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THE BARRIERS AND DRIVERS FOR A STARTUP TO IMPLEMENT A CIRCULAR BUSINESS MODEL

Master Thesis, M.Sc. Sustainable Entrepreneurship

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“What are the barriers and drivers for an entrepreneur to implement a circular business model in the (pre-)market entry phase?”

A cross-sectional study approach for ReFurnished

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ABSTRACT

The concept of circular economy is often opted as a possibility to sustainable development, which leads to a decrease in demand of natural resources and energy and their accompanying negative environmental impacts by extending the value of all type of resources. However, research shows that businesses face multiple barriers regarding the transition to a circular business model. Limited research is conducted that evaluates the adoption of circular strategies and CBMI by (sustainable) startups. To address this issue, this paper investigates the barriers and drivers of startups regarding the adaptation of CBM's with the aim to contribute to a better understanding of the difficulties startups face, and to provide a guideline for the implementation of a CBM for future startups. A qualitative cross-sectional study approach with the use of seven semi-structured interviews is conducted. The results of the study show that concept knowledge, public perspective, price and suppliers all create difficulties for startups to implement a circular business model. However, the intrinsic motivation, the new norm and good network are three strong drivers to pursue a sustainable approach. In addition, it shows that the barriers and drivers not only influence the CBMI, but they also influence each other.

Keywords: ‘circular business model innovation’, ‘sustainable startups’, ‘barriers and drivers business model innovation’, ‘business model approach’, ‘circular economy’.

INTRODUCTION

The ‘material footprint’ has globally increased by 70% between 2000 and 2017. This economic and social progress has resulted in environmental degradation, which is endangering the systems on which our future development, and therefore our survival, depends (Department of Economic and Social Affairs, n.d.). To ‘ensure sustainable consumption and production patterns’ is the 12th Sustainable Development Goal (SDG) of the United Nations (“Goal 12 | Department of Economic and Social Affairs,” n.d.). It includes eight specific targets and three means and implementation targets. However, the SDG focusses more production efficiency. It gives limited attention to unsustainable consumer patterns (Gasper, Shah, & Tankha, 2019). Moreover, the Intergovernmental Panel on Climate Change (IPCC) report also concludes that one of the barriers of implementing the adaptations in Europe is the lack of citizen engagement (IPCC, 2021).

The concept of circular economy is often opted as a possibility to sustainable development, which involves activities that reduce, reuse and recycle materials in the production, distribution and consumption systems (Guldmann & Huulgaard, 2020). Furthermore, it is expected that the adaptation to a circular economy will contribute to a decrease in demand of natural resources and energy and their accompanying negative environmental impacts by extending the value of all type of resources. The application of a circular economy model also entails circularity and improved relations between all the actors in the society, such as the employees, workers, consumers, local community, and the whole society (Università degli Studi di Urbino Carlo Bo, 2021). In addition, Barbu, Florea, Ogarca, & Barbu (2018) conclude in their research that switching to a sharing economy can have promising possibilities for a change in consumer behavior and therefore more citizen engagement. This type of economy ensures a more efficient and sustainable use of resources, by applying a collaborative consumption model. Contributing to this sharing economy is the new startup ReFurnished. They offer a circular furniture subscription service for international

students in the north of the Netherlands. Thus, they follow a product-as-a-service model. They aim to start with a sustainable business model and in the future, they want to switch to a circular business model.

However, research shows that businesses face multiple barriers regarding the transition to a circular business model (CBM), also referred to as circular business model innovation (CBMI). These barriers differ between different types of circular business models, but they also differ between the small, medium, and large enterprises (Bocken & Geradts, 2020; Guldmann & Huulgaard, 2020; Rizos et al., 2016; Vermunt, Negro, Verweij, Kuppens, & Hekkert, 2019). Internally, the product-as-a-service model encounters the most organizational and financial barriers. Externally, it encounters market and institutional barriers (Vermunt et al., 2019). Moreover, a lot of research is conducted on how established businesses can implement a circular business strategy or circular business model, but limited research is conducted that evaluates the adoption of circular strategies and CBMI by (sustainable) startup companies, especially those who are still in their pre-market entry phase. This is relevant because circular start-ups could be important in delivering environmental, technological, and social innovation (Università degli Studi di Urbino Carlo Bo, 2021). To address this issue, this paper investigates the barriers and drivers of startups regarding the adaptation of CBM's with the aim to contribute to a better understanding of the difficulties startups face, and to provide a guideline for the implementation of a CBM for future startups when entering the market. This leads to the following research question: *What are the barriers and drivers for an entrepreneur to implement a circular business model in the (pre-)market entry phase?*

This research question is answered by applying a qualitative research approach, contributing to existing literature in the field of circular business models, adaptation, and sustainable start-ups. As mentioned, this research is conducted for the startup ReFurnished.

However, the results of this study can be used by every startup (in their pre-market entry phase) to help implementing a circular business model.

The outline of this research is structured in five sections: After this introduction, section 2 offers an overview of existing literature research together with key theoretical concepts. Furthermore, section 3 describes the methodological approach and the used research design and in section 4, the findings are presented. At last, in section 5, a conclusion is provided where the limitations and recommendations are discussed. This research concludes with the appendix and a list of used references.

LITERATURE

The transition of the linear economy into a circular economy

The essence of the linear economy is often summarized as a ‘take-make dispose’, which means that one takes the resources, make the goods, sell the goods with profit, and dispose of everything that is not needed anymore. This also includes the product at the end of its lifecycle. This linear approach has been highly successful in increasing material wealth in industrial countries up until the 20th century, but it has caused weaknesses in the new millennium. The current economy approaches an inevitable point of being supply constrained. Especially in western economies, suppliers already operate at their almost maximum capacity for example in terms of food (Sariatli, 2017). Moreover, the linear approach threatens the stability of the economics and the integrity of natural ecosystems that are important for the survival of humanity (Ghisellini, Cialani, & Ulgiati, 2016).

In order for the economy and the environment to harmonize, the earth should be viewed as a possible closed-loop system with limited assimilative capacity, i.e., a circular approach (Geissdoerfer, Pieroni, Pigosso, & Soufani, 2020). The concept of a circular economy is inspired by various ideas and concepts dating back to the 1970’s (Winans, Kendall, & Deng, 2017). In consequence, with the increasing attention for the concept of circular economy throughout the last decades, different definitions were created. For this research, I will define circular economy according to the study from Geissdoerfer et al., (2020, p.3) that defines the circular economy as *“an economic system in which resource input and waste, emission, and energy leakages are minimized by cycling, extending, intensifying, and dematerializing material and energy loops. This can be achieved through digitalization, ferritization, sharing solutions, long-lasting product design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling.”* This transition into a circular economy results in a new evaluation of current business models of companies and organizations and the accompanying business model innovation.

Circular business models

The basic definition of a business model is merely a description of how a firm does its business and it can be seen as the conceptual and architectural implementation of a business strategy and as the foundation for the implementation of business processes (Richardson, 2005). The ideas of Richardson (2005) are also reflected in the research of Guldmann (2020), that outlines the three major components of a business model: (1) the value proposition, that is the product and/or service offering, (2) the value creation and delivery system, which enables a company to generate and deliver the products/services to customers and (3), the value capture system, which states how a firm earns revenue and generates turnover, etc.

A sustainable business model incorporates pro-active multi-stakeholder management, the creation of monetary and non-monetary value for multiple stakeholders and has a long-term perspective (Geissdoerfer, Vladimirova, & Evans, 2018). Circular business models (CBM) are a type of sustainable business models and are often associated with characteristics, such as ‘increased collaboration’, ‘pay for performance’, and ‘reverse logistics’. Different from a linear business model (LBM), a business model that is circular substitutes primary material input with secondary input, which extends the useful life of products and parts and results in closing material loops (Nußholz, 2017).

The concept of a circular business model is becoming important in the transition towards a circular economy. However, to transition a business model into a circular business model, companies must evaluate and innovate their current business models.

Circular business model innovation (CBMI)

Business model innovation refers to the process of changing existing business models to create new business model configurations (in a mature company) or designing entirely new business models to create, deliver, and capture value in novel ways (in a start-up or within a new business area of a mature company) (Guldmann & Huulgaard, 2020). Following this understanding, after

reviewing multiple definitions of sustainable business model innovation (SBMI), Geissdoerfer, Vladimirova, & Evans (2018) define SBMI as the conceptualization and implementation of sustainable business models. This can include the creation of completely new business models, diversification into additional business models, implementing of new business models, or switching from one business model to another. The definition of circular business model innovation (CBMI) differs between incumbent firms and startups. With incumbent firms, CBMI entails the process of reconfiguring an existing linear business model to include CBM factors in the form of value recreation, redelivery and recapture and an extended value proposition, or the process of redesigning an existing circular business model to include more of, or better versions of, these CBM factors. In startups, CBMI is defined as the process of creating a CBM based on those CBM factors from the beginning (Guldmann & Huulgaard, 2020). Circular startups are driven by three types of transition: from sustainability to circularity, from a sustainable entrepreneurship towards positive impact startups, and from sustainable innovation to circular business model innovation. Circular startups are unique entities that use all three transition processes (Rok & Kulik, 2021).

Barriers and drivers for CBMI

The CBMI process is challenging and requires more engagement and commitment from the company (Guldmann & Huulgaard, 2020). Companies often do not have the tools and business processes at hand to implement a more circular kind of innovation and different types of firms cope with different types of difficulties (Bocken & Geradts, 2020; Guldmann & Huulgaard, 2020; Rizos et al., 2016; Vermunt et al., 2019). According to Bocken & Geradts (2020), barriers and drivers exist at an institutional, strategic and operational level. Institutional barriers and drivers include well-established rules, norms and beliefs that describe the reality for organizations and affect organizational behavior. Strategic barriers and drivers are concerned with actions that contribute to core organizational goals and form the long-term direction of a

firm. At last, operational barriers and drivers refer to the implementation of the decisions made on the strategic level. However, larger companies face more and different internal and external barriers than smaller firms. Although startups also face barriers on the institutional and operational level, it is concluded that unlike incumbent firms, they experience barriers at the value chain level (Guldmann & Huulgaard, 2020).

According to Tiba, van Rijnsoever, & Hekkert (2020), startups form the center of entrepreneurial environments. Successful entrepreneurs will become leaders in the market. These startups are viewed as successful because of their various business performance indicators, i.e., size and growth of sales, employees, investments, or market share. All these indicators show that their business is viable and that they fundamentally contribute to the distribution of (sustainable) products or services. Such successful startups are commonly referred to as lighthouses, as they stand out from the community of startups and operate as a guide to others. It is therefore important to also understand the drivers of such startups. Existing drivers are represented as the internal motivation or passion, the maximization of positive impact and the purpose to achieve integrated economic and environmental objectives (Rok & Kulik, 2021).

Concluding framework

Reviewing the existing literature about barriers and drivers for business model innovation shows the importance of circular business model innovation and that it is evident what the barriers and drivers are for incumbent firms. For startups, however, research is limited. To highlight the current gap, I will apply a framework, adapted from Bocken & Geradts (2020) and Guldmann & Huulgaard (2020), as seen in Figure 1.

This framework shows the barriers that form a threshold for startups to implement a circular business model. Moreover, it shows the existing drivers for entrepreneurs to implement a CBM.

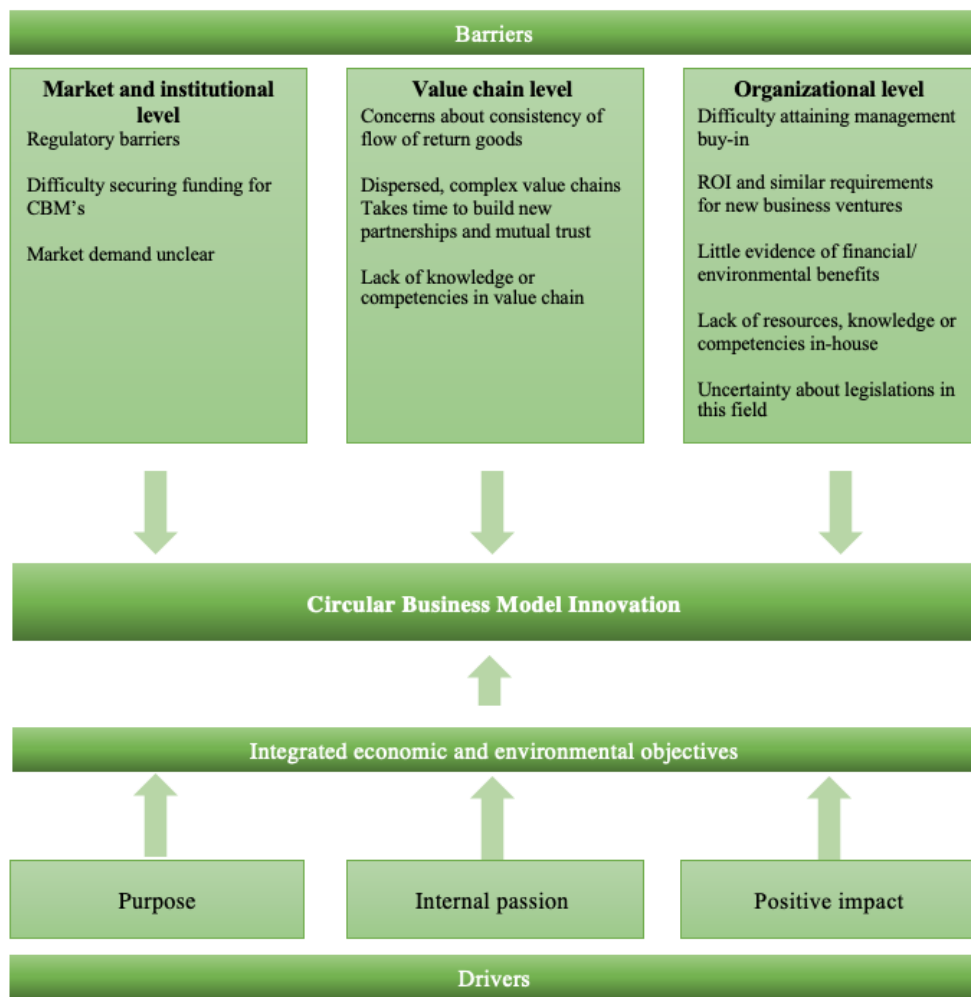


Figure 1 Framework for barriers and drivers for startups

METHODS

To better understand the underlying mechanisms that drive a startup to choose or not to choose a circular business model before entering the market, I adopted a qualitative cross-sectional study approach with the use of semi-structured interviews. This approach is suited, because a cross-sectional research design involves the collection of data on more than one case and at a single point in time to eventually analyze the data to detect patterns of association (Bell, Bryman, & Harley, 2019: 59). I studied the existing barriers and drivers for the circular business model approach for seven startups and I added more barriers and drivers to the theoretical framework that are currently not enclosed.

Sampling

To select suitable startups that represent the topic of interest, I looked at startups who have just entered the market and who have an interest in circular business models. As a next step, through personal contacts I gained by the recent participation in a startup contest based in Friesland, the use of LinkedIn and the help of the interviewees, I got in contact with the respondents for my research. These respondents and the accompanying startups are all located in The Netherlands and are shown in Table 1.

Data collection

I conducted semi-structured interviews from the 20th of April until the beginning of June 2022. The interviews were done online, with Google Meet, as this was the most accessible tool and I have worked with it in the past. Online interviews have the advantage that it is more flexible than face-to-face interviewing. Last-minute adjustments can be easily made when it comes to scheduling. Moreover, it saves travel time and costs, as some interviewees are living in other parts of the Netherlands. These advantages increased the likelihood that the participants were willing to participate in this research. One important limitation of online interviews is the loss

of connection, which can result in poor recordings of the interview, which makes transcribing difficult or at worst impossible (Bell et al., 2019). I took this into account when conducting the interviews. The interviews were conducted in either Dutch or English, depending on the preference of respondents. A minimum of six interviews is advised, which is in line with the results of Guest, Namey, & Chen (2020), who conclude that usually six or seven interviews is enough to assure a 80% saturation in a homogenous sample. However, I aimed to conduct more interviews to reach a higher level of saturation. In total, I interviewed eight startups, all in different industries. However, in the end I decided to exclude interview 4 from the results. This due the fact that the startup provides a service, and all the other startups provide products. Therefore, the findings were not representable. In Table 1, a list of the interviewees, accompanying industries and location of the startup is shown. The interview guide contains a list of questions on the specific topic of interest. However, the order of questions asked differed in some interviews from the guideline and some questions were asked that are not in the guideline. I also added questions throughout the process of interviewing (Bell et al., 2019).

Interview	Industry	Location
Interviewee 1	Packaging/ Food and beverage industry	Leeuwarden
Interviewee 2	Skin care products	Den Haag
Interviewee 3	Packaging/Logistics	Leeuwarden
Interviewee 4	Consultancy	Wageningen
Interviewee 5	Care products and cosmetics	Leeuwarden
Interviewee 6	Food and beverage industry	Breda
Interviewee 7	Online platform for services	Meerkerk
Interviewee 8	Lifestyle items/craftmanship	Leeuwarden

Table 1 Interviewees and accompanying industry and location

Data analysis

The interviews were recorded with permission from the participants, which I collected through consent forms, and they were transcribed using the software of Amberscript. In addition, I read the transcriptions to correct any mistakes. As a next step, I used Atlas.ti to process all data. Atlas.ti is a coding program for qualitative data. As this is an exploratory study to search for

barriers and drivers, I used an inductive approach when coding. The coding process includes the examination of a coherent part of the empirical material, in this case the transcript of the interview, and to label it with a word or a short sentence that summarize the essence of the content. Coding reduces large amounts of the interviews, and it makes the data readily accessible for further analysis, while simultaneously increasing the quality of the analysis and findings. From coding, final conclusions can be drawn and verified (Skjott Linneberg & Korsgaard, 2019). The coding process will be done on three levels (Bell et al., 2019; Gioia, Corley, & Hamilton, 2013; Skjott Linneberg & Korsgaard, 2019). The first level involves basic aspects and to summarize what the interviewee has said. This stage is not yet analytical. This stage consists of a total of 103 codes. The second level is more analytical in nature, and it focused more on creating patterns and seek for similarities in the data. This brought the data to a higher level of abstraction, which resulted in 12 groups. The third and final level enclosed broad analytic themes. In this phase, it was possible to see concepts and codes as dimensions of a broader phenomenon. The complete coding tree is presented in Appendix A. At last, for establishing the credibility of the findings and to ensure that I interpreted the results correctly, conformation is sought in form of respondent validation or member validation (Bell et al., 2019). Unfortunately, due to personal circumstances and the time limit of this research, this validation is not included in this research.

FINDINGS

This section discusses the findings of the data collection. The aim of the research is not only to find the barriers and drivers startups encounter while implementing a CBM, but also to provide a new theoretical framework. In total, eight startups were interviewed, excluding one from the results. All startups entered the market less than three years ago. In this section, the five barriers and four drivers that the startups encountered will be discussed as well as additional findings that came up during the interviews. First, due to the nature of the qualitative structure of the research, additional information that I retrieved from the interviews is presented. Next, the barriers will be discussed, followed by the drivers.

Business modeling

Only interviewee 5 mentioned using theoretical business models on occasion to improve. All the other interviewees described the business modeling process as flexible, organic, practical and continuously changing. Interviewee 3 mentioned: *“Well, I’ve always had that [the business model] pretty clear and we’re still working on the business case. The real business model can still change and more and more is being added.”* Testing the product, doing more research and develop the customer base are three key factors to a successful business model, according to all interviewees. Another finding is that a sustainable business model needs to add value to what already exist, and that sustainability is not an intention to buy. Interviewees 1 and 3 explain that people will not buy something because it is the sustainable option, or as interviewee 1 said: *“Sustainability itself does not encourage to buy”*. Aside from sustainability, the product needs to add value to the already existing alternatives. At last, only the startup of interview 7 implemented circularity into their business model after entering the market, stating that they when they looked at the production of their product, they were left with a lot of waste and as they quote: *“that's actually really just pure from our hearts that we thought of; we also can't bring ourselves to throw that away, that we actually went to see well, what can we do with those*

lemons, so that they get a second life?" All the other interviewees had the intention from the beginning to implement circularity into their business model. They encountered a gap or a problem in the current market and they provided a sustainable solution for it.

The Dutch market

Often mentioned in the interviews were the advantages and disadvantages for startups in the Dutch market. The Netherlands has a good infrastructure, which is convenient for startups in the business of sustainable packaging and logistics. The mindset of Dutch people is both mentioned as an advantage as a disadvantage. In general, the Netherlands is currently more willing to accept sustainable options than in other countries and the inhabitants are more willing to change their behavior and lifestyle, or as interviewee 3 said: *"I think we are just a very small country that with our way of thinking can represent a very large part of the world, so at least the western countries."* However, within the Netherlands, the public perspective is considered a disadvantage, as people are pickier, sceptic and conservative. In addition, the Dutch market is also not progressive and flexible when it comes to finances and data sharing. Dutch people or organizations are considered more distrustful regarding money and giving personal information, making the market more conservative than other markets. Interviewee 1 explains this: *"You also notice that in Germany, France and England that it is much easier there. And if you do further research, you will also discover that it is a completely different culture. As for the money, they give more to charities, credit cards are used more and in that regard data is also easier to obtain. People are more willing to give up credit card information or to download an app [and therefore sharing their personal data]. And that is not the case in the Netherlands."*

International expanding

Interviewee 1, 2, 3, 6 and 8 mentioned that after accomplishing being successful in the Dutch market, there is an intention to expand the business on an international level, as the Dutch market is relatively small compared to larger countries. An advantage that interviewee 2 mentions is that Europe has a lot of young people who are interested in the sustainable and circular economy and by expanding, they can produce more locally and use local resources: *“We are really circular, so we just want to have small branches in every country, because then we can reuse the raw materials better.”* Another reason to expand is given by interviewee 6 and the aim is to counterbalance the growing (not-sustainable) American market: *“It's not for nothing that all major online companies are almost American. It is of course horrifying that we have almost no European counterparts for that and that is also the greatest motivation for me to always stay for a European Union. We just have to make sure we counterbalance that.”*

Barriers

Concept knowledge

The first barrier is the concept knowledge. Interviewees 2, 3, 5, 6, 7 and 8 mention that one difficulty regarding implementing circularity is the definitions of the concepts ‘circularity’ and ‘sustainability’ and the public perspective regarding those definitions. Interviewee 3 said: *“Very few people know what is really good. What is sustainable? For example: You have a material that is completely sustainable. You can just throw it into nature and that's fine. But it will only last one, or ten times. Then you have something a little more polluting, still durable. But that lasts 300 times. What is sustainable then? It just all has to do with opinions. So the difference in opinions who thinks what is sustainable? That's just more of a public opinion.”*

Another misconception about sustainable businesses is that they can and are allowed to be profitable. Three interviewees mentioned that even though they are running a sustainable business, it is still a business, and the goal is also to be profitable. Interviewee 5 feels not

understood, as *“I feel like they [the people] don't quite understand that I'm just running a business. That I also make profit and that it is also allowed and that I have turnover and have objectives. People think I should be a foundation. Why on earth should I be a foundation if I want to reach the large group of people or actually want to prove that you can set up a company well, circular, with a profit.”* The last disadvantage with the lack of concept knowledge is that the concepts ‘sustainability’ and ‘circularity’ are often used as a marketing tool to attract more customers, therefore losing their value and confusing people.

Public perspective

The second barrier is the public perspective, mentioned by interviewee 1, 3, 5, 6 and 8. The public perspective consists of consumers as well as stakeholders such as suppliers, investors and buyers. The public perspective is negative when it comes to sustainability and circularity, as it costs more money, and it takes more effort. Interviewee 6 mentions: *“I think people are still lazy, so people want to fix it, but it shouldn't cost too much, and it shouldn't be too hard and it shouldn't take long.”* It is in the nature of people to buy their things in bulk and for the cheapest price. Interviewee 5 explains: *“People are keen on a discount. If you just give a discount, people will think they have a good deal. Actually I am very much against giving a discount, because you build up a price and you don't do it for nothing. And if you also have to consider a margin to give that discount, then you are either fooling people if you don't give a discount, or if you give a discount, it hits you in your own wallet. And you do the latter, you have to outsource the production again and everything is produced in Asia, because it is nice and cheap there. So that messes up the whole world again. And that just sustains each other.”* Moreover, the public perspective is also influenced negatively by the marketing tools that companies use to promote sustainability and circularity. The concepts are losing their value, as mentioned at the previous barrier.

Price and suppliers

The third barrier often mentioned is the availability and price of sustainable alternatives. Interviewees 1, 2, 3 and 5 say that it is hard to find suppliers. Sustainable materials are more expensive than for example plastics, which results in a higher product price. It is therefore also difficult to find stakeholders and buyers because they are not willing to pay the higher product price for a more sustainable option if there is also a cheaper option. They only look for the cheapest and easiest option and that option is rarely the sustainable one. Interviewee 1 states: *“You are trying to solve something for the world and nobody wants to cooperate because it costs money. And it doesn't even cost that much money. It costs about ten euros per month more, and that scares me that ten euros really makes so much difference.”* At last, interviewee 2 mentions that when the production is outsourced, there are limited producers who have the right equipment to produce on a sustainable level and if they do, they only produce on a large scale.

Scale

The fifth and last barrier is the small scale of startups. The first disadvantage is mentioned by interviewee 7 and references to production: *“The downside is that I think when you create a product and certainly when you look at purchasing raw materials and packaging material and things like that. It only becomes interesting if you order a lot and if you have a high production.”*

The problem of producing on a small scale is also mentioned by interviewee 2, 3 and 5. They do not have the resources to produce on a larger scale and taking that step acquires more money and branding. Another disadvantage of small scale is that it is difficult to invest in the right equipment, as there is not a lot of capital. The last disadvantage is that on a small scale it is more difficult to reach other people and to compete with large companies not focusing on sustainability, according to interviewee 2, 5 and 6. However, interviewee 7 mentions that one advantage of the small scale is *“that you are not really in the spotlight yet, and that mistakes can be made.”*

Drivers

Create impact

The first driver is that pursuing a sustainable business is often an intrinsic motivation. The interviewees want to create a closed-loop economy whereby the list reducing carbon emissions, material footprint and (e-)waste as reasons their motivation to be sustainable. In addition, they not only aim to create an impact on an environmental level, but they also aim to provide the consumer with the right information about the current state, as interviewee 5 explains: *“It feels very much as if it is unjustified that many people do not know that mainly in personal care products, there are micro and nano plastics in them. If people know about it, I'm fine with it, but it's being kept hidden. If people know that, then my goal has actually been achieved. I'm very bad at injustice, people don't know that.”*

The new standard/norm

The second driver is the acknowledgement that the linear economy is transitioning to a more sustainable and circular economy and therefore becoming the new standard. Sustainability needs to become the norm, not the exception. Interviewee 5 said that *“it would be very nice if in five years we are already at a point where the majority of humanity finds this [plastic free products or natural products] normal.”* Another reason is obtaining resources. Depending on the industry, the interviewees mention that the sustainable raw materials they use are (almost) free and although other sustainable materials are more expensive, the interviewees highlight that there cannot be an infinite provision of the currently used raw materials. At one point, it is necessary to transition to these sustainable options. Moreover, regulations become stricter and new laws on national and European level will be implemented in the next years, for example the law that discourages using disposable plastic to enhance a cleaner environment. This gives these startups a competitive advantage in the current transitioning economy. Interviewee 1 describes the process: *“for example we are already moving to other technologies for the future*

of packaging, but perhaps we will not use them at all, but that we are already in it, so that we are able to switch without gigantic costs or using a very large learning curve for it and that combined with raising capital and can scaling so to speak, so growing super quickly should make it possible.” Interviewee 5 also has an advantage, as “if very large companies, municipalities or provinces want to have Christmas packages, then they must purchase this completely circular from 2025, well that is of course quite a big advantage, because I am already into that category.”

Network

The sustainable business environment provides a good and solid network for startups and businesses. Interviewees 1, 5 and 8 emphasize that this sustainable network enables them to get help from other people, businesses and municipalities on a voluntary basis. Moreover, it allows them to learn and develop their business and the sustainable entrepreneurial environment is considered a safe learning environment. In addition, there are more subsidies and resources available on a small scale for sustainable startups. All interviewees agree that having a sustainable business creates goodwill. According to interviewee 6: *“because circularity and sustainability are now so high on everyone's agenda, make it or could be a flying start for my company. Like I said, the doors just open very easily.”* The presence of a solid network was stronger for the startups based in Leeuwarden than in other parts of The Netherlands.

DISCUSSION

It is evident that these findings bring a larger problem to the surface than just the barriers that prevent a startup to implement a circular business model. The public perspective and information gap are still a large part of the problem. Customers and stakeholders often find it difficult to comprehend the concepts of sustainability and circularity and are not willing to pay the extra price. For sustainable startups, it is difficult to change that perception as they often not have the scale and finances to compete with the established businesses in their sector. This sustains each other because sustainable materials are still more expensive than the current used materials and there is still a lack of sustainable suppliers for these startups. In addition, businesses use the concepts as a marketing tool. By overusing the concepts and using them wrongly, they lose their value. Marketing is meant to influence the behavior of people and if these concepts are not used in the right way, people are getting misinformed and therefore it contributes to the increased knowledge gap. Remarkable are the results of the perspective of the Dutch market. When considering the Dutch market compared to other countries, the mindset of Dutch people is considered promising. This contradiction emphasizes the importance of context within the field of sustainability, as there is clearly a difference in public perspective within the Netherlands and the perspective of the Dutch market compared to other countries. Funding was often mentioned as difficult in The Netherlands because of the conservative nature of the Dutch finance system. This prevents startups from scaling up, getting the right equipment, find the right suppliers and to reach more people through branding.

Nevertheless, the findings resulting into the drivers are promising. Not only is sustainability an intrinsic motivation to create impact, to teach people and to reduce climate change, but the interviewees also acknowledge that this is going to be the new norm in the future. Governments are implementing more laws and targets that encourage the sustainable economy and at the same time penalize the businesses who do not fulfil the targets. All startups

are aware of their competitive advantage and strong market position even though they are still small and produce on a small scale. This is strengthened by the solid network that the sustainable entrepreneurial environment provides startups. The companies located in Leeuwarden experienced a stronger feeling towards the good network and the possibilities that the sustainable entrepreneurial environment provides than the startups located in other parts of The Netherlands, which again emphasizes that context is very important, but it also highlights that other municipalities of The Netherlands are not as developed as Friesland is. All findings were combined to alter Figure 1 into the following new framework, as seen in Figure 2 below. Moreover, the barriers and drivers not only influence the implementation of a CBM, but they also influence each other, which can also be implemented in the theoretical model. There is significant evidence that the barriers and drivers strengthen and sustain each other. The problems that arise on a market/institutional level, have an influence on the barriers at the value chain level. As there is less demand for sustainability on a market level, it has a negative impact on the supply side, the value chain level. This negative impact on the value chain level, reflects on the organizational level of the business, as it affects the way they conduct their business. In the end, there is not a real difference between implementing a CBM pre-market entry phase or just after entering. Another interesting finding is the use of theoretical business models. The findings show a contradiction with existing literature as the findings show that the business model approach happened in a more organic and practical way and that the interviewees did not use theoretical business models. However, it is not enough to reject existing research about the importance of using business models, as these startups have entered the market less than three years ago.

As any other studies, this research has some limitations. Unfortunately, due to the time limit and personal circumstances the results were not validated by the interviewees. As I read and coded the interviews myself, there is a chance that I did not interpret the findings correctly.

This could be prevented by respondent validation or member validation (Bell et al., 2019). Another limitation is that although the results had a significant level of saturation, I conducted all the interviews by myself. Therefore, there is a possibility that I unintentionally lead the interviewees in a favorable direction when conducting the interviews. It is important to take this into account when interpreting the findings. At last, I could have prevented excluding one interview by structuring beforehand the type of business I wanted to interview. I did not consider this before searching for companies.

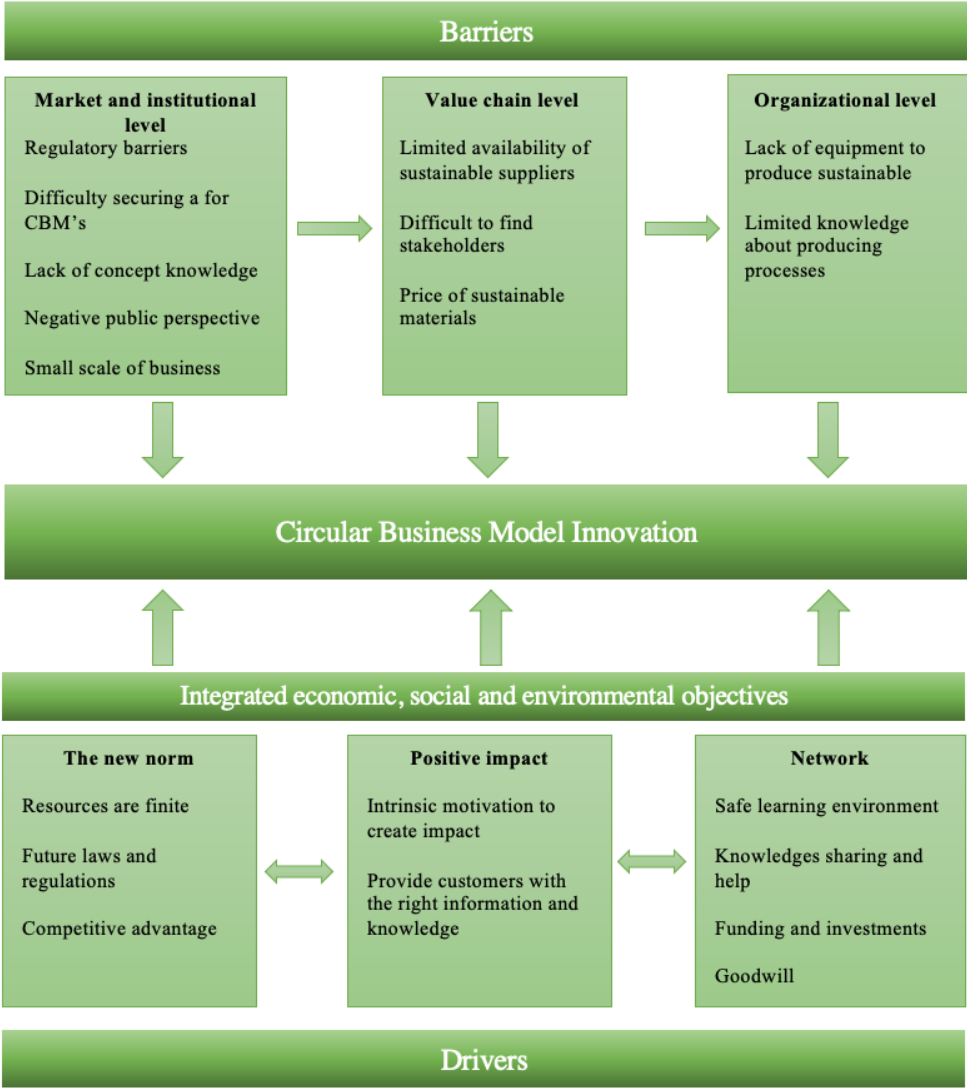


Figure 2 New theoretical framework including barriers and drivers for CBMI

CONCLUSION

This research aimed to study the barriers and drivers for an entrepreneur to implement a circular business model in the pre-market entry phase. Existing literature shows the importance of circular business model innovation. However, current research is more aimed at incumbent firms and for startups, research is limited. Eight startups were interviewed in this study, excluding one from the results. The results of the study are combined and seen in Figure 2 and shows that concept knowledge, the public perspective, price and suppliers all create difficulties for startups to implement a circular business model. These barriers were categorized into the three overarching barriers, namely market/institutional level, value chain level and organizational level. However, the intrinsic motivation, the new norm and good network are three strong drivers to pursue a sustainable approach. The companies located in Leeuwarden experienced a stronger feeling towards the good network that the sustainable entrepreneurial environment provides than the startups located in other parts of The Netherlands. Moreover, it shows that the barriers and drivers not only influence the CBMI, but they also influence each other. In addition, the business modeling approach resulted in interesting findings, as almost none of the startups used theoretical frameworks before starting their business. At last, the findings show the importance of context, as the public perspective is different within the Netherlands and for the Dutch market compared to other countries regarding the international expanding of their startups. In conclusion, this research highlights new perspectives and resulted in new information and therefore contributes to the existing field of circular business modelling by expanding the literature with a perspective on startups.

RECOMMENDATION

These findings can be used to help other startups strengthen their business model approach and to provide them with a solid theoretical basis for entering the market. In addition, these findings can be used for policymakers to improve current policy regarding sustainability and circularity. At last, this section includes suggestions for further research.

Managerial implications

This study is conducted for ReFurnished, a startup in their pre-market entry phase. The results of this study can be useful for startups like ReFurnished to strengthen their business plan, as well as prepare them for entering the market. I recommend startups to test, change and improve their product or service as much as possible before scaling up. Moreover, by considering that a lot of startups had problems with obtaining capital and scaling up, it is important to have a solid plan for funding and investments. The province of Friesland is the best option, because they provide a good network and therefore it could be easier to get access to resources. At last, I advise startups to create an impact by finding a solution or possibility that happens to be sustainable, but to advertise efficiency and ease, instead of emphasizing on being the sustainable option. It is evident that in this current environment, sustainability is not yet an intention to buy.

Policy implications

For institutions such as governments and municipalities, these results can be used to create targeted campaigns to inform people about sustainability and its positive impact. It is recommended to create more awareness about the concepts. Moreover, it is recommended to provide businesses with stricter rules about using sustainability and circularity as a marketing tool. Businesses need to be more transparent about their sustainable strategies and sustainable impact. At last, I highly recommend universities and other educational institutions to reconsider

their study programs within the field of business, economics or management. As sustainable business needs to become the standard and not the exception and to increase the concept knowledge, it will be beneficial to implement a sustainable business approach as a normal business approach in every program. Learning about the triple bottom line approach, greenwashing or the importance of measuring impact should not be a specialized study, it should be included in every related business study.

Further research

As the results show that the public perspective and the lack of concept knowledge sustain each other, more research can be done focusing on how to provide clear information about these concepts for consumers. In addition, this research only focused on startups who provided a product. It could be helpful to investigate startups who provide a sustainable service, such as consultancy or strategy implementing. Conducting more research in this area can be a solution to increase the gap that currently still exists between consumers and sustainability.

In addition, the Dutch market was often mentioned positive as well as negative. For further research, it would be interesting to compare the entrepreneurial environment for startups in The Netherlands with other countries. This could give more insight on how to operate successfully within these environments and it could help startups to scale their business to an international level. Moreover, the results show that Leeuwarden provides a stronger feeling of having a solid network than other parts of the Netherlands. This is also interesting to investigate further.

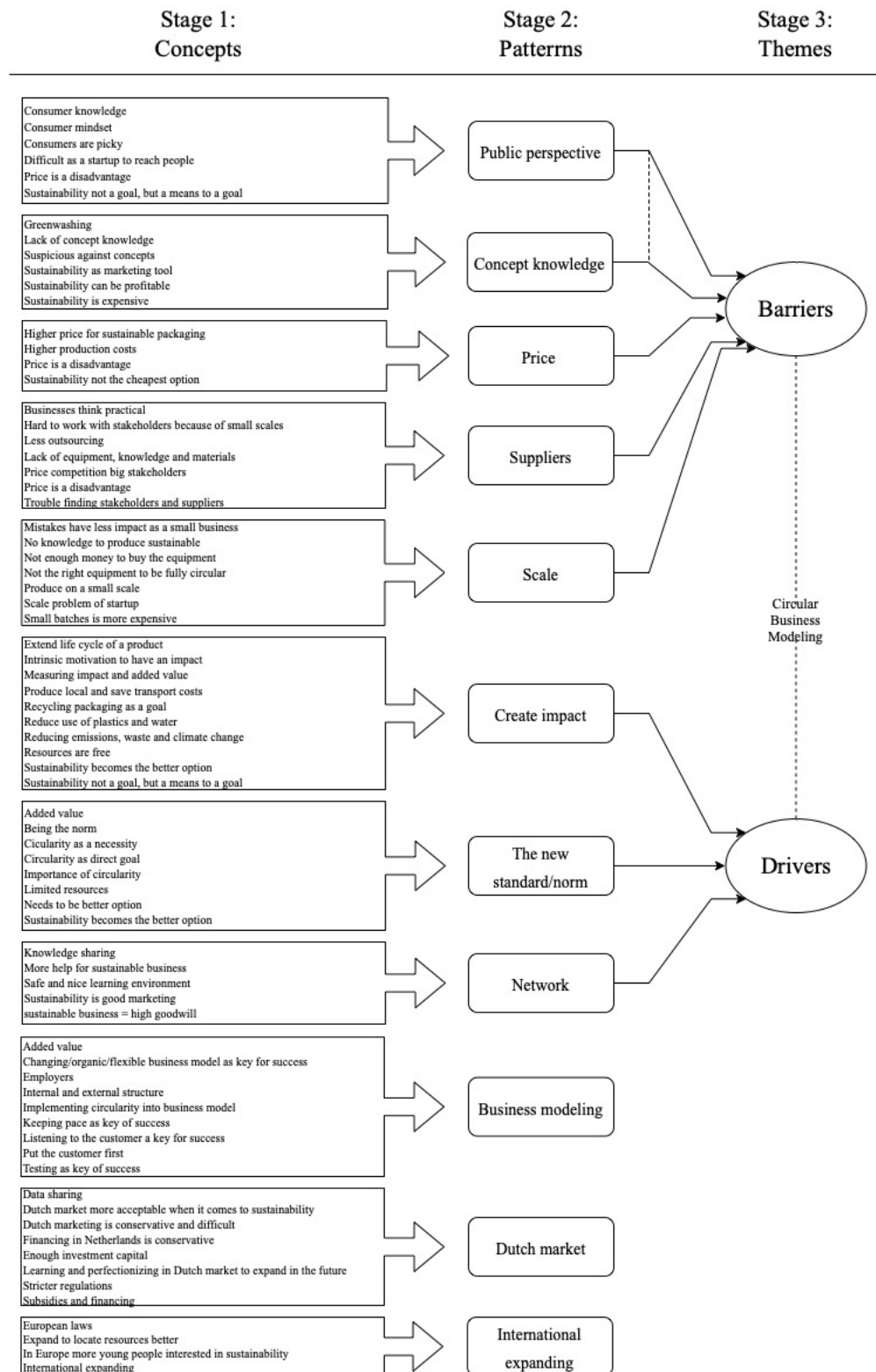
As mentioned in the discussion, the results also influence each other. With further research it can be studied if there is a relation between increasing concept knowledge and the customer mindset and if that has an influence on finding suppliers and sustainable alternatives for materials.

PERSONAL NOTE

Thank you for reading this thesis and guiding me through this process. As any other student experiences, the process of writing this thesis had its ups and downs. Having a background in Business Economics I was a little hesitant and anxious about conducting qualitative research. I had little to none experience with conducting interviews and coding them. However, I enjoyed talking to the participants and I learned a lot from them. I gained some interesting new perspectives about price discounts, and I also appreciated all the input I was given. In addition, I was also glad to help the participants by sharing my own knowledge and contacts with them and to help them as well. This is another example of the good network and goodwill the sustainable entrepreneurial environment of Leeuwarden provides. I am so glad that I chose to do this program, as it has challenged me on a personal and professional level, and I cannot wait to share my knowledge with the rest of The Netherlands.

APPENDIX

Appendix A – Coding scheme



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