, business navigator analyst:

The revenues today are completely more or less linear with sold goods [...] And that would then influence the sales KPIs a lot. [...] I mean you could argue whether it would even fit in an existing structure at all, or do you need to set up a different company vehicle, because in some sense you are becoming a financial company [...] If you own the furniture and turn into a circular, and running it all yourself, you're also going to tie off the model of capital that currently is pretty much based on supply patterns and sales patterns, and that is your inventory, that is how the capital is tied up in stock today. [...] Let's say that you completely shift to a circular model, and that your average leasing contract is three years, all of a sudden you have inventory for almost three years. And that is, of course, quite a bit of capital needed to finance that.

- Interview IKEA Holm

As seen in the quote above there are many implications for changing to this kind of model. IKEA’s current financial structures are built upon KPI’s in a retail logic, meaning that they want to keep the inventory turnover as high as possible to not tie up capital in goods. This capital structure with a short-term return logic, where IKEA can quickly cover the cost for produced products, does not support a CBM where one remains in the ownership over the goods. Since the logics are so different, it could even imply that IKEA turns into a “financial

institute” and therefore has to set up a “different company vehicle”, in order to be able to comply with the different logics. Kraatz and Block (2008) argue that compartmentalizing, by creating separate business units as implied by this example of Holm, is a way to run different logics simultaneously. One could wonder whether the circular setup would completely take over the linear setup as soon as it is well developed, or, as Kraatz and Block (2008) argue, that this type of separation from the core business is just a symbolic action to comply with conflicting logics.

Moreover, the respondents of IKEA seemed worried that the consumers’ perception of IKEA products does not match the circular product logic, as seen in the following quote by Larsson, a circular business designer:

Due to the perception of IKEA furniture, but also in the way they are constructed, a lot of them end in recycling centres. Due to the way we also like "okay it costs 200, so I can easily buy a new one", which is, you know, emergency furniture, "I don't need to care about if I can resell it further." I [a customer] can feel like it's end of life, but in reality, they have many more years to live. - Interview IKEA Larsson

In this example Larsson appears concerned about the fact that IKEA is perceived as a low cost furniture retailer, and therefore customers will not see a value in reselling them. On the other hand, Larsson also gives a hint that IKEA itself is contributing to this problem, because the furniture is “constructed” in a way that makes them difficult to reuse. This shows patterns of thought of a traditional logic where products are designed to only last for a certain period of time (McDonough & Braungart, 2002), and not the circular logic of “redesign” (Borland et al. 2019). Lundqvist, a project leader of new technology innovation, further explains how IKEA has found a way to keep their current product concept in the circular business:

We have identified that 3D printing is one of the technologies that can support this transition from different points of view. So right now we don't have spare parts for certain products, because we stop selling those products, and store extra parts only for certain years. So we foresee that we could 3D print some of those parts and then make them available to customers, they access the spare parts longer in time. Also,

reusing parts of the materials or printing with potential waste. - Interview IKEA Lundqvist

This reasoning can be seen as contradictory in itself and illustrates how IKEA combines the two logics ‘consume more’ versus ‘repairing the stuff you already have’. “Stop selling” certain products and instead introducing new products could potentially nurture the customer’s interest in buying new. Constantly introducing new trends could lure the customer away from repairing the products they already have. One could then wonder whether 3D printing really is supporting the circular transition or just supporting a continuity of their current way of doing business.

Small Entrepreneurial Companies

On the same note, the SECs confirmed that new products remain the main stimulus to attract consumers, and perceive it difficult to compete with traditional products. Consequently, as seen in the following quote, the SECs have to convince customers of their value proposition:

We have to be able to assemble it, disassemble it, refurbish it and put it back in circulation and convince the consumer that this is like a new product. It's different from Alpha in the sense that people are expecting a like new product with our service. We make that promise to customers, so the products you're getting are going to be either new or like new. - Interview Gamma Brown

Contradicting to IKEA, this quote points out that Gamma sees the need to address its customers differently. By introducing new value propositions for customers such as “this is like a new product”, it seems that Gamma tries to stimulate customers’ mindset towards a circular economy, similar to the earlier quote of Beta to “educate” customers. Furthermore, besides the educational component that the SECs are talking about in their strive towards a circular economy, they also perceive customers as necessary to bring change, on which Delta elaborates:

I think a large part of the change in the whole textile industry is lying with the consumers that are now purchasing textiles and throwing them away too easily. So the customers do have an important role there. - Interview Delta Jones

This quote once again highlights a circular way of thinking that goes beyond a firm-centric approach; instead value is created together and even “customers have an important role”. Consequently, both IKEA and the SECs seem to be influenced by the logic held by their customers, which is in line with previous research stating that CBM implementation can both be hampered and supported by the values held by its environment (Levänen et al. 2018). Another type of external actor (Pache & Santos, 2010) previously identified by circular economy literature (Ranta et al. 2018) that affects the change towards a CE, occurs to be regulatory bodies, which was brought forward by several of the respondents of both the SECs and IKEA, and is highlighted in the following quote:

Now there's a lot of awakening within the minds of societies in Westernized countries, but we still need to work on the perception of values, and that you understand the value of material and it's life. [...] So it needs to be pushed also by the governments, to have some benefits that it can be more price effective and more competitive as well. So I think it's very hard. - Interview Beta Carter

Once more, this quote illustrates the need for a broad re-education in terms of society's understanding of “the value of material and it's life”. Nonetheless, as long as competition is still based on a low-cost logic, it might constrain the change of understanding and “awakening”. Thus, the respondents argue that the transition to a circular economy calls for governmental regulation.

Lastly, funding agencies also appear to be external actors who can influence the SECs, as Pache and Santos (2010) and D'Aunno et al. (1991) argue: as soon as an organisations is resource dependent on someone, they will feel the need to comply to their respective favored logic in order to access the resources needed. Alpha sheds light on this:

What is really difficult as an impact startup and circular startup is that circularity is costly. [...] We have proven that we can have a quarter of a million people sign up [...] And we did it for approximately 1/10th of what it takes to build a platform, and that is how we have been able to wow investors. But when they are then choosing between us and these guys who print new shit, sell it, and make a profit that is huge, very traditional, these guys prioritize the economy. - Interview Alpha Smith

This is an example of the contemplation of investors when choosing a new investment, who appear to prioritize short-term returns and profits. Since the transition to a circular economy requires a long-term perspective (Kraaijenhagen et al. 2016), and according to the empirical findings in some cases a higher initial investment, multiple respondents of the SECs revealed that convincing investors of the validity of their business model or technology was challenging. Delta, for example, expresses the following:

Our machines are more expensive than existing machines. It's more steel, you've put a lot of effort in safety, so they're relatively expensive, which is a big hurdle to introduce a new technology in a market where they're talking about dollar cents difference to move something or not to move something. The other side of that is that our operating costs are much lower, so in the end it balances out. But your first investment is higher and that's a big hurdle to overcome. - Interview Delta Jones

This quote highlights that, although Delta can prove to have a technology that in terms of costs balances out in the end, on top of the environmental gains, investors were still not easily convinced, because the short-term return logic occurs to be higher valued.

To sum up, switching from selling ownership to performance does not stand without complication. IKEA's capital structure and customer expectations are perceived as obstacles, however it also seems that IKEA's own attempt to transition into a circular business is constantly reflected back on a traditional product approach. They incentivize consumers to buy new, by constantly changing their product range and constructing products that are recyclable, but are not designed to last longer than one life cycle. The SECs on the other hand are shown to be mainly constrained by external actors in setting up circular initiatives and

systems, since consumer expectations, legislation, and funding schemes are all perceived to be based on a traditional logic. External actors will be discussed further in the next section, as being important for building networks and creating shared value.

5.4 Value Creation: Individual versus Shared

In line with Fehrer and Wieland (2020) explanation of circular economy being very network driven, where prolonging the life of products means incorporation of multiple actors throughout the product life cycle, several respondents in our study highlighted that their circular business models are to a large extent dependent on a network and other people's actions. This is in contrast with linear business models where the focus lies on creating value efficiently in isolation of each other (Richardson, 2008).

The incumbent company

To begin with, Larsson, a circular business designer, gives some examples of how IKEA works in a network:

We have a second-hand platform here in Sweden, Blocket, which enables IKEA family members to post their furniture for free on that platform [...] A couple of years ago we started a collaboration with some of the largest waste companies, to both learn that if we design something we are able to disassemble, so we can actually separate the materials and then we can become recyclers ourselves [...] So how we can collaborate around that and use the different competencies because you're creating waste that needs to be recycled. - Interview IKEA Larsson

This quote illustrates that IKEA both considers how to prolong the life of products and takes responsibility for it in the end of its life cycle, a circular logic (Lacy et. al), and additionally does so by collaborating with other companies; through Blocket and recycling firms. On the other hand, if the motive is “to become recyclers ourselves” again a firm-centric traditional approach can be identified. By learning and then executing themselves, IKEA would become

a competitor to its own ‘teachers’, which goes against the central practice for transitioning towards a well-functioning circular economy; collaboration rather than competition (Fehrer & Wieland, 2020). On the same note, investing in other circular companies seems to be a way for IKEA to accelerate the transition to a circular economy, as seen in the following quote by Berggren, a sustainable innovation manager:

We see circularity as a prerequisite for doing business in the future. It's morally right. By investing we get a place around the table where we have an influence and that we can support the company to scale. So it's to be in the forefront, what I think is the bottom line of what we get out of it. - Interview IKEA Berggren

What can be drawn from this quote seems to be quite ambiguous; IKEA is investing in other companies because supporting circularity "is morally right". However, there also seems to be an individualistic underlying thought to it, since Berggren acknowledges that investing is a way to gain influence, which seems to be a motive of not only supporting others, but rather something that can enable IKEA to have a ‘first mover advantage’ in the circular economy transition.

During the interviews with IKEA it also became clear that CBMs may not only require a network between firms but also require collaboration within organisations, meaning that organisations need to align their business units in a more integrated way, which was emphasized by Holm, business navigator analyst:

It is covering so many aspects, all the way from supply chain to customer financing [...] I think that has been the challenge, that you actually need quite skilled people to sort of bring this all on board and figure out “okay what does this mean for me, and how can I do something about it here?” [...] It might be a lot of different parts of the organisation that are usually not interlinked. - Interview IKEA Holm

This quote illustrates how challenging it can be to transform into a circular business, as Holm highlights it is dependent on many internal actors who have to be aligned on the circular

logic. Yet, different units potentially have varying operative goals that conflict with each other (Kraatz & Block, 2008). In a traditional logic, employees might be used to working independently from other units and operate their unit's tasks in a sequential manner. However, now they have to be both willing and able to take responsibility beyond an individual or single unit perspective; "how can I do something about it?" and think about how one unit's tasks affect the rest of the organisation's ability to change into a circular business.

Small Entrepreneurial Companies

The network logic likewise became apparent during the interviews with the SECs, as exemplified by the following quote:

We work very closely with two social workshop facilities, with handicapped people here in the local environment. They run a lot of dry processes for the coffee, so we deliver the coffee there, they do most of the drying, printing, and packaging. Cyclists pick up the coffee from the local cafe's. [...] Also it is very convenient for us to work with a very close network of people here, and other start-ups that work in the social workshops [...] the German government supports activities with this workshop so it's very cost competitive. - Interview Beta Carter

As this quote demonstrates, requires the network logic designers to think differently, by thinking in systems around products (local coffee shops have waste that can serve as a material), instead of thinking about the product itself (a coffee cup) (Bocken et al. 2016). This integral thinking considers both social and environmental aspects, as Beta works with handicapped people while being environmentally cautious the whole way through, by having a local cyclist transportation system. Moreover, it shows how a government can play an important network role, in enabling Beta's circular product to be cost competitive. Proving that a successful functioning of a circular business is very much dependent on the dynamics of its environment (Levänen et al. 2018).

Although the previous quote shows that it is possible for SECs to successfully build and contribute to ecosystem networks, one of the SECs elaborated on the big challenge related to network collaborations they had to overcome:

We used outsourced logistics for a little while and we found that the people didn't actually care about the furniture, they brought a table to walls and brought the leg on the bed, and then ultimately like, you know, that's a money losing asset for us, [...] so owning that whole part of the logistics chain is something that we've had to take like and build an expertise around to maximize the useful life of the asset. - Interview Gamma Brown

This quote highlights the complexity in the network logic, as other actors such as Gamma's logistic partners in this case, might not be aligned on the circular logic that aims to take care of the products one has, so that there is no need to harvest more material to create new products. Gamma's decision in this case though, seems to come from a traditional logic, where damaging furniture could equalise increased cost. Thus, it is not about maximising the useful life of the material (Lacy et al. 2020), but instead the "asset".

To summarize, some of the data shows that IKEA knows they are dependent on other actors in their attempt to transition to a CE, however, the way they currently collaborate with other organisations seems to have a firm-centric motive; to gain knowledge and influence for their own benefit. From the SECs it becomes apparent that they are built up with a network logic and think in systems around products. However, both IKEA and the SECs experienced challenges related to network building. Other challenges that are connected to network dependencies will be discussed in the next section.

5.5 Scaling: Global Efficiency versus Multi-localisation

Building on the above theory of network dependency, the data from both IKEA and the SECs shows that circular business ideas that are built in one market, modeled to a certain infrastructure, are not necessarily directly applicable to other markets. Therefore, this section analyses the tension between traditional logic scalability and circular logic localised solutions.

The incumbent company

While in their general understanding respondents from IKEA appear to recognize the lack of direct transferability of circular business ideas between markets, from multiple comments on scalability it occurs they are looking for the one solution that can be scaled and made globally efficient. This contradiction shows in the following two quotes of Berggren, a sustainable innovation manager:

The preconditions in the world are so different, there could be legislation, hygiene, or culture. So what is feasible in the Netherlands or in Sweden, with a certain type of infrastructure, would perhaps not work in India or the USA. If you take mattresses, when they were used for 10/15 years, you encounter an enormous waste stream with complicated materials. So in the Netherlands we have partners who can dismantle and recycle different parts. But to scale that, with the number of different places in the world will be an enormous effort. - Interview IKEA Berggren

In this first quote IKEA recognizes the importance of external actors as “preconditions” that influence, for example, infrastructures. The example of dismantling mattresses in one market is apparently so dependent on infrastructure and partners, that scaling that solution to other markets is “an enormous effort”. The “preconditions” could be understood as different “rules of the game” (Kraatz & Block, 2008) that guide the organisation’s decision making. They are not limited to, as Berggren points at, regulative conditions, but can also be broader cultural beliefs (Stål & Corvellec, 2018), such as “hygiene”. Even though Berggren seems aware of the fact that a circular economy needs local solutions by acknowledging that not all solutions are “feasible” in different markets, in the second quote it becomes apparent that IKEA strives for global scalable solutions:

Another thing is scalability. So, we have operations in most continents in the world, and we have gained this experience and knowledge through decades about the different markets. Whereas, many startups, naturally, are located in one spot, locally. They're very far from having a solution that can be implemented globally [...] the idea

could be brilliant. But the time to take it from brilliant local to globally integrated is very challenging. - Interview IKEA Berggren

This quote illustrates that IKEA might be influenced by multiple logics (D'Aunno et al. 1991) in their thought process. At first it appears that Berggren believes IKEA is well prepared to handle the different “preconditions”, due to their experience in different markets, and follows the circular logic of local adoption. However, then it comes across as if IKEA slightly looks down on smaller firms’ “brilliant” local solutions that cannot be “globally integrated”. One could wonder whether it is IKEA’s so far success of having “operations in most continents in the world” with a concept that looks similar in all markets, that makes a historical belief and traditional logic constrain openness to multi-localised solutions. As Kraatz and Block (2008) argue, these historical commitments can become anchors, and constrain an organisation the same way as an externally imposed logic can, such as customers and capital structures mentioned in previous sections.

During the interviews it seemed that IKEA is slightly holding back in their transition towards a CE, compared to the SECs, building on the argument that they need to find one circular solution that can scale and become efficient, hence offering customers affordable circular goods, as seen in the following quote:

What a consumer would be willing to pay for such furniture [second hand usage]. [...] So how can we then actually become so efficient that we can get under that price and become profitable doing it. [...] The efficiency and production is so low when you have this problem of scale. We are talking about the shift, where we talk more locally. - Interview IKEA Larsson

This could be seen as an example of a decision of internal actors that is justified by taking into consideration the logic believed to be held by external actors (Kraatz & Block, 2008), such as customer price sensitivity. However, again one could argue that this need for scalability and efficiency is due to IKEA’s historical contingency (Kraatz & Block, 2008), since IKEA’s goal has been to make affordable furniture accessible to everyone in the past. It becomes apparent that low cost and creating efficiency in isolation –“how can we then actually become so

efficient that we can get under that price” – are part of a traditional logic that is to a large extent still influencing IKEA in their decision process of how to proceed with their transition to a circular business.

Small Entrepreneurial Companies

In comparison to what the quotes of IKEA show, the SECs appear to be aware that their ‘solutions’ are very dependent on local networks and specific preconditions, as shown in the following quote:

We chose [to scale to] the Netherlands because it's so comparable to Copenhagen. So we basically almost have the same behaviour. [...] The trust level is important because you [the person giving away furniture] don't get any money for it, so you want to have a high trust level, in order to do it. That's why we also didn't go to America because there they don't want strangers at their door. - Interview Alpha Smith

Similarly to what IKEA highlighted in terms of hygiene in different markets, this above example of Alpha shows that scaling a CBM from one market to another is not only challenging in terms of practical issues, such as the availability of recycling companies, but also in terms of more intangible cultural aspects (Stål & Corvellec, 2018), such as trusting “strangers at their door”.

Compared to IKEA, who is still considering how to solve the problem of mattress recycling in markets with different “rules of the game”, Epsilon has made a start in solving this by becoming multi-localised. In some markets they resell the repaired products through their own platform, in other markets they use existing companies’ platforms. In some markets they have set up logistic facilities, in others they rent places. In the following quote Epsilon explains why it is necessary for them to adjust to specific markets:

Yes, our business both in regards to the re-commerce is duplicatable, so to speak, but then you have taxes and legal rules that in detail differ from country to country, specifically if you look at the European market. So there will be adjustments [...] It's a

challenge of course, but it's something that we will just, you know, sort out. -

Interview Epsilon Baker

Even though Epsilon sees their circular business offer of repairability “duplicatable”, they equally to IKEA experience that not all markets are in the same development stage of fitting the CE. Thus, instead of waiting for the individual markets to mature, Epsilon has accepted that they have to adjust to local networks when scaling internationally.

To summarize, on the one hand IKEA seems to be fully aware of the circular logic of localisation. However, they seem to be so constrained by their own history and traditional business logic, that the solution should be “globally integrated”, that they see scalability in a circular context as a challenge to overcome in order to offer affordable circular products for everyone. In contrast, the SECs are continuing their journey in enhancing the circular economy by embracing the circular logic of localised solutions, instead of seeing it as a hindrance to be overcome.

6 Discussion

The following chapter discusses the findings as analysed in the previous chapter in combination with the issues posed in the introduction of this research. First, in the introduction it was pointed out that some scholars agree that the concept of CBMs remains superficial and lacks critical analysis. This was confirmed by this study's findings, and will therefore be discussed in relation to the research objects. Related to this further research will be suggested. Secondly, from the findings it became clear that both traditional and circular institutional logic exist in organisations as they attempt to transition into a circular economy. These findings on conflicting logics will be discussed further, and the implications those tensions have on organisations. Also related to this point of discussion will further research be suggested.

6.1 Circular Business Models' Contribution to the Essence of Circularity

As seen in the introduction of this research, some scholars argue that the concept of CBMs remains superficial and lacks critical analysis. As presented in section [1.1.] EMF (2013) defined the circular economy as “an industrial system that is restorative and regenerative by intention and design”. According to the literature on CBMs (Kraaijenhagen et al. 2016; Lacy et al. 2020) in combination with this study's findings, the participating SECs and IKEA's currently tested ideas can be defined as CBMs. However, the findings on IKEA and some of the SECs show that their CBMs are not actually “restorative” and “regenerative”. Although they attempt to extend the straight line of product use, as for example Alpha and Epsilon extend products' life by respectively reuse and repair models, it is not guaranteed that the line is bent into a circle, to make products and resources flow continuously. Moreover, the product as a service CBM (Lacy et al. 2020) identified in IKEA's circular initiatives and Gamma, does not guarantee in itself that the furniture or its materials are ‘wasted’ after being leased for a couple of years. Thus, even though these models are presented in theory as a “CBM”

they are not interlinked with the key idea of a circular economy; “restoration” of resources. Korhonen et al.’s (2018) argument, as brought forward in the introduction of this study, that CBMs lack proof of environmental impact is confirmed by the empirical findings. Thus, we suggest that further nuance is needed in the understanding of CBMs, since CBMs alone cannot be directly equated to the change of the current take-make-waste economy.

Moreover, more critical analysis is needed for the concept of CBMs, since empirical data shows that although both IKEA and some of the SECs portray to have adopted a circular logic, their mission and approach to sustainability shows a clear prevalence of a traditional logic. For example, the findings on IKEA show that they focus their circular activities based on firm-centric benefits and feasibility, rather than on environmental and social impact. Thus, one can argue that there is (too) much variance in what is considered to be a CBM. The same label –circular business– is used to describe companies with major differences, however, to really advance the transition to a circular economy it is crucial that the standards are more critical and include a prominent focus on the restoration and regeneration of nature and resources. Therefore, coming back to Sridhar and Jones’ (2012) criticism that the triple bottom-line is more focused on the process rather than the outcome and the unquestioned co-existence of the three bottom-lines, we suggest that scholars and field-level actors put more emphasis on the implication of this approach on businesses. This unquestioned co-existence of the three bottom-lines was prominent in the findings of IKEA, as they seemed ignorant of the conflict between the values. By promising a triple bottom-line –balancing social mission, environmental stewardship, and economic goals– it is no wonder that CBMs can create delusional thoughts on successfully addressing the pressing sustainability issues. Therefore, we agree that theory on CBMs lacks critical assessment, mainly on the practical application of them and their ability to solve environmental challenges.

Besides the conclusion that CBM literature needs nuance and lacks critical analysis, it should still be mentioned that Fehrer and Wieland’s (2020) fourth discussed logic *symbiotic ecosystem* [section 2.1.3] highlights an important gap in CBM literature, since this logic’s value is created by closing resource loops, and is therefore more aligned with the concept of a “continuous” flow of products and resources. This was not identified among respondents of this study; although some appear to have a “zero waste” focus, which is the “ultimate ambition” of the circular economy, they remain focused on their individual CBM, and therewith take the “system” out of the concept of circular economy as an “industrial system”. Hence, further research is suggested in the relation between symbiotic ecosystems and CBMs,

and the implications of collective action and collaboration of various actors in their value creation logic.

6.2 Advancing Circularity in the Current Economic System

In the analysis it is highlighted that both traditional and circular institutional logic exist in organisations as they attempt to transition into a circular economy. An important difference identified, however, was the way in which these two logics occur in organisations. In line with previous research about mental and institutional barriers that are ingrained in organisations' systems (Stål & Corvellec, 2018; Kraaijenhagen et al. 2016), IKEA seems to be constrained by the traditional logic tied into things such as their capital structure, history and company vision. The tension between the two logics becomes evident in the way IKEA assesses their circular initiatives, how they perceive consumers, how they approach collaborations with other firms, and as stated in the section above, where their initiatives are directed.

Several of the SECs on the other hand, seem to come from a more 'pure' circular logic, as seen in their willingness to educate customers and industry partners of a circular lifestyle, their awareness of environmental 'costs' and local adaptiveness. However, as stated by previous research (Kraaijenhagen et al. 2016; Levänen et al. 2018), mental barriers can also occur due to socially accepted behaviour and other societal phenomena such as legislation and fiscal incentives, which is confirmed by the findings: the SECs are inevitably externally pressured by the traditional logic. The pressure of the traditional logic occurs in the SECs dependency on financial resources, and the imposed price competition with traditional products. For example, the findings show that the short termism that is connected to the traditional way of selling products is not carried by the circular logic of selling performance, where value is captured throughout the entire product life-cycle and not in a single customer transaction.

When seeing these tensions arise internally and externally to organisations, it no longer comes as a surprise that the implementation rate of CBMs is low. Not only do companies face practical issues implementing these concepts (Abbeya & Guide, 2017), but also mental constraints embedded in its institutional environment, as shown by our empirical

data. This indicates that the change towards a circular economy cannot be alone driven by companies, instead all societal actors, such as customers, regulation and financial institutes need to collaborate and use their power towards a mutual goal of accomplishing a circular economy. Thus, we suggest the transition towards a circular economy should not only rely on the actions of individual companies, as our findings show it needs to be accomplished through a systemic change.

Therefore, it would be valuable to conduct a study that explores circular economy implementation from a whole system perspective, where regulators, financial institutions, companies and customers are included simultaneously. We suggest further research into resource integration among various actors in a society, to specifically address what is needed in the transition to an economy that is restorative and regenerative. For example, studying collaborative platforms, where circular companies standing for one part of the ecosystem can connect with others, in order to “close” the circle together. On a different level, we suggest a study on how new forms of financing, that does not impose a short-term focus on profits, can support companies with their transition. More specifically, how business models that value environmental aspects above financial profitability, can be supported by alternative funding schemes, or a change in value logics of financial institutes.

7 Conclusion

The purpose of this study was to explore how the logic of the current economic systems influences organisations' patterns of thought and practices when attempting to transition into a circular economy. Through the use of a multiple case study with both an incumbent firm and SECs in the furniture industry or closely related industries, the contextual differences and common grounds when driving the change to a circular economy were explored. The following section will provide an answer to this study's purpose. Thereafter, theoretical and practical implications will be outlined.

7.1 Research Resolution

The furniture industry and closely related industries are highly affected by the concept of circular economy; it concerns products with a high environmental impact during extraction of materials or production phases. Therefore, companies within those industries have critical positions to drive the change towards a system that is restorative of natural resources and regenerative of the natural ecosystem, the key elements of a circular economy. This change requires companies to adopt circular business models. However, the actual implementation rate of those models is low. Moreover, current appliances of circular business models lack the environmental and social impact that many scholars imply they have, besides the business opportunities promised. We argue that this lack of impact is partially due to the way they are set up, with little consideration for the environment they operate in, and partially because they are rooted in a traditional perspective of profitability, and therefore remain firm-centric.

This comparative study shows that both the incumbent firm and the small entrepreneurial companies are internally and externally influenced by different institutional logics. Although the findings show that the different patterns of thought of the SECs appear to be rooted in a circular logic, their practices show a different side in terms of their offerings, which in most cases do not show to be restorative nor regenerative. May it be unconsciously or forced, the incumbent company's patterns of thought and practices clearly follow a traditional business logic in terms of its mission, approach to sustainability, offerings, value

creation, and perspective on scaling, despite its aim to become a fully circular business within the next ten years. In addition, the incumbent company appears to experience internally imposed barriers to this transition, due to its long established history. In brief, it occurs that both the incumbent company and the SECs follow the logics imposed by institutional actors – governments, consumers, and financial institutes– in their attempt to transition into a circular economy.

Thus, as long as not all institutional actors are aligned on a circular goal, companies remain to follow a traditional business logic and little impact can be expected from individual firms' circular initiatives. Therefore, this study concludes that the transition into a circular economy requires systemic change, to align all institutional actors to drive the change in conjunction.

7.2 Theoretical Implications

This study follows research using institutional theory as a lens to explore the various logics occurring in companies' as they attempt to transition to a circular economy. Subsequently, it is strongly grounded in a combination of circular business model and institutional theory. We responded to previous researchers' notion on the importance of assessing how institutional environments may support certain business logics and hamper other logics, by providing an critical empirical analysis of the logics influencing the research objects. Therewith, we delivered a first contribution to the emerging stream of research on the mental and institutional barriers for circular economy adoption.

7.3 Practical Implications

The findings of this study show important lessons for companies that attempt to transition into a circular economy. They may use the findings to understand the barriers they potentially face. However, this study is limited to empirical examples within the furniture industry, and closely related industries, thus the findings should be carefully applied to other contexts. Moreover, this study includes important implications for the institutional actors within our

society, since our findings show the important role they must play in a much needed transition to a circular economy.

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Appendix A - Interview Guide IKEA

Introduction

- Master thesis at LUSEM
- Purpose of study
- Your name will be kept strictly confidential
- Allowance to interrupt and not answer any questions
- Permission to record

- How long have you worked at IKEA?
- Can you describe a typical day in your position at IKEA?

Circular economy

- What does the circular economy mean to you?
- In what way would you describe IKEA as a circular business?
 - *Can you give any example of how you prolong the life of products?*
 - *Can you give an example of how you use resources in a smarter way?*
 - *How do you transform waste into resources?*
 - *How do you establish and promote systems and services to enable a circular economy?*
- What are the external driving forces for IKEA adopting a circular business model?
- Do you think the vision is achievable within the current system?

Collaboration

- How do you get partners to collaborate in a circular project? (External collaboration)
- How do you get other people at IKEA to collaborate in a circular project? (Internal collaboration)
- What happens to the products at the end of their life-cycle?
 - *Do you have reverse logistics partners?*

Business Model

- How does IKEA create value now, and how will that change in the future?
- How do you assess circular business models?
- How do you see the compatibility of growth and creating a positive impact?

Challenges

- What are day-to-day challenges you experience within your department, related to the circular strategy?
- Overall, what would you say are the biggest challenges IKEA is facing transforming to a circular economy?

Future

- Where do you see IKEA in 10 years in terms of circularity?
- How do you see the industry evolve in 10 years in terms of circularity?

Appendix B - Interview Guide SECs

Introduction

- Master thesis at LUSEM
- Purpose of study
- Your name will be kept strictly confidential
- Allowance to interrupt and not answer any questions
- Permission to record

- Could you describe a typical day as CEO of your company?
- What were the main drivers to start this business?

Company

- Can you explain your company's business model?
- What value is your company offering?

Circular economy

- What does the circular economy mean to you?
- In what way would you describe your company as a circular business?
- What is your personal drive to adopt a circular economy approach?
 - *How does this relate to the vision of the company?*
- Do you think the vision is achievable within the current system?

Collaboration

- What type of actors do you collaborate with?
- What drives you to collaborate with certain actors?
- What drives actors to collaborate with you?

Challenges

- What keeps you awake at night?
 - *Can you give an example of any barriers or challenges you are facing?*
 - *Can you relate this to your circular approach in general?*
- In what way would you improve your current process / business model?

Future

- Where do you see your company in 10 years in terms of circularity?
- How do you see the industry evolve in 10 years in terms of circularity?