Gordon Institute of Business Science
University of Pretoria

Business model transformation towards sustainability:

the drivers, barriers, and outcomes

Natalie Hesketh-Maré

Student Number: 20820195

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Philosophy in Corporate Strategy.

28 November 2021

ABSTRACT

There is a call for businesses to act sustainably by becoming purpose-led and contributing to a sustainable future. This action requires business leaders to transform business models (BM) into sustainable businesses that create environmental, social, and corporate governance value. This study focused on how businesses transform their existing BMs towards sustainability, with the aim to assist managers and other stakeholders with the implementation of sustainable business model innovation (SBMI).

The theoretical relevance of this study was to explore the emergent topic on SBMI that related to a standard BM that transforms into a sustainable BM, then into BM innovation, with the goal of SBMI. In addition, the literature on the theoretical constructs on the drivers, barriers, and outcomes of BM transformation towards sustainability were also explored.

This was an exploratory and qualitative study that addressed the research questions which explored the theoretical constructs of the drivers, barriers, and outcomes of sustainability. 15 Participants were interviewed from the South African emerging market's franchising, retail, and supplier industry sectors. The qualitative data was systematically analysed through a thematic analysis approach.

A conceptual framework was developed which reflected the new insights on the theoretical constructs of BM transformation towards sustainability. This study confirmed and added to the existing body of knowledge by making a small contribution to the SBMI literature. The research also added new insights by claiming potential refinements to the literature, which related to the external barriers of sustainability. These potential refinements to the SBMI literature included energy security, socio-political unrest, and COVID-19.

KEYWORDS

Sustainable Business Model Innovation, Business Model transformation towards sustainability, Sustainability, Drivers of Sustainability, Barriers of Sustainability, Outcomes of Sustainability

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy in Corporate Strategy at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Natalie Hesketh-Maré **28 November 2021**

CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF KEY ACRONYMS AND ABBREVIATIONS

BM	Business Models
SBMI	Sustainable Business Model Innovation
SBM	Sustainable Business Model
WBCSD	World Business Council for Sustainable Development
ESG	Environmental, Social, and Corporate Governance
UN	United Nations
SDG	Sustainable Development Goals
BMI	Business Model Innovation
TBL	Triple Bottom Line
ABS	Chartered Association of Business Schools
ROI	Return on Investment

CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

This study explored the drivers, barriers, and outcomes of business model (BM) *transformation* towards sustainability. The research was based on research gaps identified by scholars through the collection and analysis of recent and credible academic papers. This was a qualitative study that explored the existing theory on sustainable business model innovation (SBMI) and how this concept is implemented to transform organisations towards a more sustainable business model (SBM) (Bocken & Geradts, 2020; Foss & Saebi, 2016; Geissdoerfer et al., 2018).

1.1 Background to the Research Problem

The World Business Council for Sustainable Development (WBCSD) developed a framework for businesses, in their published 'Vision 2050: time to transform' document, which detailed the need for businesses to *transform* from their traditional business-as-usual approach (McCormick & Smith, 2021). Furthermore, the WBCSD encourages business leaders to shift their mindsets to reinvent capitalism towards value creation, to build long-term resilience, and to adopt a regenerative approach that will positively contribute to the ecosystems (McCormick & Smith, 2021). Stakeholders, investors, and customers are demanding more sustainable action from businesses (Accenture, 2021).

In addition, it was stated that businesses have an opportunity to lead the way in terms of sustainable investing in the environmental, social, and corporate governance (ESG) factors for value creation which will contribute to a more sustainable future (Ismail, 2020). Therefore, the United Nations (UN) formed the UN Global Compact division for business leaders to support the Sustainable Development Goals (SGDs) and to take responsibility for the current strain on the planet and its people (United Nations Global Compact, n.d.).

Furthermore, there is an opportunity for business leaders to take responsible action by transforming their BMs to become more sustainable to make an impactful and lasting difference in society (Accenture, 2021). In addition, there is a call for CEOs and leadership teams to also transform into responsible, stakeholder-centric managers (Accenture, 2021). Bhattacharya and Polman (2017) emphasises that CEOs should be the drivers of change and their leadership should lead sustainability transformation within organisations. The World Economic Forum's Global Shapers Community goes a step further by calling all young leaders to drive sustainable action and sustainable change in

order to solve global issues such a climate change, social injustice, and poverty (World Economic Forum, 2021).

The COVID-19 pandemic has increased the pressure for businesses to deliver ESG value to all stakeholders and to operate sustainably within society (Accenture, 2021). Businesses need to ingrain sustainability into all elements of the BM as well as into the company's DNA to succeed in delivering ESG value (Accenture, 2021). Now is the opportunity for organisations to transform their BMs into purpose-led sustainable businesses (Accenture, 2021).

1.2 Research Problem

The focus of SBMs and SBMI is a current topic in academic literature and recent debates are evident amongst academics. The theoretical problem is that there is limited research on SBMI, and its successful adoption and implementation within businesses (Evans et al., 2017; Geissdoerfer et al., 2018). Bocken and Geradts (2020) identified that the barriers and drivers of sustainability are also less explored in the literature. Therefore, this study covered these theoretical constructs with the addition of the construct on the outcomes derived from the successful implementation of SBMI.

The evolution of the BM literature was noted by Evans et al. (2017) who indicated that the literature has evolved and merged into three categories namely, the classification of BMs, the quality of the BM which contributes to the performance, and the innovation potential of the BM. Bolton and Hannon (2016) stated that the BM literature explains and elaborates how firms establish themselves to create value from their activities.

Furthermore, Foss and Saebi (2016) undertook an extensive literature review and indicated that the business model innovation (BMI) literature is current and emerging, but it is less prevalent than the concept of open innovation. Two factors explained the reason for the limited number of published papers on BMI. Firstly, BMI research is relatively recent and secondly, it is an emergent research topic with a lack of understanding of the structure (Foss & Saebi, 2016).

In addition, SBMs is defined as the continuous *transformation* of a company's capabilities, through the implementation of SBM concepts, with the purpose to become a more sustainable business (Teece, 2018). Geissdoerfer et al. (2018) further defined a

SBM as one which is fundamentally based on the value capture and value creation activities, by creating value for all stakeholders and the company (Geissdoerfer et al., 2018).

Furthermore, several credible papers detail the emerging theories on SBMI which have been applied to start-ups, entrepreneurial firms, and in the corporate context (Foss & Saebi, 2016). Geissdoerfer et al. (2018) described SBMI as the development and implementation of a SBM. BM transformation is noted as a BMI mechanism that involves the *transformation* of an existing BM into a different BM (Geissdoerfer et al., 2018). In addition, Rauter et al. (2017) identified two ways to transform BMs towards sustainability. Firstly, an existing BM could be re-defined to incorporate sustainability into all strategies, and secondly, existing BMs could be radically transformed (Rauter et al., 2017). Many scholars have also indicated that this is a fertile area for further research (Foss & Saebi, 2016; Tate & Bals, 2018).

Rauter et al. (2017) asserted that sustainability plays a pivotal role in the continual *transformation* of traditional BMs. Additionally, the literature revealed agreement by scholars that *transformation* is required to existing BMs to realise BMI through the development of dynamic capabilities (Bocken & Geradts, 2020; Foss & Saebi, 2016; Jacobides et al., 2018; Richter et al., 2017; Tate & Bals, 2018). Bocken and Geradts (2020) indicated the utilising of dynamic capabilities, which include sensing, seizing, and transforming, towards a SBMI into three categories namely, institutional drivers, strategic drivers, and operational drivers. Whereas Rauter et al. (2017) classified the drivers of SBMI as either internal or external drivers.

Regarding the literature on the barriers of SBMI, it revealed that the barriers of SBMI first need to be identified and addressed before proceeding with the implementation of BI and sustainability strategies in order to improve the probability of success (Evans et al., 2017). Bocken and Geradts (2020) classified the barriers of sensing, seizing, and transforming for SBMI into three categories, namely, institutional barriers, strategic barriers, and operational barriers.

Furthermore, it was acknowledged that the effective and efficient adoption of *transformation* towards sustainability within organisations will potentially create shared triple bottom line value (TBL) (Tate & Bals, 2018) as well as contribute to several beneficial outcomes (Foss & Saebi, 2016). Several academic papers identified the positive

impacts that sustainability has on both the firm's financial and sustainability performance (Evans et al., 2017). Hence, stakeholders within the value chain are becoming more aware of the impact of sustainability and the ESG factors and are therefore placing pressure on firms to be transparent and report on these sustainability matters (Evans et al., 2017).

1.3 Research Questions

The main research question of this study was based on the research opportunities identified by Bocken and Geradts (2020), Foss and Saebi (2016), and Geissdoerfer et al. (2018) on how organisations can utilise innovation within a BM to assist with the *transformation* into a SBM.

Three research sub-questions were also identified to support this main research question and were related to the three theoretical constructs, as seen in Figure 1:

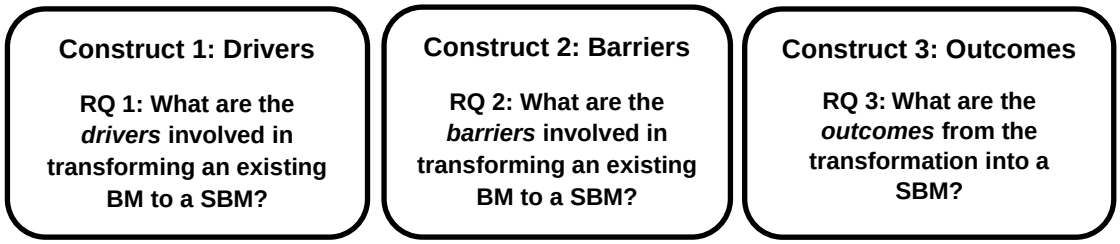
Research sub-question 1: What are the *drivers* involved in transforming an existing BM to a SBM (Bocken & Geradts, 2020; Rauter et al., 2017)?

Research sub-question 2: What are the *barriers* involved in transforming an existing BM to a SBM (Bocken & Geradts, 2020; Foss & Saebi, 2016; Geissdoerfer et al., 2018)?

Research sub-question 3: What are the *outcomes* derived from the transformation into a SBM (Bocken & Geradts, 2020; Evans et al., 2017; Tate & Bals, 2018)?

Figure 1

Research sub-questions related to the theoretical constructs



Note. Author's own, adapted from Bocken and Geradts (2020), Evans et al. (2017), Foss and Saebi, 2016; Geissdoerfer et al., 2018, Rauter et al. (2017), and Tate and Bals (2018).

1.4 Research Purpose

The purpose of this study was to explore SBMI to develop a better understanding and reveal new insights. The related theoretical constructs on the drivers, barriers, and outcomes of SBMI were also explored.

Furthermore, this study explored the BM transformation phenomena identified by Geissdoerfer et al. (2018) which related to a standard BM that transitions into a SBM, then into BMI, to create SBMI, were also explored.

A conceptual framework was developed to present the key constructs of SBMI, and the drivers, barriers, and outcomes.

1.5 Research Scope

1.5.1 Theoretical Scope

The scope of the research covered SBMI literature which is a recent debate amongst academics and is also identified as a fertile area for further research (Foss & Saebi, 2016; Tate & Bals, 2018). The SBMI literature is within the broader scope of the strategy literature, but it is specific literature that combines sustainability and builds on the existing body of work on BMs and BMI. However, SBMI has become an emerging topic within the strategy literature as outlined by Bocken and Geradts (2020), Foss and Saebi (2016), and Geissdoerfer et al. (2018).

Furthermore, the theoretical scope also covered the broad constructs on the drivers, barriers, and outcomes of BM transformation towards sustainability, which are less explored in the literature, and were outlined by Bocken and Geradts (2020), Evans et al. (2017), Guldmann and Huulgaard (2020), Laukkanen and Tura (2020), Rauter et al. (2017), Sousa-Zomer and Cauchick-Miguel (2019), and Tate and Bals (2018). Therefore, the SBMI literature and the theoretical constructs on the drivers, barriers, and outcomes were explored in this study to answer the research questions.

1.5.2 Physical Scope

The physical scope of this study used three specific industry sectors to explore SBMI and the research questions, within the South African emerging market for the following reasons. Firstly, the systematic literature review revealed that the physical scope of many of the previous studies conducted by Bocken and Geradts (2020), Guldmann and

Huulgaard (2020), Rauter et al. (2017) were based in developed countries and therefore South Africa was chosen as a developing country.

Secondly, the systematic literature review also revealed that Sousa-Zomer and Cauchick-Miguel (2019) recommended that future studies on SBMs be conducted in developing countries, and Tate and Bals (2018) identified this as a meaningful area for further research.

1.6 Research Contribution

1.6.1 Business Relevance

Business leaders will need to transform their current BMs due to the pressure from stakeholders, government, and customers, to become more sustainable and to contribute to a sustainable future (United Nations Global Compact, n.d.). There is also an opportunity for business leaders to be the drivers of impactful change (Bhattacharya & Polman, 2017) and to transform BMs into purpose-led sustainable businesses (Accenture, 2021).

Therefore, this study focused on how businesses transform their BMs towards sustainability, with the aim to assist managers and other stakeholders with the implementation of SBMI, to make a meaningful contribution to the planet and its people.

1.6.2 Theoretical Relevance

According to Crane et al. (2016), there are three ways to contribute to the body of knowledge which includes testing, building, or refining the theory. The relevance of this study was to confirm and to add to the existing body of knowledge by making a small contribution to the SBMI literature, in relation to confirming the operational drivers, organisational, and market-level barriers of sustainability within an emerging market.

Furthermore, the research contribution was to add new insights by claiming potential refinements to the literature on SBMI which related to the external barriers of sustainability as follows:

- Energy security
- Socio-political unrest
- COVID-19

Furthermore, Geissdoerfer et al. (2018) stated that SBMs will replace and surpass traditional BMs. It was argued that the competitive and sustainable advantages of transforming an existing BM to a SBM will cause non-sustainable BMs to become obsolete in the future (Geissdoerfer et al., 2018). Therefore, this exploratory study covered the drivers, barriers, and outcomes of BM transformation towards sustainability to respond to the research questions.

1.7 Structure of the Research

This research paper is made up of seven Chapters, with Chapter 1 covering the introduction to the business problem. Chapter 2 is a detailed, systematic literature review that follows a structural flow of seven sub-headings. Chapter 3 explains the main research question and sub-questions, that were identified in the literature review.

Chapter 4 discusses the aspects of the research methodology and design. The research findings are presented in Chapter 5. These findings were then discussed in Chapter 6. This research paper is concluded in Chapter 7, which presents the principal theoretical conclusions, research contribution, limitations of the research, and suggestions for future research.

CHAPTER 2: LITERATURE REVIEW

The literature review was directed towards the research questions, as listed in Chapter 1.3, and focused on the analysis of credible, peer-reviewed journals in the fields of BM, SBM, BMI, and SBMI. The literature review was structured on the key theories of BM *transformation* identified by Geissdoerfer et al. (2018). This transformation related to a BM transitioning to a SBM, then to BMI, and then into SBMI. In addition, the literature on the key constructs on the drivers, barriers, and outcomes of SBMI, were also explored. The literature review is divided into these seven sub-headings as detailed in the roadmap in Table 1.

Table 1

Roadmap of the literature review

Introduction							
Main headings	**2.1 Business models**	**2.2 Sustainable business models**	**2.3 Business model innovation**	**2.4 Sustainable business model innovation**	**2.5 Drivers of sustainable business model innovation**	**2.6 Barriers of sustainable business model innovation**	**2.7 Outcomes derived from sustainable business model innovation**
Discussion Topic 1 and sub-headings	Description of the literature on business models	Description of the literature on sustainable business models	Description of the literature on business model innovation	Description of the literature on sustainable business model innovation	Description of the literature on the drivers of sustainable business model innovation	Description of the literature on the barriers of sustainable business model innovation	Description of the literature on the outcomes derived from sustainable business model innovation
Discussion Topic 2 and sub-headings	Analysis of the literature on business models	Analysis of the literature on sustainable business models	Analysis of the literature on business model innovation	Analysis of the literature on sustainable business model innovation	Analysis of the literature on the drivers of sustainable business model innovation	Analysis of the literature on the barriers of sustainable business model innovation	Analysis of the literature on the outcomes derived from sustainable business model innovation
Discussion Topic 3 and sub-headings	Interpretation and conclusion on the business model literature	Interpretation and conclusion on the sustainable business model literature	Interpretation and conclusion on the business model innovation literature	Interpretation and conclusion on the sustainable business model innovation literature	Interpretation and conclusion on the drivers of the sustainable business model innovation literature	Interpretation and conclusion on the barriers of sustainable business model innovation literature	Interpretation and conclusion on the outcomes derived from sustainable business model innovation literature
2.9 Conclusion							

Note. Author's own.

The analysis of these seven literature concepts were based on comparisons, where similarities and differences were identified as evidence to support the research questions and used to interpret the scholars' findings. The literature under each sub-heading was compared on five dimensions. The five dimensions included the description of the definitions, the key concepts, the level of analysis and context, and lastly, areas for further research. The reason for selecting these dimensions was to facilitate the

systematic comparison of the academic papers. Furthermore, this organising mechanism also assisted with the triangulation of the evidence.

2.1 Business Models

2.1.1 Description of the Literature on BMs

Teece (2018) stated that the core of a BM is centred on value creation, delivery, and value capture. Geissdoerfer et al. (2018) mentioned that BMs have four fundamental functions in business practice. The first function is the value proposition, which is the reason why the firm is in business and why customers use their products and services. The second fundamental is value creation where value is created through the BM and its functions. The third and fourth fundamental functions are value delivery and value capture (Geissdoerfer et al., 2018). An evolution on the BM literature was noted by Evans et al. (2017) who stated that the literature has evolved and merged into three categories namely, the classification of BMs, the quality of the BM, which contributes to the performance, and the innovation potential of the BM. Bolton and Hannon (2016) indicated that the BM literature explains and elaborates how firms establish themselves to create value through their business activities.

Table 2

Analysis of the BM literature

	Authors	Geissdoerfer et al. (2018)	Teece (2018)	Bolton and Hannon (2016)	Massa et al. (2017)
Business Models	Journal	Journal of Cleaner Production	Long Range Planning	Research Policy	Academy of Management Annals
	Description of definition	Four fundamental functions of a business model are based on value.	Three fundamental functions of a business model are based on value.	A business model design is an activity system.	Three interpretations of what a business model represents.
	Key topics and concepts covered	A firm's capability to transform into a new business model for a sustainable competitive advantage.	The link between business models, dynamic capabilities, and the business strategy.	Three components of an activity system within a business model.	Academic argument: • Business models are strategy, OR • Business models are a form of strategy
	Level of analysis	Firm Level	Firm Level	Macro & Firm Level	Firm Level
	Context / Setting	A review of literature	Business environment	Energy sector	A review of literature
	Areas for further research	How can organisations move from an existing business model to a more sustainable business model in business practice? The design-implementation gap of business model innovation and the three related elements.	Three areas for further research on business model innovation and the impact on dynamic capabilities: • Its conceptualisation • The implementation • The transformation	Further research on the positive impacts of an activity system within a socio-technical setting. Research gap between business models and sustainable innovation to introduce sustainable technologies to generate revenue.	• Determining how value is created in relations to the ESG factors • Measuring this value creation • Measuring the value delivery • Measuring the value capture

Note. Author's own adapted from Bolton and Hannon (2016), Geissdoerfer et al. (2018), Massa et al. (2017), and Teece (2018).

Table 2 was compiled to organise the evidence in relation to the research questions and to assist with a comparative analysis of the similarities and differences between the four selected scholars. The reason these four scholars were selected was due to these scholars having researched and written relevant and recent articles on BMs, that have been published in credible and top-rated journals, like the Research Policy Journal which has an ABS 4 rating.

2.1.2 Analysis of the Literature on BMs

There were clear areas of similarities identified after the four articles were analysed, between Geissdoerfer et al. (2018) and Teece (2018) as well as areas of distinct difference amongst Bolton and Hannon (2016) and Massa et al. (2017), as seen in Table 2. The articles were systematically compared on the five dimensions. The first comparison was on the scholars' description of their definitions on BMs. The main similarities were found between Geissdoerfer et al. (2018) and Teece (2018) on their definitions of a BM, which both included the function of value. Teece (2018) summarised his earlier definition of a BM by stating that there were three fundamentals of a BM which were based on value, namely value creation, delivery, and capture.

Although Geissdoerfer et al. (2018) undertook a review of the SBMI literature, the scholars adopted the Teece (2018) definition and summarised the BM definition with the emphasis on the value elements as the foundation of a BM, but also added a further value fundamental, which was value propositions. Hence, a BM was created to satisfy the needs of customers by creating and adding value through the firm's value proposition, value delivery, and value capture (Geissdoerfer et al., 2018).

However, the differences were noted between Bolton and Hannon (2016) and Massa et al. (2017) in terms of their description of BMs and the key concepts. Bolton and Hannon (2016) identified the activity system approach which describes a BM as a system of symbiotic functions with various stakeholders in the network. This activity system approach had three components, namely, content (what functions need to be performed?), structure (how are these functions related?), and governance (who needs to perform these activities?) (Bolton & Hannon, 2016). Whereas Massa et al. (2017) stated that there were three interpretations of what a BM represented. Firstly, a BM represented the foundation of the overall organisation, secondly, BMs were cognitive and linguistic schemas, and thirdly, BMs represented the activities and functions of a firm (Massa et al., 2017).

The second comparison was on the scholars' key topics which uncovered further similarities between Geissdoerfer et al. (2018) and Teece (2018), which involved a firm's capabilities. Geissdoerfer et al. (2018) stated that to achieve a sustainable competitive advantage, the firm's capability to transform into a new BM was crucial. Teece (2018) added that there was a link between BMs, their dynamic capabilities, and the business strategy. Furthermore, Massa et al. (2017) echoed a similar concept on business strategy, which was an academic argument in the literature, which contended that if a BM was a strategy or if a BM was a form of strategy.

The third comparison was on the level of analysis which indicated that all studies were at a firm level (Geissdoerfer et al., 2018; Teece, 2018; Bolton & Hannon, 2016; Massa et al., 2017). The context in the Teece (2018) paper was in the business environment, whereas the context of the Bolton and Hannon (2016) study was in the energy sector, and both the Geissdoerfer et al. (2018) and Massa et al. (2017) papers were both literature reviews. Lastly, the recommendation for further research indicated similarities between Teece (2018) and Geissdoerfer et al. (2018) which stated that further research in the implementation of BM innovation be investigated.

2.1.3 Interpretation and Conclusion on the BM Literature

The analysis of the BM literature presented similarities and differences in the literature. The analysis indicated that while Teece (2018) and Geissdoerfer et al. (2018) had similar definitions, there were differences between Bolton and Hannon (2016) and Massa et al. (2017). There were also similarities in the comparison of the key topics between Geissdoerfer et al. (2018), Teece (2018), and Massa et al. (2017). Lastly, the comparison for further research indicated that Teece (2018) and Geissdoerfer et al. (2018) had similarities in their recommendation for further research on the implementation of BMI.

Concluding the analysis and interpretation of the literature, the BM definition by Geissdoerfer et al. (2018) was suitable to this study's research questions as well as the scholars' concept of BM *transformation* to create a sustainable competitive advantage. The justification for this definition and concept selection was due to the research questions being based on the *transformation* of existing BMs. As per the BM transition described by Geissdoerfer et al. (2018), the SBM literature was reviewed in the next section.

2.2 Sustainable Business Models

2.2.1 Description of the Literature on SBMs

SBMs were defined as the continuous transformation of an organisation's capabilities, through the implementation of a SBM, with the purpose to become a more sustainable business (Teece, 2018). Geissdoerfer et al. (2018) described the definition of SBMs as having two attributes, firstly, the SBM incorporated sustainability goals, and secondly, that sustainability was integrated into the BM's value proposition, creation, delivery, and value capture activities. The scholars further defined a SBM as one that was fundamentally based on the value capture and value creation activities, by creating value for all stakeholders and the company (Geissdoerfer et al., 2018).

In addition, there were four dimensions of sustainability that were identified by Lozano (2018) namely, economic, environmental, social, and time dimensions. The scholar stated that these four sustainability dimensions were interrelated and embedded in a BM holistically, systemically, and integrally to transform into a more SBM (Lozano, 2018).

Furthermore, Lozano (2018) discovered four characteristics of a SBM. Firstly, the model applied a TBL perspective, secondly, considered all value chain stakeholders, thirdly, classified the environment and society as stakeholders, and lastly, adopted a system and firm-level perspective (Lozano, 2018).

Table 3 was compiled to organise the evidence in relation to the research questions and to assist with the comparative analysis on the similarities and differences between the four selected scholars. The reason that Lozano (2018) and Lloret (2016) were selected was due to these two scholars having a different and interesting perspective of SBM than Geissdoerfer et al. (2018) and Teece (2018).

Another reason for the selection of these scholars was due to their recently published articles in the Journal of Business Research, Business Strategy and the Environment, and Long Range Planning Journal, which all hold an ABS 3 ranking.

Table 3

Analysis of the SBM literature

Sustainable Business Models	Authors	Geissdoerfer et al. (2018)	Teece (2018)	Lozano (2018)	Lloret (2016)
	Journal	Journal of Cleaner Production	Long Range Planning	Business Strategy and the Environment	Journal of Business Research
	Description of definition	Two attributes of sustainable business models.	Sustainable business models are defined as the transformation of a company's capabilities through the implementation of sustainable business model concepts.	More sustainable business models are a holistic approach where companies operationalise their strategy.	Three domains of business models for corporate sustainability.
	Key topics and concepts covered	A firm's capability to transform into a new business model for a sustainable competitive advantage.	The link between business models, dynamic capabilities, and the business strategy.	The comparison of sustainable business models with the corporate sustainability framework. The transformation from traditional business models to sustainable business models.	Development of a business model for corporate sustainability with a long-term strategic approach to harness a competitive advantage.
	Level of analysis	Firm Level	Firm Level	Firm Level	Firm Level
	Context / Setting	A review of literature	Business environment	A review of literature	Mexico
	Areas for further research	How can organisations move from an existing business model to a more sustainable business model in business practice? The design-implementation gap of business model innovation and the three related elements.	Three areas for further research on business model innovation and its impact on dynamic capabilities: • Its conceptualisation • The implementation • The transformation	• The tax implication of the value-added • Theories to explain the concept • The implementation • Association of business sustainability with corporate sustainability • Holistic and systemic framework	

Note. Author's own, adapted from Geissdoerfer et al. (2018), Lloret (2016), Lozano (2018), and Teece (2018).

2.2.2 Analysis of the Literature on SBMs

Similarities and differences were identified after systematically comparing the four papers on the five dimensions, as seen in Table 3. Firstly, there were similarities in the definitions by Geissdoerfer et al. (2018) and Lozano (2018), who stated SBMs included the concept of value. Geissdoerfer et al. (2018) mentioned that sustainability was entwined into a BM's four value elements, and Lozano (2018) pointed out that the outputs should add more value and have a greater sustainability contribution than the input value.

Moreover, most of these scholars defined the concept as SBMs (Geissdoerfer et al., 2018; Teece, 2018) in the literature. However, Lozano (2018) challenged this conventional naming convention and proposed a term called *more SBMs*. The scholar defined this concept of more SBMs as a holistic approach where companies operationalised their strategy and based it on resource efficiencies (Lozano, 2018).

Similarly, to Lozano (2018), Lloret (2016) also challenged the naming convention and definition of SBMs, and phrased it is as BMs for corporate sustainability. The scholar defined a BM for corporate sustainability as a long-term competitive strategy that had three domains, a market-industry view, a resource-based view, and an institutional-based view (Lloret, 2016).

Furthermore, the comparison of the key concepts indicated similarities between Geissdoerfer et al. (2018), Lozano (2018), and Teece (2018) that firms were required to transform their existing BMs, firm's capabilities, and the fundamental value to become more sustainable. Thirdly, the level of analysis comparison indicated that all studies were at a firm level (Geissdoerfer et al., 2018; Lloret, 2016; Lozano, 2018; Teece, 2018).

The context of the studies indicated similarities between the papers by Geissdoerfer et al. (2018) and Lozano (2018), which were both literature reviews, where the Teece (2018) study was in the business environment and the Lloret (2016) study was based in Mexico. Lastly, the recommendation for further research indicated similarities between Geissdoerfer et al. (2018), Lozano (2018), and Teece (2018) who all stated that further research was required on the practical implementation of SBMs.

2.2.3 Interpretation and Conclusion on the SBM Literature

The analysis of the SBM literature presented similarities in the definition of SBMs which included the concept of value creation (Geissdoerfer et al., 2018; Lozano, 2018). The analysis indicated that while Teece (2018) and Geissdoerfer et al. (2018) had similarities on how the concept was termed SBMs, there were differences between Lozano (2018) and Lloret (2016), who termed the concept as more SBMs and BMs for corporate sustainability, respectively.

Regarding the key concepts of SBM amongst the scholars, the comparison indicated that Geissdoerfer et al. (2018), Lozano (2018), and Teece (2018) had similar views that firms were required to transform their existing BM to become more sustainable. Finally, the last similarity was identified in the recommendation for further research on the implementation of SBMs (Geissdoerfer et al., 2018; Lozano, 2018; Teece, 2018).

Concluding the analysis and interpretation of the literature, the SBM concept defined by Geissdoerfer et al. (2018), Lozano (2018), and Teece (2018) applied to this study's research questions. The reason for this concept selection was that these scholars

referred to the necessity of BM *transformation* to become more sustainable, which related to the research questions. As per the BM transition detailed by Geissdoerfer et al. (2018), the BMI literature was reviewed in the next section.

2.3 Business Model Innovation

2.3.1 Description of the Literature on BMI

Foss and Saebi (2016) undertook an extensive literature review and stated that the BMI literature was current and emerging, but it was less prevalent than the concept of open innovation. Two factors explained the reason for the limited number of published papers on BMI. Firstly, BMI research was relatively recent and secondly, it was an emergent research topic with a lack of understanding of the structure (Foss & Saebi, 2016).

Foss and Saebi (2016) summarised the definition of BMI as fundamental changes to the BM structure, which directly affected the BM's elements and performance. This included the design of unique, distinctive, and significant amendments to the core elements of a firm's existing BM or the structure connecting those elements (Foss & Saebi, 2016).

Table 4 was compiled to organise the evidence in relation to the research questions and to assist with the comparative analysis on the similarities and differences between the five selected scholars. The reason for selecting these five scholars was due to their agreement that transformation was required to an existing BM to realise BMI through the development of dynamic capabilities (Bocken & Geradts, 2020; Foss & Saebi, 2016; Jacobides et al., 2018; Richter et al., 2017; Tate & Bals, 2018).

These scholars have also published peer-reviewed articles in well-ranked journals like Long Range Planning, which had an ABS 3 ranking.

Table 4

Analysis of the BMI literature

Business Model Innovation	Authors	Bocken and Geradts (2020)	Tate and Bals (2018)	Jacobides et al. (2018)	Richter et al. (2017)	Foss and Saebi (2016)
	Journal	Long Range Planning	Journal of Business Ethics	Strategic Management Journal	Creativity and Innovation Management	Journal of Management
	Description of definition					Business Model Innovation is changes to the fundamental structure of a business model for performance
	Key topics and concepts covered	Transformation through the dynamic capabilities concept	Triple bottom-line value concept Social and dynamic capabilities concept for change	Ecosystem concept Sharing economy concept utilising dynamic and sensing capabilities to change	Sharing economy concept Dynamic capabilities concept with the use of technology for change	Challenges of business model innovation: • Managerial • Novelty • Scope
	Level of analysis	Micro Level & Firm Level	Micro Level & Individual Level	Macro Level & ecosystems	Macro Level & Sharing Economy	Macro Level
	Context / Setting	Multi-national corporations	Empirical context: For-profit social entrepreneurs	Ecosystems	Germany, Austria, and Switzerland	A review of literature
	Areas for further research	• Innovating business models for sustainability (supports Foss and Saebi (2017) • Barriers and drivers • Organisational design	• Social capabilities • Stakeholder network • Capabilities to overcome barriers to create shared triple bottom line value	Value of resources and capabilities depending on the role of the firm within the ecosystem	• Other perspectives of the sharing economy • Link between sharing economy and entrepreneurship • Services used in sharing economy • Cultural variables	• Antecedents • Outcomes • Moderators • Novelty and scope How do business models innovative for more sustainability?

Note. Author's own, adapted from Bocken and Geradts (2020), Foss and Saebi (2016), Jacobides et al. (2018), Richter et al. (2017), and Tate and Bals (2018).

2.3.2 Analysis of the Literature on BMI

The five articles were systematically compared on the five dimensions as indicated in Table 4. Firstly, it was noted that Foss and Saebi (2016) stated in their definition of BMI that change was required to the fundamental structure of a BM as part of the innovation process.

The other scholars have similar views which were seen in the opinions of Foss and Saebi (2016) on the transformation concept of BMI. As noted in Table 4, there were similarities

between all five scholars that transformation to a BM was a requirement to realise BMI (Bocken & Geradts, 2020; Foss & Saebi, 2016; Jacobides et al., 2018; Richter et al., 2017; Tate & Bals, 2018).

Furthermore, there was a clear concept topic amongst the five scholars which was based on dynamic capabilities, which was viewed as an important enabler to BMI (Bocken & Geradts, 2020; Foss & Saebi, 2016; Jacobides et al., 2018; Richter et al., 2017; Tate & Bals, 2018). Bocken and Geradts (2020) elaborated those dynamic capabilities were required in the formation of SBMI and contributed to firms building sustainable competitive advantage. However, Tate and Bals (2018) identified that TBL value was part of the dynamic capabilities concept, which the scholars stated was only achieved through the developments of social and dynamic capabilities.

Additionally, on the dynamic capabilities' theory, the difference in the literature was seen in the concept by Richter et al. (2017) who stated that technology could be exploited in BMs to generate dynamic capabilities, which was identified in the example of the BMs of Uber and Airbnb. These BMs were built on the sharing economy concept which was like the classification of innovation ecosystems by Jacobides et al. (2018). It was stated that innovation ecosystems utilised dynamic capabilities to produce value within the system.

It was interesting to note the vast differences in the level of analysis and context. The comparison indicated that three studies were at a macro level (Foss & Saebi, 2016; Jacobides et al., 2018; Richter et al., 2017), while two studies were at a micro-level (Bocken & Geradts, 2020; Tate & Bals, 2018). Regarding the differences in the context of the studies, multi-national organisations (Bocken & Geradts, 2020), ecosystems (Jacobides et al., 2018) and for-profit social entrepreneurs (Tate & Bals, 2018) were used in the studies. Whereas the research setting for the Richter et al. (2017) study was in Germany, Austria, and Switzerland.

Lastly, similarities were found in the identification of areas for further research between Bocken and Geradts (2020) and Foss and Saebi (2016). The scholars indicated that there was a need for further research on how innovation could be utilised in a BM to become more sustainable, and added that research on the barriers, drivers, and antecedents was also required (Bocken & Geradts, 2020; Foss & Saebi, 2016).

2.3.3 Interpretation and Conclusion on the BMI Literature

The analysis of the BMI literature presented many similarities in terms of the requirements of BM transformation for innovation as well as the dynamic capabilities concept amongst the five papers (Bocken & Geradts, 2020; Foss & Saebi, 2016; Jacobides et al., 2018; Richter et al., 2017; Tate & Bals, 2018).

The similarity of the sharing economy concept was noted between two scholars (Jacobides et al., 2018; Richter et al., 2017). There were vast differences observed in the level of analysis and context of the studies. However, there were similarities in the need for future research in relation to how innovation could be used in a BM to create sustainability (Bocken & Geradts, 2020; Foss & Saebi, 2016).

Concluding the analysis and interpretation of the literature, the definition by Foss and Saebi (2016) on BMI was applied to this study. The reason for this selection was that their explanation on *transformation* which was required to a traditional BM to realise BMI supported the main research question.

Furthermore, the areas for further research identified by Bocken and Geradts (2020) and Foss and Saebi (2016) were applied to this study. The reason for this selection was that it supported the main research question and sub-questions on the drivers, barriers, and outcomes of BM *transformation* for sustainability. As per the BM transition detailed by Geissdoerfer et al. (2018), the SBMI literature was reviewed in the next section.

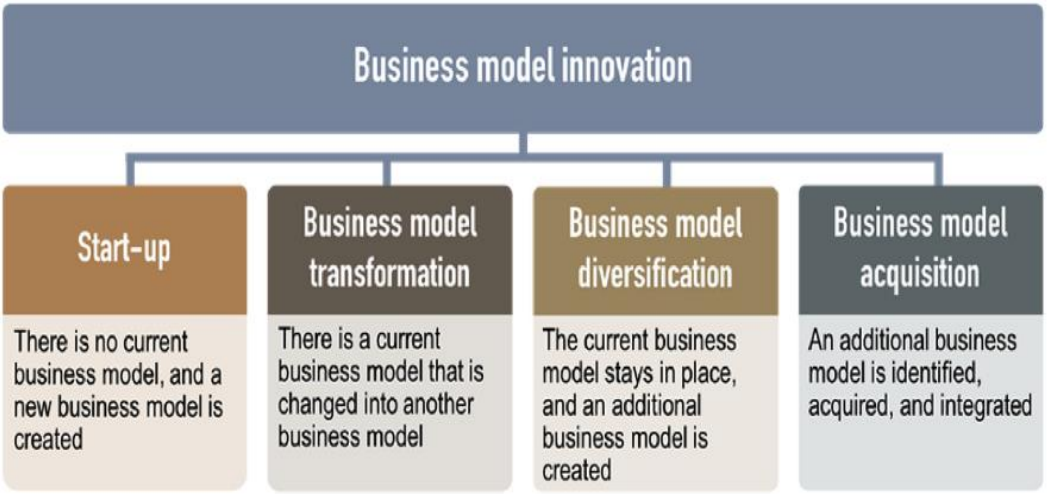
2.4 Sustainable Business Model Innovation

2.4.1 Description of the Literature on SBMI

Geissdoerfer et al. (2018) described SBMI as the development and implementation of a SBM. This process began with the development of four mechanisms, which included the creation of a new BM, the diversification into an additional BM, the acquisition of a new BM, or the transformation into another BM, as seen in Figure 2 (Geissdoerfer et al., 2018). BM transformation was identified as a BMI mechanism that involved the transformation of an existing BM into a different BM (Geissdoerfer et al., 2018).

Figure 2

Types of business model innovation



Note. Types of business model innovation. From "Sustainable business model innovation: a review", by Geissdoerfer et al., 2018, *Journal of Cleaner Production, 198, p. 407.*

An emerging term sustainability-oriented innovation was discovered in the literature and was explained as creating social, environmental, and economic value through changing an organisation's philosophy, values, products, services, processes, and activities (Adams et al., 2016). This sustainability-oriented innovation concept was similar to the Geissdoerfer et al. (2018) definition that stated that organisations were required to transform.

Table 5 was compiled to organise the evidence in relation to the research questions and to assist with the comparative analysis on the similarities and differences between the four selected scholars. The reason these four scholars were selected was due to these scholars having researched and written recent articles on the topic of SBMI. These articles were published in credible journals known for covering the emerging findings on sustainability, like the Journal of Cleaner Production.

Table 5

Analysis of the SBMI literature

Sustainable Business Model Innovation	Authors	Guldmann and Huulgaard (2020)	Geissdoerfer et al. (2018)	Adams et al. (2016)	Boons and Lüdeke-Freund (2013)
	Journal	Journal of Cleaner Production	Journal of Cleaner Production	International Journal of Management Reviews	Journal of Cleaner Production
	Description of definition	Circular business model innovation is the transformation of an existing linear business model to include circular business model elements.	Sustainable business model innovation as the development and implementation of sustainable business models.	Sustainability-oriented innovation is the process of creating ESG value by changing an organisation's elements.	Business models for sustainable innovation involves the innovation and combination of four elements.
	Key topics and concepts covered	Circular business model innovation concept	Four fundamental changes to a BM to create sustainable business model innovation Four types of sustainable business models	Three components of sustainability-oriented innovation Three dimensions of sustainability-oriented innovation	Three interdependent streams of business model innovation for sustainability
	Level of analysis	Macro Level & Socio-Technical Level	Firm Level	Firm Level	Macro & Firm Level
	Context / Setting	Multiple-case study with 12 wholesale and manufacturing firms in Denmark	A review of literature	A systematic review of literature	Technological, organisational, and social innovation
	Areas for further research	Include research of start-ups and various firms of varying sizes in different industries	How can organisations move from an existing business model to a more sustainable business model in business practice?		The difference in definitions and measures in terms of business model stakeholders versus the evaluators of sustainable innovations

Note. Author's own, adapted from Adams et al. (2016), Boons and Lüdeke-Freund (2013), Geissdoerfer et al. (2018), and Guldmann and Huulgaard (2020).

2.4.2 Analysis of the Literature on SBMI

The analysis of the SBMI literature involved the systematic comparison of the articles against the five dimensions, as indicated in Table 5. Firstly, it was important to note that there were clear differences in the terminology of SBMI in the literature (Adams et al., 2016; Boons & Lüdeke-Freund, 2013; Geissdoerfer et al., 2018; Guldmann & Huulgaard, 2020). Guldmann and Huulgaard (2020) termed the concept as circular BMI, Geissdoerfer et al. (2018) defined the concept as SBMI, whereas Adams et al. (2016) classified the concept as sustainability-oriented innovation, and lastly, Boons and Lüdeke-Freund (2013) referred to the concept as BM for sustainable innovation.

However, besides the differences in terminology, the definitions amongst the scholars were similar as they referred to the change and transformation of a BM as part of the

innovation and sustainability process. In addition, there were transformation concept similarities between Guldmann and Huulgaard (2020) and Geissdoerfer et al. (2018) who both stated that transformation occurs in a circular BM. Guldmann and Huulgaard (2020) indicated that circular BMI involved the transformation of an existing BM to include circular BM elements of recreated and extended value.

Furthermore, the similarities between Geissdoerfer et al. (2018) and Guldmann and Huulgaard (2020) in relation to their circular BM definition identified it as one of the four types of a SBM. The other three SBMs were social enterprises, which impact society from economic activity, secondly, the bottom of the pyramid BMs, which targeted lower-income customers, and lastly, product-service systems that offered customers either a product or service (Geissdoerfer et al., 2018).

In addition, there were transformation concept similarities between Boons and Lüdeke-Freund (2013) and Adams et al. (2016) that indicated organisational transformation was required as a sustainable innovation implementation driver. Boons and Lüdeke-Freund (2013) mentioned that there were three interdependent streams of BMI for sustainability, which were technological, organisational, and social innovation (Boons & Lüdeke-Freund, 2013). Firstly, technological innovations were explained as the linkage between technology and the firm's commercialisation activities; secondly, organisational innovations were the changes to the culture, structure, and routines within an organisation for sustainable development, and lastly, social innovation was the BM's ability to create social purpose by creating social value and profits (Boons & Lüdeke-Freund, 2013).

The organisational transformation was one of the three components of sustainability-oriented innovation identified by Adams et al. (2016) and was similar to the identification by Boons and Lüdeke-Freund (2013). The other supporting components, which supported the implementation of sustainable businesses, were operational optimisation and systems building (Adams et al., 2016).

In terms of the level of analysis comparisons, the majority of the studies were at a firm level (Adams et al., 2016; Boons & Lüdeke-Freund, 2013; Geissdoerfer et al., 2018). Whereas the study by Guldmann and Huulgaard (2020) was at a socio-technical level. Regarding the differences in the context of the studies, both studies by Geissdoerfer et al. (2018) and Adams et al. (2016) were systematic reviews of literature, whereas the

study setting for Guldmann and Huulgaard (2020) was in Denmark based on wholesale and manufacturing firms.

Lastly, there were clear differences discovered in the identification of areas for further research between the four scholars. The most noteworthy recommendation for further research, which applied to this study's research questions, was by Geissdoerfer et al. (2018). The scholars asserted that further research was required on the transformation of an existing BM to move towards sustainability (Geissdoerfer et al., 2018).

2.4.3 Interpretation and Conclusion on the SBMI Literature

The interpretation of the SBMI literature analysis presented many differences in the terminology of the SBMI concept but also indicated the similarities between the studies that SBMI required transformation to an existing BM.

The transformation concept similarities were identified between Guldmann and Huulgaard (2020) and Geissdoerfer et al. (2018) that both identified that transformation occurs in a circular BM. While the transformation concept similarities between Boons and Lüdeke-Freund (2013) and Adams et al. (2016) were based on organisational transformation.

Concluding the analysis and interpretation of the literature reviewed, the term SBMI and its definition by Geissdoerfer et al. (2018) were applied to this study. The reason for this selection was due to the reference to the implementation of SBMI, which related to the research questions. Furthermore, the scholars' identification of BM *transformation* as one of the four types of BMI mechanisms was also applicable to the research questions (Geissdoerfer et al., 2018).

Lastly, the identification of a research gap by Geissdoerfer et al. (2018) on the *transformation* of an existing BM to move towards sustainability, was applied to the research questions. The next three sections covered the theoretical constructs on the drivers, barriers, and outcomes of BM transformation towards sustainability, which related to the classification by Bocken and Geradts (2020).

2.5 Drivers of BM Transformation towards Sustainability

2.5.1 Description of the Literature on the Drivers of BM transformation towards sustainability

Bhattacharya and Polman (2017) stated that a driver of successful sustainability was the firm's ability to incorporate sustainability into the corporate culture, structure, and strategy, to infiltrate into the hearts and minds of all stakeholders within the value chain.

In addition, Rauter et al. (2017) identified company culture, leadership, and legal regulations as strong drivers of SBMs. The scholars further added that sustainability plays a pivotal role in the continual transformation of traditional BMs (Rauter et al., 2017).

Table 6 was compiled to organise the evidence in relation to the research questions and to assist with the comparative analysis on the similarities and differences in the scholars' key concepts, level of analysis, research settings, and areas for further research.

These six scholars were selected as they had researched and written recent papers related to the drivers of BM transformation towards sustainability. These papers were published in credible journals like Long Range Planning and the Journal of Cleaner Production.

Table 6

Analysis of the drivers of SBMI literature

Drivers of Sustainable Business Model Innovation							
	Scholars	**Baldassarre et al. (2017)**	**Bhattacharya and Polman (2017)**	**Rauter et al. (2017)**	**Jacobides et al. (2018)**	**Sousa-Zomer and Cauchick-Miguel (2019)**	**Bocken and Geradts (2020)**
	Journal	Journal of Cleaner Production	MIT Sloan Management Review	Journal of Cleaner Production	Strategic Management Journal	Total Quality Management and Business Excellence	Long Range Planning
	Key topics and concepts covered	Process of sustainable value proposition design which addresses sustainability problems. • Combine user-driven innovation with SBM innovation • Sharing the value proposition with stakeholders and including them in the design process	An integrated and collaborative approach needs to be adopted to incorporate the total supply chain with both internal and external stakeholders before successfully introducing sustainability initiatives.	**Internal drivers** in the development of BMs for sustainability: • Leadership • Employee satisfaction • Staff turnover • Sustainability-oriented organisational culture • Sustainability ingrained in the corporate strategy **External drivers** in the development of BMs for sustainability: • Legal regulation Two ways to transform BMs for sustainability: 1. Re-defining an existing model to incorporate sustainability 2. Transforming the existing BM radically	Innovation ecosystems are drivers that enhance value creation and value capture in a SBM.	Co-operative, strategic, and collaborative arrangements between stakeholders were drivers of SBMI.	Three categories of drivers to sensing, seizing, and transforming for SBMI: • Institutional drivers • Strategic drivers • Operational drivers
	Level of analysis	Firm Level	Firm Level	Firm Level	Macro Level	Firm Level	Firm Level
	Context / Setting	Climate-KIC (European partnership)	Multi-national corporations	Cross-industry sectors with 10 Austrian companies	Ecosystems	Product-service systems in Brazil	Multi-national corporations
	Areas for further research	Case studies where all stakeholders participate in the design process.		• Research to understand how and to what extent companies need to transform into new BMs • Comparison of non-SBMs • Newly established, SBMs and the link to entrepreneurship	How do resources and capabilities differ depending on the role firms take within the ecosystem?	Research other SBMs implemented in developing countries, their sustainability benefits, and the collaborative approaches.	Barriers and drivers to SBMI.

Note. Author's own, adapted Baldassarre et al. (2017), Bhattacharya and Polman (2017), Bocken and Geradts (2020), Jacobides et al. (2018), Rauter et al. (2017), and Sousa-Zomer and Cauchick-Miguel (2019).

2.5.2 Analysis of the Literature on the Drivers of BM Transformation towards Sustainability

The analysis of the literature on the drivers of sustainability involved the systematic comparison of the academic papers against the four dimensions as indicated in Table 6. Firstly, it was important to note that three papers referred to the importance of stakeholder collaborations as the main driver to SBMI (Baldassarre et al., 2017; Bhattacharya & Polman, 2017; Sousa-Zomer & Cauchick-Miguel, 2019).

Sousa-Zomer and Cauchick-Miguel (2019) stated that co-operative, strategic, and collaborative arrangements between stakeholders were identified as instrumental in achieving environmental, economic, and social value as well as overcoming the implementation barrier. Similarly, Bhattacharya and Polman (2017) indicated that an integrated and collaborative approach needs to be adopted to incorporate all internal and external supply chain stakeholders before successfully introducing sustainability initiatives.

This concept was supported through the sustainable value proposition concept, which enabled value creation amongst all stakeholders, and was viewed as the heart of SBMI and a driver to overcome problems in the transformation towards sustainability (Baldassarre et al., 2017). It was further noted that the process of sustainable value proposition design, which combined user-driven innovation with SBMI, was an approach used to overcome the challenges in the development of sustainable value propositions and sustainable development (Baldassarre et al., 2017). Baldassarre et al. (2017) stated that it was imperative to include all stakeholders in this value proposition design process to increase the level of acceptance, commitment, and support of sustainable innovations.

There were further similarities identified that related to the concept of ecosystems as a driver between two scholars (Bhattacharya & Polman, 2017; Jacobides et al., 2018). Jacobides et al. (2018) indicated that innovation ecosystems were a driver that enhanced value creation and value capture in SBMI. Bhattacharya and Polman (2017) stated that value creation was only enabled in an ecosystem when a firm changed its philosophy by applying a sustainability lens to all the firm's functions and value chain.

Furthermore, there were similarities identified between Rauter et al. (2017) and Bocken and Geradts (2020) in relation to the internal and external drivers of BM transformation towards sustainability. Rauter et al. (2017) categorised internal drivers as the importance

of the values and beliefs of the leadership team. Employee satisfaction and their willingness to implement sustainable ideas as well as the staff turnover was another internal driver (Rauter et al., 2017). In addition, a transparent, sustainability-oriented organisational culture with a flat hierarchy, where sustainability is ingrained in the corporate strategy was seen as being a vital internal driver (Rauter et al., 2017).

Legal regulation was noted as an external driver towards sustainability which related to corroboration with government, NGOs, and universities to raise awareness of sustainability (Rauter et al., 2017). Rauter et al. (2017) also identified two ways to transform BMs towards sustainability. Firstly, an existing BM could be re-defined to incorporate sustainability into all strategies, and secondly, an existing BM could be radically transformed (Rauter et al., 2017).

Bocken and Geradts (2020) indicated that the utilisation of dynamic capabilities, which included sensing, seizing, and transforming, towards a SBMI into three categories namely, institutional drivers, strategic drivers, and operational drivers. Firstly, there were three institutional drivers identified that involved balancing shareholder and stakeholder value, embracing ambiguity, and valuing business sustainability (Bocken & Geradts, 2020).

Secondly, collaborative innovation, strategically focusing on SBMI, and patiently investing in sustainability, were the functions of the strategic drivers (Bocken & Geradts, 2020). Lastly, the elements of the operational drivers were classified as developing people capabilities, enabling a corporate structure for innovation, dedicating resources for SBMI, incentivising sustainability initiatives, and developing sustainability performance metrics (Bocken & Geradts, 2020).

Regarding the comparisons of the level of analysis, most of the studies were at a firm level (Baldassarre et al., 2017; Bhattacharya & Polman, 2017; Rauter et al., 2017; Sousa-Zomer & Cauchick-Miguel, 2019; Bocken & Geradts, 2020), besides the study by Jacobides et al. (2018), which was at a macro level. In relation to the similarities in the research setting, both studies by Bhattacharya and Polman (2017) and Bocken and Geradts (2020) were in multi-national companies. Whereas an organisation, Climate-KIC, (Baldassarre et al., 2017), Austrian companies (Rauter et al., 2017), and product-service systems in Brazil (Sousa-Zomer & Cauchick-Miguel, 2019), were the research context for the other studies.

Lastly, there were vast differences identified in the areas for further research. Baldassarre et al. (2017) identified the need for further case studies on stakeholder involvement in the sustainable value proposition design process. Where Rauter et al. (2017) stated the need for further research to understand how and to what extent firms need to transform into new SBMs. Sousa-Zomer and Cauchick-Miguel (2019) noted that research of SBMs in developing counties was required to understand their contribution and level of collaboration. Lastly, Bocken and Geradts (2020) stated the need for further research into the barriers and drivers of BM transformation towards sustainability.

2.5.3 Interpretation and Conclusion on the Drivers of BM Transformation towards Sustainability

The analysis of the drivers of BM transformation towards sustainability literature presented many similarities in terms of the importance of collaborations with stakeholders amongst three scholars (Baldassarre et al., 2017; Bhattacharya & Polman, 2017; Sousa-Zomer & Cauchick-Miguel, 2019). The similarity in the concept of ecosystems as a driver was also mentioned between the two scholars (Bhattacharya & Polman, 2017; Jacobides et al., 2018).

In relation to the similarities in the level of analysis, the majority of the studies were at a firm level (Baldassarre et al., 2017; Bhattacharya & Polman, 2017; Rauter et al., 2017; Sousa-Zomer & Cauchick-Miguel, 2019; Bocken & Geradts, 2020). However, there were differences noted in the research context and the only similarity was in two studies which were in multi-national companies (Bhattacharya & Polman, 2017; Bocken & Geradts, 2020). Furthermore, there were vast differences identified in the areas for further research as each paper identified separate focus areas and concepts which required further research.

Concluding the analysis and interpretation of the literature, the identification of SBMI drivers by Rauter et al. (2017) and Bocken and Geradts (2020) were applied to this study. The reason for this selection was that these scholars' classification of the drivers of BM transformation towards sustainability, supported the research sub-questions regarding the constructs on the drivers, barriers, and outcomes.

Furthermore, the research gaps identified by Rauter et al. (2017) and Bocken and Geradts (2020) were also applied to this research. This was due to the research gap identified by Rauter et al. (2017) on the ways to transform a BM towards sustainability.

Furthermore, the recognition by Bocken and Geradts (2020) for further research on the drivers and barriers to SBMI was also applied to this study. The next section will cover the barriers of BM transformation towards sustainability.

2.6 Barriers of BM Transformation towards Sustainability

2.6.1 Description of the Literature on the Barriers of BM transformation towards sustainability

It was noted in the literature that the barriers of BM transformation towards sustainability need to be identified and addressed before proceeding with the implementation of business innovation and sustainability strategies to improve the probability of success (Evans et al., 2017). Many scholars mentioned that there was limited evidence and research papers on the successful adoption and implementation of SBMI (Evans et al., 2017; Geissdoerfer et al., 2018).

Table 7 was compiled to organise the evidence in relation to the research questions and to assist with the comparative analysis on the scholars' key concepts, level of analysis, research setting, and research gaps identified. The reason these six scholars were selected was due to their recent papers related to the barriers of SBMI. These academic papers were published in credible journals like Long Range Planning.

Table 7

Analysis of the barriers of sustainable business model innovation literature

Barriers of Sustainable Business Model Innovation							
	Scholars	**Bhattacharya and Polman (2017)**	**Evans et al. (2017)**	**Geissdoerfer et al. (2018)**	**Sousa-Zomer and Cauchick-Miguel (2019)**	**Bocken and Geradts (2020)**	**Guldmann and Huulgaard (2020)**
	Journal	MIT Sloan Management Review	Business Strategy and the Environment	Journal of Cleaner Production	International Journal of Management Reviews	Long Range Planning	Journal of Cleaner Production
	Key topics and concepts covered	Six barriers to implementing sustainability initiatives: • Sustainability is not only a change initiative • It is an entire value chain approach • The board needs to understand the importance • Convince and convert the non-believers • Sustainability needs to become the responsibility of all employees • Disrupt the competitive space through collaboration	Challenges for the creation of SBMI: • TBL barriers • Mind-set challenges • Resource barriers • Technological innovation barriers • External relationship barriers • BM methods restrictions	Design-implementation gap of SBMI: • Lack of follow-through of ideas • Lack of execution of concepts • Business failure	Collaborative barriers of SBMI: • Lack of consumer acceptance • Lack of initiatives involving multiple actors and government • Cultural barriers • Lack of knowledge	Three categories of barriers to sensing, seizing, and transforming for SBMI: • Institutional barriers • Strategic barriers • Operational barriers	Four socio-technical level barriers in circular BMI: • Market level • Value chain level • Organisational level • Employee level
	Level of analysis	Firm Level	Firm Level	Firm Level	Firm Level	Firm Level	Macro & Socio-technical Level
	Context / Setting	Multi-national corporations	A review of literature	A review of literature	Product-service systems in Brazil	Multi-national corporations	Multiple case studies in Denmark
	Areas for further research		The successful implementation of SBMs.	How can organisations move from an existing BM to a more SBM? The design-implementation gap of BMI and the three related elements.	SBMs implemented in developing countries, their sustainability benefits, and the collaborative approaches.	Barriers and drivers to SBMI.	Include research on start-ups and various firms of varying sizes and different industries.

Note. Author's own, adapted from Bhattacharya and Polman (2017), Bocken and Geradts (2020), Evans et al. (2017), Geissdoerfer et al. (2018), Guldmann and Huulgaard (2020), and Sousa-Zomer and Cauchick-Miguel (2019).

2.6.2 Analysis of the Literature on the Barriers of BM transformation towards sustainability

The analysis of the literature on the barriers of BM transformation towards sustainability involved the systematic comparison of the published papers against the four dimensions as indicated in Table 7. Firstly, similarities were identified between Bhattacharya and Polman (2017), Evans et al. (2017), Geissdoerfer et al. (2018) and Sousa-Zomer and

Cauchick-Miguel (2019) which related to the challenges and barriers of successfully implementing SBMI.

Evans et al. (2017) conducted a literature review on the challenges of BM transformation towards sustainability and identified six challenges. Firstly, TBL barriers were classified as the balance between profits, and the social and environmental value which was created (Evans et al., 2017). Secondly, mindset challenges within a firm (Evans et al., 2017). Thirdly, resource barriers included the lack of allocated BMI resources (Evans et al., 2017). Fourthly, technological innovation usage and allocation challenges (Evans et al., 2017). Penultimately, external relationship barriers with stakeholders, government, and legal regulators (Evans et al., 2017). Lastly, restrictions in terms of existing BM practices to transform into a SBM (Evans et al., 2017).

There were similarities between the six barriers identified by Evans et al. (2017) and the design-implementation gap of SBMI identified by Geissdoerfer et al. (2018). The scholars defined this gap as a set of challenges that hindered organisations from successfully innovating their existing BMs, due to lack of tracking and follow-through of ideas, lack of execution of concepts, and BM failure (Geissdoerfer et al., 2018).

Regarding the design-implementation gap of SBMI (Geissdoerfer et al., 2018), in the literature Bhattacharya and Polman (2017) identified further barriers to implementing sustainability initiatives within a firm. The scholars stated that sustainability should not be viewed in isolation and required the whole value chain's commitment, as well as all employees to be held responsible for this commitment (Bhattacharya & Polman, 2017). This commitment also required the understanding from the board of directors on the urgency and importance of sustainability (Bhattacharya & Polman, 2017). The pushback, conversion and buy-in from non-believers should include education and awareness on sustainability to allow for a better understanding and enhanced acceptance (Bhattacharya & Polman, 2017).

Furthermore, Sousa-Zomer and Cauchick-Miguel (2019) identified collaborative barriers of BM transformation towards sustainability, which related to the external relationship barriers identified by Evans et al. (2017) and Bhattacharya and Polman (2017). These collaborative barriers referred to the lack of consumer acceptance, lack of initiatives with government and external stakeholders, cultural barriers, and lack of knowledge (Sousa-

Zomer & Cauchick-Miguel, 2019). Bhattacharya and Polman (2017) asserted that sustainability needs to disrupt the competitive landscape through collaborations.

In addition, four socio-technical level barriers were identified in circular SBMI by Guldmann and Huulgaard (2020). These barriers include market level, value chain level, organisational level, and employee level barriers, which were similar to the external level (Evans et al., 2017), market level (Sousa-Zomer & Cauchick-Miguel, 2019), and business level barriers identified by Bhattacharya and Polman (2017) and Geissdoerfer et al. (2018).

The difference in concepts was seen in the classification of the barriers of BM transformation towards sustainability by Bocken and Geradts (2020). The scholars classified the barriers of sensing, seizing, and transforming for SBMI into three categories, namely, institutional barriers, strategic barriers, and operational barriers (Bocken & Geradts, 2020). The institutional barriers included the focus and dedication to only maximise shareholder value, uncertainty avoidance, and short-termism by the stakeholders (Bocken & Geradts, 2020).

The strategic barriers included functional strategy barriers, the focus on exploitation, and prioritising short-term growth (Bocken & Geradts, 2020). Lastly, the scholars identified five operational barriers, which included the functional excellence barriers, barriers in the processes of innovation, resource allocation challenges, short-term incentive barriers, and lastly, financial performance metrics barriers (Bocken & Geradts, 2020).

Regarding the comparison in the level of analysis, most of the studies were at a firm level (Bhattacharya & Polman, 2017; Bocken & Geradts, 2020; Sousa-Zomer & Cauchick-Miguel, 2019; Geissdoerfer et al., 2018; Evans et al., 2017), besides the study by Guldmann and Huulgaard (2020), which was at a macro and socio-technical level. In relation to the similarities in the research settings, both studies by Bhattacharya and Polman (2017) and Bocken and Geradts (2020) were in multi-national organisations, and both studies by Geissdoerfer et al. (2018) and Evans et al. (2017) were literature reviews.

The difference in research settings were identified in the study by Sousa-Zomer and Cauchick-Miguel (2019), which was on a product-service system in Brazil, and a multiple case study of wholesale and manufacturing firms in Denmark for the paper by Guldmann and Huulgaard (2020).

Lastly, there were clear similarities identified in the research gaps stated by three of the scholars which related to the successful implementation of SBMI (Evans et al., 2017; Geissdoerfer et al., 2018; Sousa-Zomer & Cauchick-Miguel, 2019).

2.6.3 Interpretation and Conclusion on the Literature on the Barriers of BM Transformation towards Sustainability

The interpretation of the literature on the barriers of BM transformation towards sustainability presented many similarities on the challenges and barriers related to the successful implementation of SBMI (Bhattacharya & Polman, 2017; Evans et al., 2017; Geissdoerfer et al., 2018; Sousa-Zomer & Cauchick-Miguel, 2019). Furthermore, there were similarities identified between the six barriers classified by Evans et al. (2017) and the design-implementation gap of SBMI identified by Geissdoerfer et al. (2018).

In addition, Sousa-Zomer and Cauchick-Miguel (2019) identified collaborative barriers to SBMI, which are related to the external relationship barriers identified by Evans et al. (2017) and Bhattacharya and Polman (2017). However, the difference in concepts were seen in the classification of the barriers of BM transformation towards sustainability by Bocken and Geradts (2020).

Regarding the comparison in the level of analysis, most of the studies were at a firm level (Bhattacharya & Polman, 2017; Bocken & Geradts, 2020; Sousa-Zomer & Cauchick-Miguel, 2019; Geissdoerfer et al., 2018; Evans et al., 2017), besides the study by Guldmann and Huulgaard (2020). In relation to the similarities in the research settings, both studies by Bhattacharya and Polman (2017) and Bocken and Geradts (2020) were in multi-national organisations, and both studies by Geissdoerfer et al. (2018) and Evans et al. (2017) were literature reviews.

The difference in research settings were seen in the study by Sousa-Zomer and Cauchick-Miguel (2019), which was in Brazil, and the study by Guldmann and Huulgaard (2020), which was in Denmark. Lastly, there were clear similarities identified in the area for further research acknowledged by three of the scholars, which related to the successful implementation of SBMI (Evans et al., 2017; Geissdoerfer et al., 2018; Sousa-Zomer & Cauchick-Miguel, 2019).

Concluding the analysis and interpretation on the literature reviewed, the challenges and barriers to the successful implementation of SBMI identified by Bocken and Geradts

(2020), Evans et al. (2017), Geissdoerfer et al. (2018), Sousa-Zomer and Cauchick-Miguel (2019), were applied to this study due to the reference of the barriers of BM transformation in the research questions.

Lastly, the identification of research gaps related to the successful implementation of SBMI, stated by Evans et al. (2017), Geissdoerfer et al. (2018) and Sousa-Zomer and Cauchick-Miguel (2019), were applied to this study. The next section will cover the outcomes derived from BM transformation towards sustainability.

2.7 Outcomes derived from BM transformation towards sustainability

2.7.1 Description of the Literature on the Outcomes derived from BM Transformation towards Sustainability

Several academic papers identified the positive impacts that sustainability had on both the firm's financial and sustainability performance (Evans et al., 2017). The stakeholders within the value chain were becoming more aware of the impact of sustainability and the ESG factors, and therefore were placing pressure on firms to be transparent and report on these sustainability matters (Evans et al., 2017).

Many firms were forced to adopt corporate social responsibility initiatives as well as ESG accounting, which led firms to publish TBL, sustainability, and ESG reports (Evans et al., 2017). However, it was noted that financial performance and sustainability were interdependent (Bhattacharya & Polman, 2017). Khan et al. (2015) identified that firms that invest and perform on material sustainability issues added value to their shareholders and outperformed firms with minimal investment in sustainability issues (Khan et al., 2015).

Table 8 was compiled to organise the evidence in relation to the research questions and to assist with the comparative analysis on the similarities and differences in the scholars' key concepts, level of analysis, research settings, and identification of areas for further research. These three scholars were selected based on their recent research and papers related to the outcomes derived from SBMI. These papers were published in credible journals, which covered topics on sustainability, like the Journal of Cleaner Production.

Table 8

Analysis of the outcomes derived from BM transformation towards sustainability

Outcomes derived from SBMI	Scholars	Laukkanen and Tura (2020)	Tate and Bals (2018)	Evans et al. (2017)
	Journal	Journal of Cleaner Production	Journal of Business Ethics	Business Strategy and the Environment
	Key topics and concepts covered	Sustainable value creation: • Environmental • Social • Economic	Shared TBL objectives: • Environment • Economic • Social	Sustainable value: • Environmental value • Social value • Economic value
	Level of analysis	Firm Level within a sharing economy	Firm & Individual Level	Firm Level
	Context / Setting	Categorisation of 13 different sharing economy BMs and the development of a conceptual framework	A review of literature and case study of social businesses located in Haiti.	A review of literature
	Areas for further research	• Analyses to measure sustainability impacts of different sharing economy BMs. • Cross-case studies to compare the sustainable value creation of different BMs. • Case-specific research within different industries analysing different BMs choices and effect on sustainable value creation.	Research the capabilities to overcome the barriers to achieve shared TBL value.	The successful implementation of SBMs.

Note. Author's own, adapted from Evans et al. (2017), Laukkanen and Tura (2020), and Tate and Bals (2018).

2.7.2 Analysis of the Literature on the Outcomes derived from BM transformation towards sustainability

The analysis of the literature on the outcomes derived from BM transformation towards sustainability involved the systematic comparison of the published papers against the four dimensions as indicated in Table 8. Firstly, it was important to note that all three papers classified the outcomes of sustainability into three categories (Evans et al., 2017; Tate & Bals, 2018).

Evans et al. (2017) classified sustainable value, which was created into three forms, namely, environmental value (renewable resources, reduced waste, and pollution

prevention), social value (equality and diversity, community development, and secure livelihoods), and lastly economic value (profits, ROI, and business stability).

Similar to Evans et al. (2017), Tate and Bals (2018) classified shared TBL factors, which produce valuable outcomes into three categories, namely, environmental, economic, and social factors. These TBL factors had their own outcomes which produce value and enhanced the beneficial relationships with stakeholders (Tate & Bals, 2018). The scholars' concepts were like that of Tate and Bals (2018) on the shared TBL objectives for sustainability which could have a positive and significant impact on the environment through the reduction of emissions, and waste as well as the reduction in usage of non-renewable resources. Furthermore, the economic value objectives could produce higher revenue, profits, and innovation, while the social value outcomes were to develop communities through access to education, energy, health, and human rights protection (Tate & Bals, 2018).

In addition, Laukkanen and Tura (2020) identified the potential of BMs based on the sharing economy that could generate sustainable value, and classified this potential value under three categories, namely, environmental, social, and economic. The potential sustainable value which could be created in the environmental category supported the categories identified by Tate and Bals (2018), but Laukkanen and Tura (2020) added an additional element of increasing the environmental well-being. This additional environmental outcome involved the improvement of biodiversity and repairing environmental damages (Laukkanen & Tura, 2020).

Laukkanen and Tura (2020) further added an outcome to the social elements that were identified by Tate and Bales (2018), which is the element of respecting the laws, regulations, and rights as well as respecting employees, stakeholders, and individual rights. Cost-efficiency, operational stability, brand equity, and employment welfare were elements that were added to the economic elements by Laukkanen and Tura (2020).

Regarding the comparisons of the level of analysis, all three studies were at a firm level (Evans et al., 2017; Tate & Bals, 2018), with the focus on the sharing economy in the study by Laukkanen and Tura (2020), and Tate and Bals (2018) focused on an individual level. In relation to the similarities in the research setting, both studies by Evans et al. (2017) and Tate and Bals (2018) were literature reviews, with Tate and Bals (2018) also conducting a case study on social business in Haiti. The difference was that Laukkanen

and Tura (2020) developed a conceptual framework on sustainable value creation in various BMs.

Lastly, there were vast differences identified in the areas for further research. Laukkanen and Tura (2020) identified the need for further case studies to compare sustainable value creation in different BMs and within different industries. Whereas Tate and Bals (2018) stated the need for further research in the capabilities to overcome the barriers to achieve shared TBL value. Furthermore, Evans et al. (2017) identified a research gap which related to the successful implementation of SBMs.

2.7.3 Interpretation and Conclusion on the Literature on the Outcomes derived from BM Transformation towards Sustainability

The analysis of the literature on the outcomes derived from BM transformation towards sustainability presented many similarities in terms of the classification of the outcomes into three categories, namely, environmental, social, and economic (Evans et al., 2017; Tate & Bals, 2018). In relation to the similarities in the level of analysis, all three studies were at a firm level (Evans et al., 2017; Tate & Bals, 2018).

In addition, similarities in the research setting were also identified as both studies by Evans et al. (2017) and Tate and Bals (2018) were literature reviews. However, there were vast differences identified in the areas for further research as each paper identified separate focus areas and concepts requiring further research.

Concluding the analysis and interpretation of the literature, the classification of the outcomes derived from the successful implementation of SBMI by all three scholars was applied to this research paper. Furthermore, the research gaps identified by Evans et al. (2017) and Tate and Bals (2018) were applied to this research due to the relevance to the research questions.

2.8 Conclusion: Literature Review

The literature review was structured on the key concepts identified by Geissdoerfer et al. (2018) which related to the transformation of a BM to a SBM, then to BMI with the goal of SBMI. In addition, the literature on the constructs on the drivers, barriers, and outcomes of BM transformation towards sustainability, and the successful implementation of SBMI implementation were also explored. The concept of *BM*

transformation was mentioned in each Chapter section and was identified as the focus areas in the literature review which supported the research questions in this study.

A comparative analysis was conducted for each literature review section, where the academic papers were compared on five dimensions to identify similarities and differences. Therefore, relevant similarities and differences emerged through this systematic analysis of the published, credible papers in each Chapter section.

Firstly, from the analysis and interpretation of the BM literature, the definition by Geissdoerfer et al. (2018) was applied to this study's research questions as well as the concept of BM *transformation*. The justification for this definition and concept selection was due to the main research question being based on the *transformation* of an existing BM towards sustainability.

Secondly, from SBM literature analysis and interpretation, the SBM concept defined by Geissdoerfer et al. (2018), Lozano (2018), and Teece (2018) applied to this study. The reason for this concept selection was that the scholars referred to the requirement of BM *transformation* to become more sustainable, which related to the topic of BM *transformation* in the research questions.

Regarding the BMI literature analysis and interpretation, the definition by Foss and Saebi (2016) and the areas for further research identified by Bocken and Geradts (2020) and Foss and Saebi (2016) were applied to the research questions. The reason for this selection was that it supported the main research question and sub-questions on the constructs on the drivers, barriers, and outcomes of *BM transformation* towards sustainability.

Thirdly, the term SBMI and its definition by Geissdoerfer et al. (2018) were applied to this study. The scholars' identification of BM *transformation* as one of the four types of BMI mechanisms applied to the research questions (Geissdoerfer et al., 2018). In addition, the identification of a research gap by Geissdoerfer et al. (2018) on how organisations transform an existing BM towards sustainability were applied to the research questions due to the focus on *BM transformation*.

Fourthly, the identification of SBMI drivers by Rauter et al. (2017) and Bocken and Geradts (2020) were applied to this research. The classification of the drivers of BM

transformation towards sustainability supported the sub-research question on the construct of the drivers. Furthermore, the research gaps identified by Rauter et al. (2017) and Bocken and Geradts (2020) have also applied to this study. This was due to the research gap identified in *SBM transformation* (Rauter et al., 2017) and the identification for further research on the drivers and barriers to SBMI (Bocken & Geradts, 2020).

Regarding the barriers of BM transformation towards sustainability, the classification by Bhattacharya and Polman (2017), Evans et al. (2017), Geissdoerfer et al. (2018), and Sousa-Zomer and Cauchick-Miguel (2019) were utilised in this study due to the reference to the *implementation of SBMI*, which relates to the research questions.

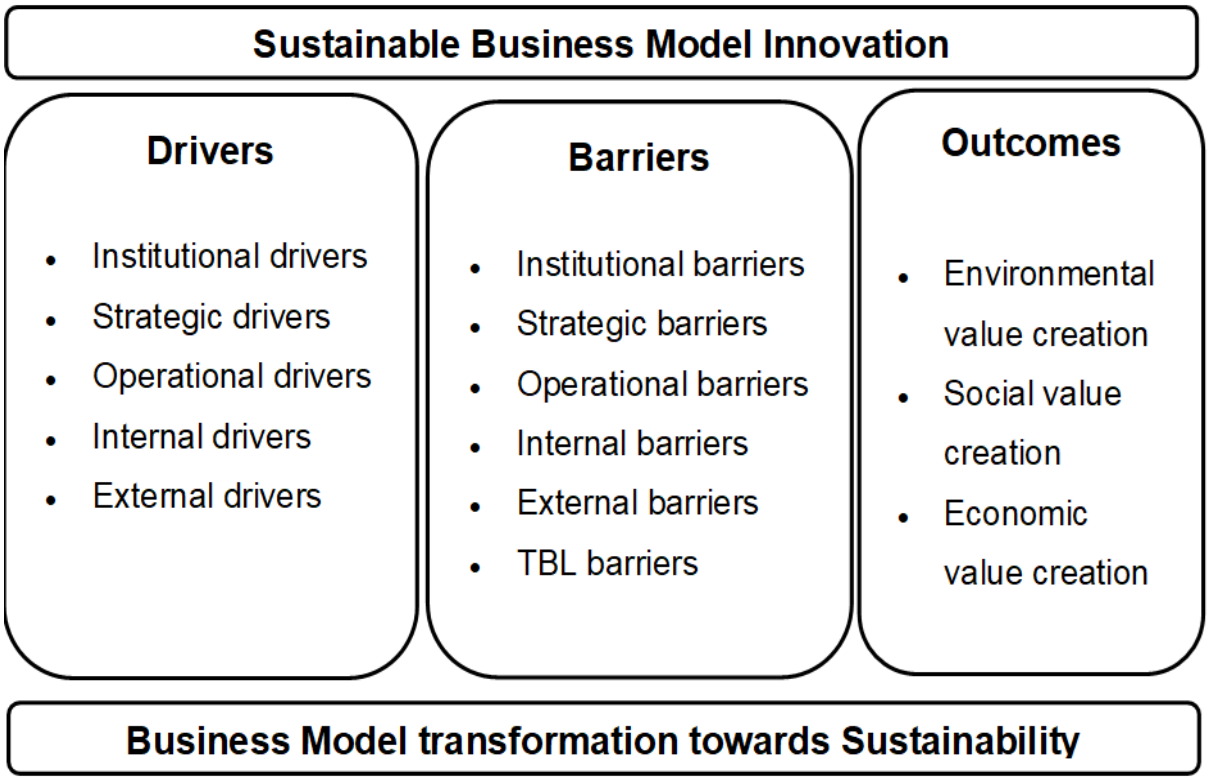
The identification of the research gaps on the successful *implementation of SBMI*, stated by Evans et al. (2017), Geissdoerfer et al. (2018) and Sousa-Zomer and Cauchick-Miguel (2019), were applied in this study due to research questions being based on the drivers, barriers, and outcomes of SBMI.

Lastly, based on the analysis of the literature, the classification of the outcomes derived from the successful *implementation of SBMI* by Evans et al. (2017), Tate and Bals (2018), and Laukkanen and Tura (2020) were applied to this research. Furthermore, the research gaps identified by Evans et al. (2017) and Tate and Bals (2018) were also applied to this research due to the relevance to the research questions.

The summary of the knowledge drawn from the systematic analysis of the literature was used to develop a conceptual framework, as depicted in Figure 3. Furthermore, this conceptual framework reflected the theoretical lens of the literature which was explored and represented the literature that was discussed in Chapter 2. This framework formed the foundation for addressing the research questions in Chapter 3.

Figure 3

Conceptual framework of the BM transformation towards sustainability



Note. Author's own, adapted from Bhattacharya and Polman (2017), Bocken and Geradts (2020), Evans et al. (2017), Geissdoerfer et al. (2018), Laukkanen and Tura (2020), Rauter et al. (2017), Sousa-Zomer and Cauchick-Miguel (2019) and Tate and Bals (2018).

CHAPTER 3: RESEARCH QUESTIONS

3.1 Research Opportunity

Research gaps were identified in three recent and credible academic papers namely, “Sustainable business model innovation: a review” by Geissdoerfer et al. (2018). Secondly, “Fifteen years of research on business model innovation: how far have we come, and where should we go?” by Foss and Saebi (2016), and lastly, “Barriers and drivers to sustainable business model innovation: organisation design and dynamic capabilities” by Bocken and Geradts (2020).

Three research opportunities on SBMI were identified in the first paper namely, the implementation of SBMI; its tools; and its challenges (Geissdoerfer et al., 2018). Secondly, Foss and Saebi (2016) mentioned an antecedent of BMI as the need for greater sustainability, in terms of ESG factors, and the need to elaborate on how an existing BM can innovatively transition towards sustainability. Lastly, Bocken and Geradts (2020) claimed that more research is required on how to guide managers to effectively innovate to create impactful sustainability as well as assessing the barriers and drivers of SBMI. Table 9 summarises the various research gaps identified during the systematic literature review in Chapter 2.

Table 9

Research opportunities based on the literature review

Title	Journal	Authors	Research gaps
Fifteen years of research on business model innovation: how far have we come, and where should we go?	*Journal of Management*	Foss and Saebi (2016)	The need to elaborate on how business models creatively and innovatively transition towards sustainability. Four areas for further research related to business model innovation: • Antecedents • Outcomes • Moderators • Novelty and scope
Sustainable business model innovation: a review	*Journal of Cleaner Production*	Geissdoerfer et al. (2018)	How can organisations move from an existing business model to a more sustainable business model in business practice? Three areas for further research focusing on the design-implementation gap of business model innovation: • The implementation • The activities and tools • The barriers and challenges
Barriers and drivers to sustainable business model innovation: organization design and dynamic capabilities	*Long Range Planning*	Bocken and Geradts (2020)	More research is required on how to guide managers to effectively innovate to create impactful sustainability. Four areas for further research related to business model innovation: • How to innovate business models for sustainability? • How to create impactful sustainability? • Barriers and drivers of sustainable business model innovation • Organisational design and dynamic capabilities

Note. Author’s own, Bocken and Geradts (2020), Foss and Saebi (2016) and Geissdoerfer et al. (2018).

3.2 Research Questions

The research questions were based on the research gaps identified in three academic papers, which focused on *BM transformation* as detailed in Table 9. However, the main research question was stated by Geissdoerfer et al. (2018) on how organisations move from an existing BM to a more SBM. Furthermore, the scholars' identification of *BM transformation* as only one of the four types of BMI mechanisms was applied to the research questions (Geissdoerfer et al., 2018). Based on these research gaps identified in the literature, the research questions were amended as follows for this study:

How does an organisation transform its existing BM towards a SBM?

Research sub-question 1: What are the drivers involved in transforming an existing BM towards a SBM?

This question identified which internal and external antecedents (Foss & Saebi, 2016) assisted with the BM transformation towards sustainability and the SBMI implementation process, as well as the strategic, institutional, and operational drivers (Bocken & Geradts, 2020; Rauter et al., 2017).

Research sub-question 2: What are the barriers involved in transforming an existing BM towards a SBM?

This question identified the internal and external barriers in the BM transformation towards sustainability and the SBMI implementation process, as well as indicated the strategic, institutional, and operational barriers (Bocken & Geradts, 2020; Foss & Saebi, 2016; Geissdoerfer et al., 2018).

Research sub-question 3: What are the outcomes derived from transforming an existing BM towards a SBM?

This question indicated and identified the outcomes derived from the BM transformation towards sustainability (Foss & Saebi, 2016) as well as if sustainable or triple bottom line value was created in the and the SBMI implementation process (Bocken & Geradts, 2020; Evans et al., 2017; Tate & Bals, 2018).

The next Chapter discusses the research methodology and design, that was implemented in this study.

CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN

A research design is defined as a framework that outlines how the research was undertaken to answer the relevant research questions as well as to present the criterion on how the quality of the evidence collated was assessed (Bell et al., 2019). This Chapter discusses the research framework, which included the data gathering and data analysis processes, to address the study's research questions.

4.1 Choice of Methodology

4.1.1 Exploratory Study

According to Braun and Clarke (2006), exploratory studies aim to answer 'how' questions. Therefore, this was an exploratory study as the research questions aimed to explore *how* an existing BM *transforms* towards sustainability.

4.1.2 Qualitative Method

The choice of methodology for this study was a qualitative approach, which is identified as the most appropriate method for an exploratory study as well as for answering 'how' research questions (Braun & Clarke, 2006). A qualitative approach was also recommended for the implementation of business and society research, specifically related to sustainability (Crane et al., 2018), which complemented this study's research questions.

Furthermore, Bocken and Geradts (2020) applied a qualitative approach to their study to identify the drivers and barriers of the implementation of SBMI, through the utilisation of semi-structured interviews. Therefore, this further justified the adoption of a qualitative approach as the focus of this study was on BM *transformation* towards sustainability and the drivers, barriers, and outcomes.

4.1.3 Inductive Approach

According to Eisenhardt et al. (2016), inductive approaches build theory from cases and undertake interpretivist studies to explain the data. Whereas Bell et al. (2019) defined qualitative research as the focus of words over the quantification of data, which leads to an interpretive and inductive research approach. This research method is also applied in answering 'how' questions (Gehman et al., 2018), which directly related to this study's research questions.

Furthermore, it is argued that inductive methods were useful in making a meaningful contribution to grand challenges in society (Eisenhardt et al., 2016). Therefore, an inductive approach was applied to this study due to the nature of the exploratory research on SBMI.

4.2 Philosophical Foundations

Philosophical foundations in business research are based on a body of knowledge, also referred to as the philosophy of social science (Bell et al., 2019). The purpose of this philosophy is to explore and understand assumptions in three dimensions, namely, ontology, epistemology, and research strategy (Bell et al., 2019). Ontology is the assumptions about the nature of reality; where epistemology is the assumptions about how we develop knowledge of reality assumed in the ontology; and the research strategy is the appropriate way in which to implement research-based ontological and epistemological assumptions (Bell et al., 2019).

Therefore, the research strategy implemented in this study was an interpretivism approach, which built on the multiple social constructs of reality as well as the research questions covering how and what statements (Bell et al., 2019). Furthermore, the research strategy supported the qualitative method, as the participants were selected based on their sustainability experience and knowledge about the research phenomena in the research questions.

4.3 Role of Theory

As scholars stated that this is a fertile area for further research (Foss & Saebi, 2016; Tate & Bals, 2018), the scope of the study explored the emergent topic on SBMI which related to a standard BM that transitions into a sustainable BM, then into BM innovation, with the goal of *transforming* into a SBMI. In addition, the literature on the theoretical constructs on the drivers, barriers, and outcomes of BM *transformation* towards sustainability was also explored.

According to Crane et al. (2016), developing, refining, or testing theory, are the three possible theoretical contributions of studies. This research aimed to refine the theory, by building on the existing literature (Crane et al., 2016), related to SBMI, in order to make a small theoretical contribution and potential refinements to the literature.

4.4 Research Setting

Based on the research questions, leading organisations in South Africa with experience in transforming an existing BM towards sustainability, within the franchising, retail, and e-commerce industry sectors, were considered as the setting for this study. However, after much effort, the e-commerce industry was substituted with suppliers within the value chain, due to the lack of access to e-commerce participants and their willingness to participate in this study.

The justification for the choice of these three industry sectors facilitated the triangulation and comparison of the research findings. Furthermore, these industry sectors were also selected based on the following differences amongst the industries:

- BMs vary
- Differences in values and business philosophy
- Different targeted customers (end-consumer or business-to-business)
- Stakeholders within the supply chain differs
- Differences in business size and the number of employees

4.5 Level and Unit of Analysis

The level of analysis for this study was at an organisational level due to the research gap identified by Geissdoerfer et al. (2018) which was on how an *organisation* transforms from an existing BM to a more SBM. This research gap applied to SBMI at an *organisation level*. Therefore, the organisational level of analysis was applied in addressing the research questions.

The unit of analysis were the individual participants within the three selected industry sectors. Participants were selected from businesses within these three industry sectors based on their experience in sustainability and BM transformation.

4.6 Sample Selection Criteria and Sample Size

Bell et al. (2019) stated that purposive sampling is best suited to qualitative studies. This method is a non-probability sampling technique that strategically targets participants in the unit of analysis to answer specific research questions (Bell et al., 2019).

A systematic approach to the purposive sampling was applied to this study, by identifying four selection criteria in strategically selecting the participants which were interviewed:

- Industry level – selected organisations from the industry sectors applicable to the research setting namely franchising, retailers, and suppliers.
- Organisational level – selected organisations that were claiming to be transforming or moving towards a SBM or were implementing a sustainability strategy.
- Decision-making level – selected participants who worked within the chosen industry sectors.
- Experience level – selected participants who had experience, knowledge, and an understanding of the process involved in transforming a BM or implementing a sustainability strategy.

The initial participants were drawn from the research setting and divided into three categories of role players. However, as discussed, the *e-commerce sector* was replaced with *suppliers*.

- Franchising sector: Senior managers within franchisor companies
- Retail sector: Senior managers within these retail companies
- *E-commerce sector: Senior managers within these e-commerce companies*
- *Therefore, the supplier sector included senior managers from this industry sector*

In addition, as part of planning for a robust dataset, the aim was for a sample size of 21 participants to be interviewed. However, based on the time constraints and willingness of participants to be interviewed, the sample size was adjusted to *15 participants*. The sample size of 15 participants allowed for a diversity of perspectives, the development of insights, and allowed for a deeper understanding of the research topic to be explored. In addition, the sample size of 15 assisted with the triangulation of the research findings from the three industry sectors.

The summary of the intended participants in the research setting versus the actual participants who were interviewed were as follows and are presented in Table 10:

- Franchising sector:
    - Seven intended interviews with senior managers within franchise companies
    - *Eight actual interviews were conducted with senior managers within franchise companies*

- One actual interview was not used due to the participant's lack of understanding and quality of the answers relating to sustainability and BM transformation

- Retail sector:
  - Seven intended interviews with senior managers within retail companies
  - *Three actual interviews were conducted with senior managers within retail companies*

- E-commerce sector: *This industry sector was replaced with suppliers within the value chain*
  - Seven intended interviews with senior managers within e-commerce companies
  - *Five actual interviews were conducted with senior managers within the supplier sector*

Table 10

Purposive sample size

Research Setting	Intended Participants	Intended Number of Participants	*Actual Number of Participants*
Pilot interview	One participant	1	1 (not used)
Franchising sector	Senior managers within franchisor companies	7	**8** (1 rejected)
Retail sector	Senior managers within these retail companies	7	**3**
Suppliers	*Not selected*	Not intended to be used	**5**
E-commerce sector	Senior managers within these e-commerce companies	*7*	*Not selected*
TOTAL		*22*	**15**

Note. Author's own.

4.7 Research Instrument

Semi-structured interviews allow researchers to ask specific questions, related to the research questions and constructs as part of the interview guide (Bell et al., 2019). Furthermore, semi-structured interviews allow for flexibility in the sequence in asking the questions and allow for the participants to express their answers in their own words based on their background and experience (Bell et al., 2019).

Hence, this qualitative research instrument was selected for this study, and semi-structured interviews were utilised to collect the primary data. Based on the research questions, the following topics were used to develop the interview guide with open-ended questions, as seen in Appendix A (Interview Guide):

- SBMI
- The drivers of BM transformation towards sustainability
- The barriers of BM transformation towards sustainability
- The outcomes derived from BM transformation towards sustainability

4.8 Data Gathering Process

As the research was exploratory in nature, the primary data was collected through semi-structured interviews of 15 participants, drawn from three industry sectors within the South African emerging market. These interviews were conducted after the ethical clearance was obtained from the GIBS Ethical Committee (as seen in Appendix B), pilot testing was completed, and signed consent forms were received from all participants (as depicted in Appendix C).

All semi-structured interviews took place and were recorded via Zoom, the online meeting platform, as the author was based in the Netherlands and all participants were based in South Africa.

Bell et al. (2019) stated that early transcription improves the validity of the research. Hence, live, and instant transcriptions were created and edited for each interview through the utilisation of the Otter online transcription tool.

As presented in Table 10, a total of 17 senior level managers were interviewed and all participants signed consent forms. Many participants were accessed through the

researcher's personal network and one participant was accessed via LinkedIn. Furthermore, a pilot interview was conducted to test the interview guide, interview platform and transcription tool. This interview was not used as part of the final data set.

Bell et al. (2019) stated that an interpretivist approach to data gathering allows participants to express their understanding and experience of a subject matter in their own words through asking open-ended questions during an interview. Therefore, as seen in 4.7, this approach was implemented in the semi-structured interviews which allowed the interview participants to freely express their thoughts, opinions, and understanding of SBMI.

Furthermore, Bell et al. (2019) identified that the triangulation of data sources improves the research quality and validity. Therefore, the triangulation in this study related to the three industries, which were the sources of the same data, obtained through the same interview protocol, to facilitate the systematic analysis of the different perspectives from the participants from the three industry sectors.

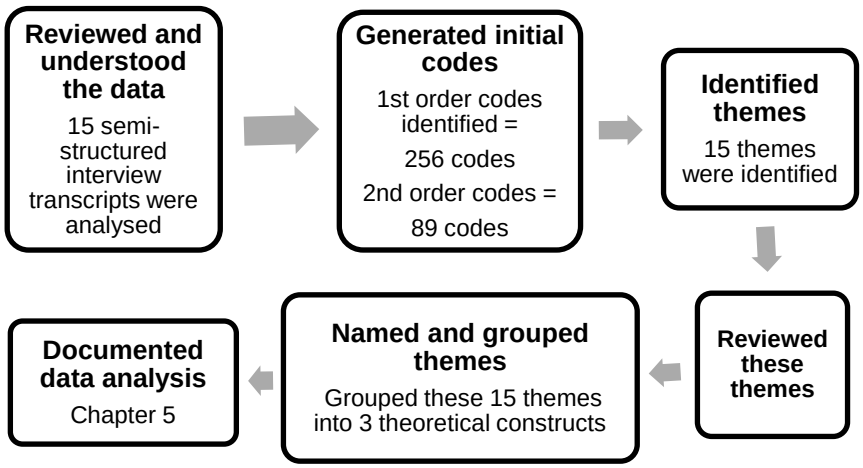
4.9 Qualitative Data Analysis Approach

It is stated that content analysis is a well-suited approach for unstructured interviews and qualitative, organisational case studies (Bell et al., 2019). Braun and Clarke (2006) identified thematic analysis as a form of content analysis. The steps which were taken with this analysis approach included inductively analysing the interview feedback and data, and secondly, themes or patterns within the data, in relation to the different epistemological and ontological approaches, were identified and analysed (Bell et al., 2019).

Furthermore, the six phases of thematic analysis, identified by Braun and Clarke (2006), involved a deep understanding of the data, generating initial codes, identifying themes, reviewing these themes, describing, and naming these themes, and lastly, documenting the data analysis for the final research report (Braun & Clarke, 2006). These six phases of thematic data analysis were implemented during the data analysis process of this study, as seen in Figure 4.

Figure 4

Thematic data analysis process applied in this study



Notes. Author's own, adapted from Braun and Clarke (2006).

The 15 semi-structured interview transcripts were reviewed and analysed to gain an overall understanding of the research findings. Secondly, 256 initial codes were generated, followed by 89 second order codes, by utilising Atlas.ti, which is a coding software programme. Thirdly, after the second order codes were analysed, 15 themes were identified, which will be discussed in more detail in Chapter 5 and are listed in Appendix D.

These themes were then reviewed and named. Step five involved the grouping of these 15 themes into 3 theoretical constructs. The final step involved the documentation of this data analysis which is discussed in Chapter 5.

The five-step thematic analysis process aimed to achieve data saturation. This tends to occur in qualitative research when no new codes or themes are found in the data analysis (Saunders et al., 2018). As seen in Table 11, data saturation was achieved in interview 15, where only 1 new code was revealed. Furthermore, the objective of this analysis approach was to address the research questions and to identify themes that pertain to the research topic related to SBMI.

Table 11

Saturation analysis

Saturation analysis – new code decomposition		
Interviews	**Research setting**	**Number of 2nd order codes**
Participant 1	Retail sector	**89**
Participant 2	Franchising sector	**54**
Participant 3	Retail sector	**38**
Participant 4	Franchising sector	**33**
Participant 5	Franchising sector	**43**
Participant 6	Franchising sector	**38**
Participant 7	Franchising sector	**32**
Participant 8	Franchising sector	**20**
Participant 9	Retail sector	**11**
Participant 10	Supplier	**17**
Participant 11	Supplier	**15**
Participant 12	Franchising sector	**10**
Participant 13	Supplier	**9**
Participant 14	Supplier	**7**
Participant 15	Supplier	**1**

Note. Author's own.

4.10 Research Quality and Rigour

Eisenhardt et al. (2016) identified three fundamental criteria contributing to the quality and rigour of inductive papers, namely, generating strong theory, deriving themes from compelling and rich data, and research providing meaningful and relevant insights. In addition, it is stated that studies should aim to avoid rigour mortis and ensure high levels of reliability, replicability, and validity (Bell et al., 2019).

A systematic approach was implemented in this study to increase and achieve the credibility, transferability, dependability, and confirmability of the research outcomes. As seen in Table 12, a research quality and rigour strategy were implemented in this research, which included the following actions:

- The literature review was based on recent, credible, and highly rated academic papers

- A systematic approach was taken regarding the literature review and research questions
- Developed a consistency matrix (Appendix E)
- Triangulation of the primary data through the selection of three diverse industry sectors
- A credible sample was purposively selected with a sufficient sample size of 15
- Developed a standardised and focused interview protocol for consistency in all interviews
- Utilised a robust, well tested, and piloted interview protocol as the research instrument
- Used a coding software programme, Atlas.ti, to assist with the coding
- All interviews were recorded via Zoom and transcribed with Otter

Table 12

Research quality and rigour strategy

Trustworthiness Criteria	Research Quality & Rigour Strategy	
Credibility	1	Literature Review: Used recent & highly rated academic papers
	2	Literature Review: Used a systematic approach
	3	Triangulation of primary data
	4	Selected a credible sample and sufficient sample size
	5	Used of a credible coding system
Transferability	6	Developed a consistency matrix
	7	Standardised and focused interview protocol used
	8	Used a robust, well tested and, piloted interview protocol
	9	Purposive sampling
	10	Provided detailed descriptions of the research findings in Chapter 6
Dependability	11	Triangulation
	12	Provided detailed notes on how the findings were compared to the key literature in Chapter 6
Confirmability	13	All interviews were recoded and saved via Zoom
	14	All interviews were transcribed via Otter
	15	Triangulation
	16	Researcher reflexed on the research outcomes

Note. Author's own, adapted from Bell et al. (2019) and Eisenhardt et al. (2016).

4.11 Ethical Considerations

The GIBS Research Ethics process was followed to ensure that all research conducted under the auspices of GIBS was done in an ethical manner, followed the University's policy and in such a way that the rights of all stakeholders associated with this research were protected.

4.11.1 Anonymity of Participants

The anonymity of the 15 participants, during the data collection and data analysis, was applied through the following actions:

- No names of the individuals or the organisations were reported or mentioned
- The standard informed letter of consent was signed by each participant before the interview commenced, as seen in the example in Appendix C
- The data has been stored and reported without identifiers

4.11.2 Interview Platform and Recordings

All interviews took place via Zoom and were recorded which enabled quality transcriptions to be saved. Furthermore, the interviews were also automatically transcribed via an online platform called Otter. The video and transcription recordings were downloaded and deleted immediately from the Zoom and Otter platforms to protect the confidentiality of all participants.

4.11.3 Data Storage

Regarding the data storage, the data will be safely stored for 10 years on the researcher's personal, secure Dropbox, which is a cloud-based storage facility, and is password protected. After the data was analysed and Chapter 5 was written, all video and voice recordings were deleted off Dropbox to maintain the anonymity of the participants.

4.12 Limitations of the Research Design and Methods

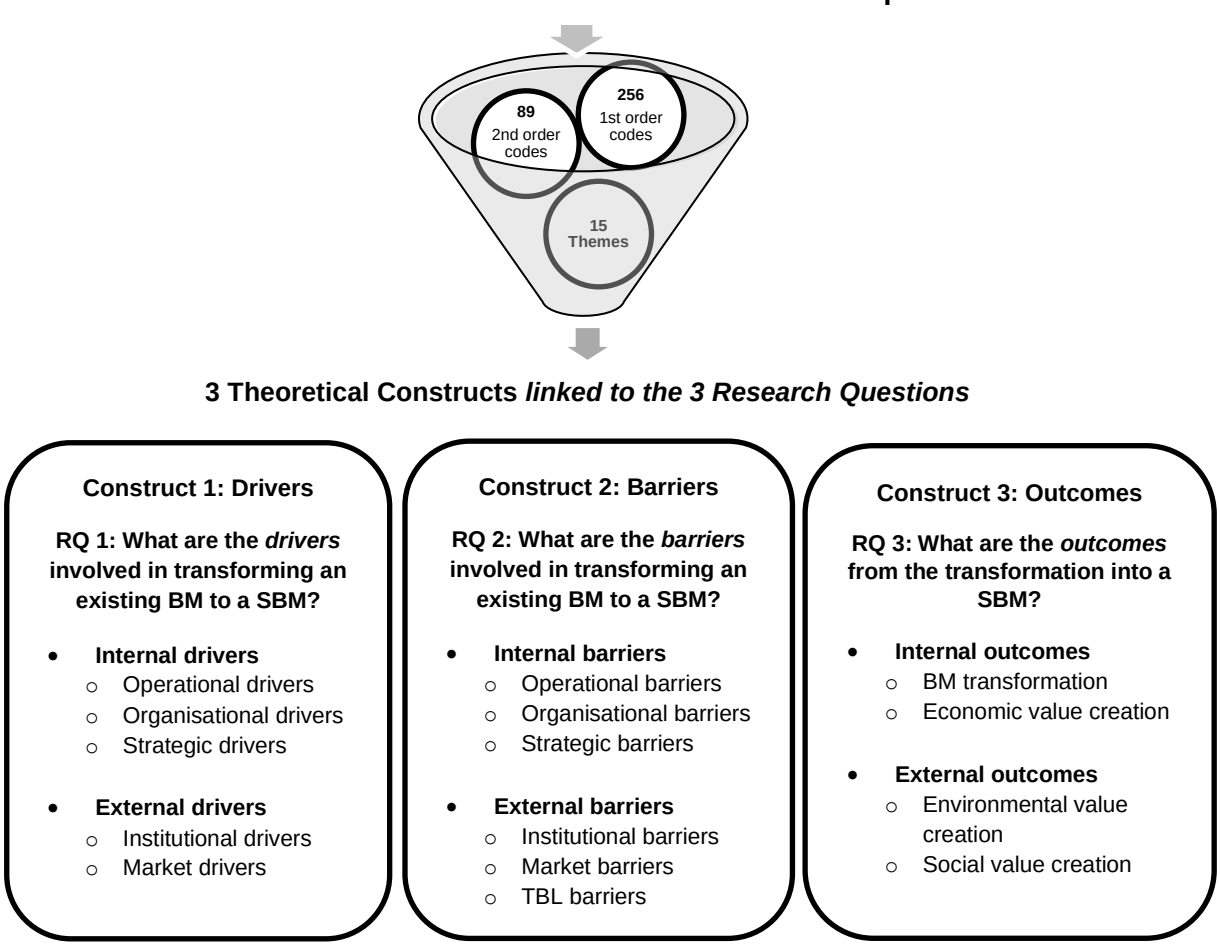
There were two main limitations of this study's research design and methods. Firstly, the research was undertaken by a novice researcher with minimal experience in researching. The researcher also had emerging knowledge on sustainability. Secondly, the boundaries of the research setting, which included three industry sectors within South Africa, may not apply to other research contexts and settings. The next Chapter will discuss the research findings.

CHAPTER 5: RESEARCH FINDINGS

This Chapter presents the key findings derived from the data gathering and data analysis process, as detailed in Chapter 4. This Chapter was structured through a theoretical lens according to the three theoretical constructs detailed in Chapter 2, namely the drivers, barriers, and outcomes of BM transformation towards sustainability. As seen in Figure 5, these three theoretical constructs were linked to the three research sub-questions. In addition, the 15 theoretical themes, which were derived from the thematic data analysis, were categorised under these three theoretical constructs.

Figure 5

Thematic data analysis process indicating the constructs linked to the research questions



Note. Author's own, adapted from Braun and Clarke (2006).

The 15 transcripts were qualitatively coded, analysed, and categorised into 15 themes using Atlas.ti. These themes were then further qualitatively analysed by utilising Atlas.ti's

Code-Document Table analysis tool to identify data patterns. The data retrieved from these tables were 'normalised' to allow for clear patterns to emerge due to the unequal number of participants in each industry sector.

The 15 transcripts were grouped into three document groups in Atlas.ti, based on the industry sectors, namely franchising, retail, and suppliers. This analysis tool facilitated the cross-tabulation of the qualitative data by indicating the number of codes per document and per document group. Furthermore, this allowed for the representation of the frequency of mentions by the participants, as well as the frequency of mentions between the document groups/industry sectors. This grouping also facilitated the triangulation of the three industry sectors.

As this was a qualitative study, the quantitative frequency of mentions were used to assist with the analysis of the findings. The themes with higher or fewer mentions did not represent their importance, ranking, or significance. As seen in Table 13, the percentages indicated the number of mentions of each theme by the participants in each industry sector. The colour shading represented the number of mentions by percentage categories, as follows:

- 0% – 33% of mentions = pale green
- 34% - 66% of mentions = pale grey
- 67% - 100% of mentions = dark grey

Regarding the *drivers construct*, based on these colour shadings, it was interesting to note that the operational and strategic drivers had the most number of mentions by suppliers, as the internal driver of sustainability. However, the operational drivers had the least number of mentions by the franchising sector, as an internal driver, but the institutional drivers had multiple mentions by all industry sectors.

Furthermore, on the *barriers construct*, no mentions were made on strategic barriers by the retail and supplier sectors, which was the most frequently mentioned internal barrier by the franchising participants. The franchising sector also mentioned organisational and institutional barriers more frequently than the other two sectors. Interestingly, all industry participants mentioned market barriers as an external barrier of sustainability.

Regarding the *outcomes construct*, environmental value creation had the most number of mentions by the retail sector, as an external outcome of sustainability. However, it is

interesting to note that all industry participants mentioned internal and external outcomes of sustainability multiple times, based on the balance of colour shadings.

Concerning the industry sectors, the franchising participants mentioned operational drivers the least number of times, but these participants mentioned strategic barriers the most frequently as a theme. Whereas the participants from the retail sector did not mention strategic barriers as a theme, but organisational drivers were the retailer participants' most mentioned theme. In addition, participants from the supplier sector mentioned TBL barriers the most number of times, but did not mention strategic barriers as a theme, as was the case in the retail sector.

Furthermore, the most mentioned *code groups* and potential new themes were summarised in Table 13. Five potential new themes and four potential new sub-themes were identified through the data analysis and highlighted in blue in Table 13. These potential new themes are discussed in the Chapter sections to follow, as indicated in the last column of Table 13.

Table 13

Cross-tabulation of the 15 themes by the three industry sectors

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
1	Internal Drivers: Operational	Drivers	20%	33%	46%	*Incentives: Employee & customer*	*Reduce waste*	5.1.1
2	Internal Drivers: Organisational	Drivers	31%	43%	26%	*Employees: Retention & attraction*		5.1.1
3	Internal Drivers: Strategic	Drivers	22%	33%	46%	*Sustainability ingrained into DNA & strategies*		5.1.1
4	External Drivers: Institutional	Drivers	32%	33%	36%	*Collaborations with government & NGOs Associations*		5.1.2
5	External Drivers: Market	Drivers	45%	26%	30%	*Pressure from customers*	*Pressure from customers*	5.1.2
6	Internal Barriers: Operational	Barriers	39%	40%	21%	*Resources*		5.2.1
7	Internal Barriers: Organisational	Barriers	52%	21%	27%	*Leadership*		5.2.1
8	Internal Barriers: Strategic	Barriers	100%	0%	0%	*Short-term focus*		5.2.1
9	External Barriers: Institutional	Barriers	45%	17%	38%	*Lack of government involvement & initiatives*	*Energy security & socio-political unrest*	5.2.2
10	External Barriers: Market	Barriers	37%	26%	37%	*COVID-19*	*COVID-19*	5.2.2
11	External Barriers: Triple Bottom Line	Barriers	40%	7%	53%	*Balance between profit versus sustainability rewards*		5.2.2
12	Internal Outcome: Business Model Transformation	Outcomes	32%	36%	32%	*Re-defining the existing BM*		5.3.1
13	Internal Outcome: Economic Value Creation	Outcomes	30%	34%	35%	*Increase in profitability*		5.3.1
14	External Outcome: Environmental Value Creation	Outcomes	29%	42%	30%	*Reduction of waste*		5.3.2
15	External Outcome: Social Value Creation	Outcomes	36%	39%	25%	*Community upliftment*		5.3.2

Note. Author's own.

The cross-tabulation analysis of the 15 themes by industry sectors was applied to each theoretical construct to provide a detailed analysis of the key findings, which were discussed in this Chapter. Firstly, the key findings under the construct on the drivers were presented, followed by the construct on the barriers, and the Chapter was concluded with the findings on the construct on the outcomes of BM transformation towards sustainability.

5.1 Construct 1: Research Findings on the Drivers of BM Transformation towards Sustainability

The theoretical construct on the drivers was linked to the first research question:

What are the drivers involved in transforming an existing BM into a SBM?

The data analysis revealed five themes related to the construct on the *drivers* which were categorised under internal drivers and external drivers. The internal drivers included organisational, operational, and strategic drivers, whereas the external drivers included the market and institutional drivers.

5.1.1 Construct 1: Research Findings on the Internal drivers of BM Transformation towards Sustainability

5.1.1.1 Introduction on the Internal Drivers

Table 13a is an extract from Table 13, which indicated the data patterns between the industry sectors on the internal drivers of sustainability, which were the most and least mentioned by the participants, as the drivers moving organisations towards sustainability. Firstly, the operational drivers were the most frequently mentioned by the supplier industry, and the least mentioned by the franchising industry.

It was interesting to note that participants mentioned the reduction of waste as an operational driver. This driver was highlighted in pale blue as a potential new sub-theme. Furthermore, the operational and strategic drivers were both the most mentioned themes by the supplier participants, but the least mentioned themes by the franchising participants.

The organisational drivers were most frequently mentioned by the retail participants. The organisational drivers were also identified as a potential new theme which was highlighted in pale blue.

Table 13a

Extract of the cross-tabulation of the 3 themes under the construct on internal drivers

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
1	Internal Drivers: Operational	Drivers	20%	33%	46%	*Incentives: Employee & customer*	*Reduce waste*	5.1.1
2	Internal Drivers: Organisational	Drivers	31%	43%	26%	*Employees: Retention & attraction*		5.1.1
3	Internal Drivers: Strategic	Drivers	22%	33%	46%	*Sustainability ingrained into DNA & strategies*		5.1.1

Note. Author's own.

The most mentioned code groups were also analysed, to identify which theme the codes relate to, in relation to the internal drivers construct on as illustrated in Figure 6. Leadership and employees were the predominant codes that formed the organisational drivers theme. This theme was also identified as a potential new theme.

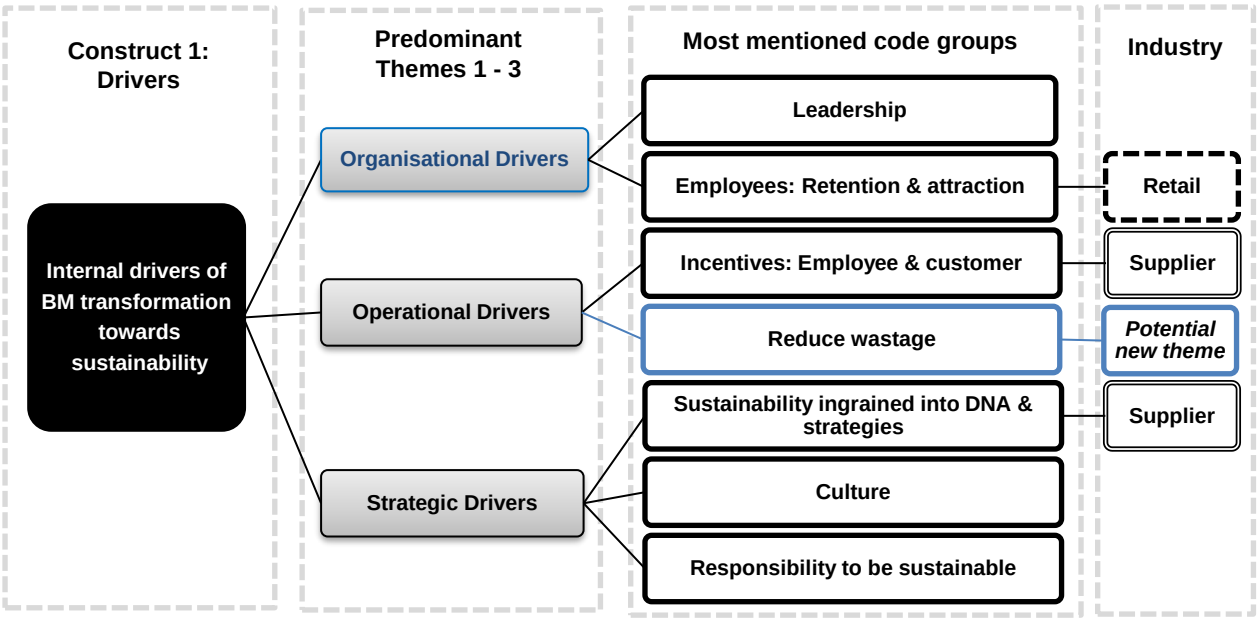
The operational drivers theme consisted of incentives for employees and customers, and the reduction of waste. The reduction of waste was noted as a potential new sub-theme. The strategic drivers theme was formed with three codes. Firstly, the strategic focus on sustainability was engrained in the organisation's DNA and all corporate strategies. Secondly, sustainability was reflected in the company culture. Lastly, businesses have a responsibility to be sustainable.

Furthermore, Figure 6 represented the evidence of the data patterns, in relation to the predominant code groups most mentioned by the respective industry sectors. The retention and attraction of employees were mentioned the most as the organisational barrier in the retail industry. Regarding the operational drivers, employee and customer incentives were the most mentioned code group by the supplier sector.

It was interesting to note that participants also mentioned the reduction of waste as an operational driver, which was highlighted in pale blue as a potential new sub-theme. In addition, the supplier participants also most frequently mentioned that sustainability was at the core of their business and ingrained into their corporate strategy as the strategic driver of BM transformation towards sustainability.

Figure 6

Predominant themes and most mentioned code groups of the internal drivers



Note. Author's own.

5.1.1.2 Evidence on the Internal Drivers

Regarding the evidence on the internal drivers, the evidence was based on the comparison of the most mentioned code groups in the three internal drivers themes, as presented in Table 13a. The respective participant quotes were used as evidence and summarised below:

Evidence on the organisational driver: Employee retention and attraction

Retail Participant

Staff is a massive component to sustainability. It's all about their upliftment and people sustainability…that is a really strong internal driver for us, to engage and retain our talent.

Evidence on the operational driver: Employee and customer incentives

Supplier Participant

We offer a financial reward to change the mindsets of people in order for sustainability to advance from both within and outside the company.

Supplier Participant: New potential theme on the reduction of waste

Waste is what we need to try and eradicate because obviously that's part of sustainability.

Evidence on the strategic driver: Sustainability engrained into the corporate strategies

Supplier Participant

The new Board came in and they really saw, and still see, the added value of sustainability. So as of October 2020, sustainability really has become a top focus, and sustainability has developed globally…the world climate is our global strategy to make the company more responsible and a sustainable business that positively contributes to the environment and society. Our intrinsic driver and purpose are to make an impact that matters.

5.1.1.3 Cross-case and In-case Analysis on the Internal Drivers

The evidence of the internal drivers of BM transformation towards sustainability presented similarities and differences between the industry sectors. There were similarities identified in the analysis between the franchising and retail sectors, as both industries identified the internal drivers theme as the force transforming organisations towards sustainability.

However, the difference noted was that the franchise industry mentioned that leadership was the driving force within organisations, whereas the retail industry stated that employees have the most impact internally.

Furthermore, there was consensus amongst the participants in the retail industry, that the operational and strategic drivers were moving organisations towards sustainability. The retailers specifically mentioned incentive initiatives and adopting a sustainability lens in all corporate strategies as the internal drivers within their industry.

5.1.1.4 Interpretation and Conclusion on the Internal Drivers

The analysis of the findings indicated three themes of internal drivers of BM transformation towards sustainability, which were classified into organisational, operational, and strategic drivers. The organisational drivers of sustainability were mentioned the most by the retail sector, which included the retention and attraction of employees. Organisational drivers were identified as a new theme. However, there was consensus in the supplier industry that operational (incentives) and strategic drivers (sustainability is the strategy) within an organisation are the catalysts of sustainability. Furthermore, the reduction of waste was noted as a potential new sub-theme.

Concluding the analysis and interpretation of the internal drivers themes, the key internal drivers transforming organisations towards sustainability were identified as the importance of the participation of employees, incentives to change mind-sets, and implementing corporate strategies based on sustainability.

5.1.2 Construct 1: Research Findings on the External Drivers of BM Transformation towards Sustainability

5.1.2.1 Introduction on the External Drivers

Table 13b is an extract from Table 13, which indicated the patterns between the industry sectors on the external drivers, which were most and least mentioned by the participants, as the drivers moving organisations towards sustainability. Firstly, the institutional drivers were mentioned by all industries, but most frequently mentioned by the supplier industry, and the least mentioned by the franchising industry.

Secondly, the market drivers were the most mentioned theme by the franchising participants, but the least mentioned theme by the retail participants. It is interesting to note that participants mentioned pressure from customers as a market driver, which has been highlighted in pale blue as both a potential new theme and sub-theme.

Table 13b

Extract of the cross-*tabulation of the 2 themes under the construct on external drivers*

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
4	External Drivers: Institutional	Drivers	32%	33%	36%	*Collaborations with government & NGOs Associations*		5.1.2
5	External Drivers: Market	Drivers	45%	26%	30%	*Pressure from customers*	*Pressure from customers*	5.1.2

Note. Author's own.

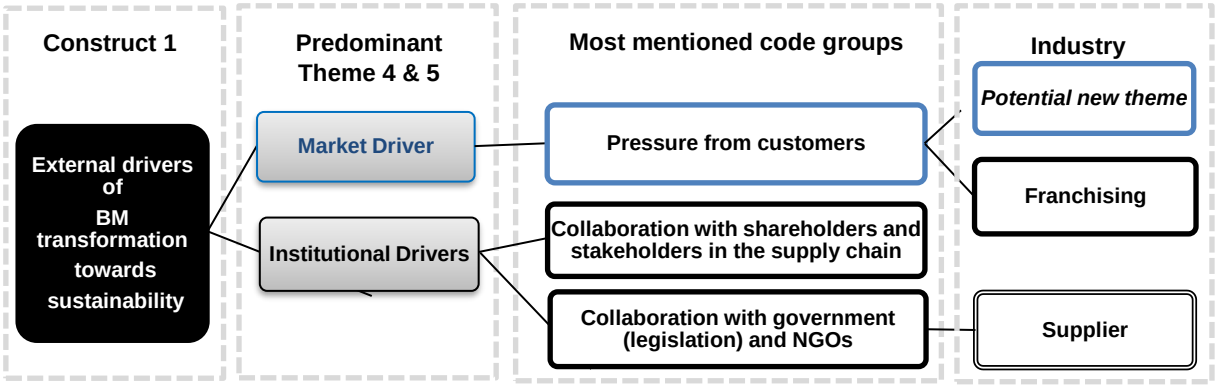
The most mentioned code groups were also analysed to identify which theme the codes related to, in relation to the theoretical construct on external drivers, as illustrated in Figure 7. Pressure from customers was identified as the most mentioned code group which formed the market drivers theme.

The institutional drivers theme was formed with two predominant codes, which highlighted the effect of collaboration and strategic partnerships. The first code was labelled collaboration with shareholders and stakeholders in the supply chain. The second code was labelled collaboration with government, NGOs, and universities.

Furthermore, Figure 7 represented the evidence of data patterns, in relation to the predominant code groups most mentioned by the respective industry sectors. The market drivers theme was most frequently mentioned by the participants in the franchising industry, which related to the pressure from customers. This theme and code group were both highlighted in blue as a potential new theme and sub-theme. Institutional drivers had multiple mentions from the supplier sector in relation to the collaboration with government and NGOs.

Figure 7

Predominant themes and most mentioned code groups of the external drivers



Note. Author's own.

5.1.2.2 Evidence on the External Drivers

The evidence on the external drivers was based on the comparison of the most mentioned code groups in the external drivers themes, as presented in Table 13b. The respective participant quotes were used as evidence and summarised below:

Evidence on the market driver: Pressure from customers

Franchising Participant: Potential new theme and sub-theme

Consumers are becoming more and more aware of sustainability. This external pressure is pushing sustainability. Consumers are really looking for those brands that support local, that are sustainable, that they don't use plastic…that's what sustainability is for and why it's important for our brand. As soon as that unexpected pressure starts coming externally, then it becomes a mandate in the business.

Evidence on the institutional driver: Collaboration with government & NGOs

Supplier Participant: Legislation and NGO membership

The external drivers are definitely government and supply chain drivers, to some extent, as well as legislation. The Waste Management Act came into play in March. So, luckily all our things were in place beforehand to conform to the Waste Act, and we also members of PETCO.

Franchising Participant: A different view on the role that universities play

I think the problem are business schools, which is ironic considering that you are at GIBS. Business schools have a major need to look at themselves in the mirror as I still see sustainability as being an add-on to different degrees and I think it's crazy. I think that the whole paradigm needs to shift…which makes it hard to implement change from the heart.

Evidence on the institutional driver: Collaboration within the supply chain

Retail Participant: View on acting responsible within the supply chain

We look at sustainability throughout the entire supply chain. We act responsibly within our supply chain, not just in terms of the environment, but in terms of the way that we treat our communities and we've worked very, very closely with them. We baked sustainability into our business from day one. This aligns with our value set and our culture, and how we go about ethics as we are very strict on who we work with.

5.1.2.3 Cross-case and In-case Analysis on the External Drivers

The evidence of the external drivers of BM transformation towards sustainability presented many similarities and differences between the industry sectors as well as a difference in a participant's view.

Regarding the similarities, the main similarity between all industry sectors was identified in the market drivers theme, which had the most mentions regarding the pressure from customers. However, pressure from customers was mentioned the most number of times by the franchising participants as the external driving force moving organisations towards sustainability.

Furthermore, there were similarities identified in the analysis between the retail and supplier sectors, as both industries identified the institutional drivers theme as the external driver of sustainability. However, the difference noted was that the retail

participants mentioned collaboration with shareholders and stakeholders within the supply chain multiple times. Whereas the supplier participants mentioned collaboration with the government about legislation, and NGOs, most frequently.

A further difference was noted as a participant in the franchising industry had a different view on the role that universities play in driving sustainability. The participant viewed universities as an institutional barrier and not a driver.

5.1.2.4 Interpretation and Conclusion on the External Drivers

The analysis of the findings indicated two themes of external drivers of BM transformation towards sustainability, which were classified into market and institutional drivers. The market drivers transforming organisations towards sustainability were most frequently mentioned by the franchising sectors, which included pressure from customers. Furthermore, this theme and code group were noted as a potential new theme and sub-theme.

The institutional drivers transforming organisations towards sustainability were most mentioned by the supplier sectors, which included collaboration with stakeholders in the supply chain, collaboration with government about legislation, NGOs, and universities. However, collaboration with the government and NGOs had the most number of mentions from the supplier sector.

Concluding the analysis and interpretation of the external drivers themes, the key drivers identified were pressure from customers and collaboration with government and NGO associations.

5.1.3 Construct 1: Conclusion on the Research Findings on the Internal and External Drivers of BM transformation towards sustainability

The theoretical construct on the *drivers* of sustainability consisted of five themes which were categorised under internal and external drivers, as summarised in Table 13c. The internal drivers theme included three themes which were classified as operational, organisational, and strategic drivers. The external drivers theme included two themes which were the institutional and market drivers of BM transformation towards sustainability.

Table 13c

Cross-tabulation of the drivers themes by industry sector

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
1	Internal Drivers: Operational	Drivers	20%	33%	46%	*Incentives: Employee & customer*	*Reduce waste*	5.1.1
2	Internal Drivers: Organisational	Drivers	31%	43%	26%	*Employees: Retention & attraction*		5.1.1
3	Internal Drivers: Strategic	Drivers	22%	33%	46%	*Sustainability ingrained into DNA & strategies*		5.1.1
4	External Drivers: Institutional	Drivers	32%	33%	36%	*Collaborations with government & NGOs Associations*		5.1.2
5	External Drivers: Market	Drivers	45%	26%	30%	*Pressure from customers*	*Pressure from customers*	5.1.2

Note. Author's own.

It was interesting to note that the operational and strategic drivers had the most number of mentions by suppliers as the internal driver of sustainability. However, the operational drivers had the least number of mentions as an internal driver, but the institutional drivers had multiple mentions by all industries.

Based on analysis of the findings on the *internal drivers* of sustainability, the key drivers identified with the most number of mentions were the importance of the participation of employees, incentives to change mind-sets, and implementing corporate strategies based on sustainability. In addition, based on the analysis of the findings on the *external drivers* of sustainability, the key drivers identified with the most mentions were pressure from customers and collaboration with government and NGO associations.

Furthermore, two *potential new themes* and sub-themes were identified as drivers of BM transformation towards sustainability. Firstly, the reduction of waste was noted as a potential new sub-theme of operational drivers. Secondly, organisational barriers as a category were identified as a potential new theme. Thirdly, pressure from customers was noted as a potential new-sub theme. The market driver was also identified as a potential new theme.

5.2 Construct 2: Research Findings on the Barriers of BM Transformation towards Sustainability

The theoretical construct on barriers was linked to the second research question:

What are the barriers involved in transforming an existing BM into a SBM?

The data analysis revealed six themes related to this construct which were categorised under internal barriers and external barriers. The internal barriers included organisational, operational, and strategic barriers, whereas the external barriers included the market, institutional, and TBL barriers.

5.2.1 Construct 2: Research Findings on the Internal Barriers of BM Transformation towards Sustainability

5.2.1.1 Introduction on the Internal Barriers

Table 13d is an extract from Table 13, which indicated the patterns between the industry sectors on the internal barriers which were most and least mentioned by the participants. The franchising industry and retail sector both mentioned operational barriers multiple times, whereas the retail industry had the most number of mentions. The operational barriers were the least mentioned by the supplier participants. The organisational barriers were most frequently mentioned by the franchising participants. Furthermore, organisational barriers, as a category, were identified as a potential new theme, as highlighted in blue.

It was interesting to note that both the retail and supplier sectors did not mention any strategic barriers. The franchising sector was the only industry sector that mentioned strategic barriers of BM transformation towards sustainability.

Table 13d

Cross-tabulation of the internal barriers themes by industry sector

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
6	Internal Barriers: Operational	Barriers	39%	40%	21%	*Resources*		5.2.1
7	Internal Barriers: Organisational	Barriers	52%	21%	27%	*Leadership*		5.2.1
8	Internal Barriers: Strategic	Barriers	100%	0%	0%	*Short-term focus*		5.2.1

Note. Author's own.

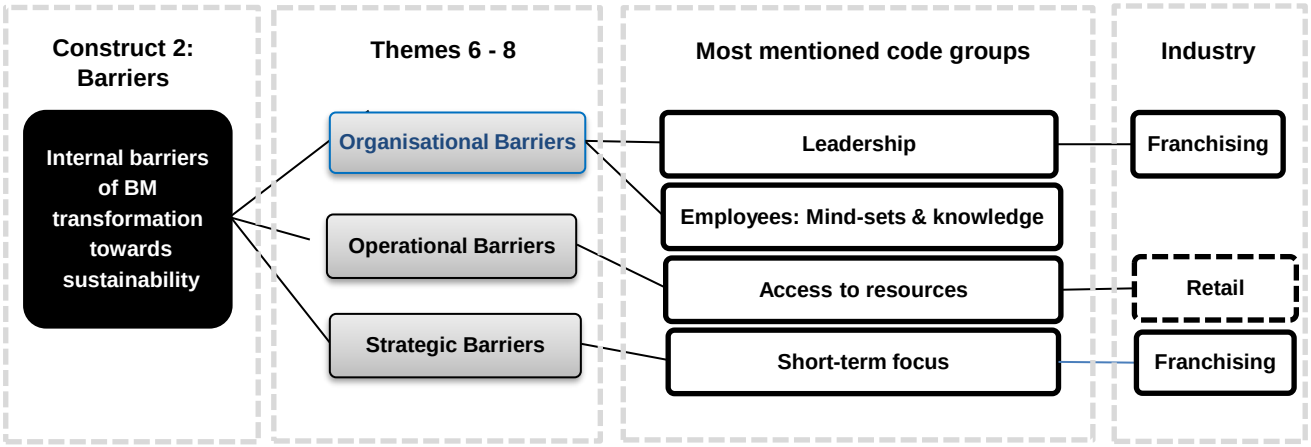
The most mentioned code groups were also analysed to identify which theme the codes related to, in relation to the theoretical construct on internal barriers, as illustrated in Figure 8. Leadership and employees were the most frequently mentioned codes that formed the organisational barriers. The internal operational barrier theme consisted of one most mentioned code which was resources. The strategic barrier theme also had one mostly mentioned code which was the short-term focus on sustainability.

Furthermore, Figure 8 represented the evidence of data patterns, in relation to the predominant code groups most mentioned by each industry sector. Regarding the organisational barriers, leadership was mentioned the most number of times by the franchising sector. Organisational barriers were identified as a potential new theme and was highlighted in blue.

Access to resources were the most mentioned operational barrier in the retail industry. In addition, the franchising participants most frequently mentioned the short-term focus of sustainability as their strategic barrier of BM transformation towards sustainability.

Figure 8

Internal barriers of BM transformation towards sustainability



Note. Author's own.

5.2.1.2 Evidence on the Internal Barriers

The evidence on the internal barriers were based on the comparison of the most mentioned code groups in the internal barriers themes, as presented in Table 13d. The respective participant quotes were used as evidence and summarised below:

Evidence on the organisational barriers: Leadership

Franchising Participant: Board members & decision-makers

The biggest challenge is working with individuals at board level, and the decision makers. It's about the transformation of individuals first, shifting people from their heads to their hearts.

Evidence on the operational barriers: Access to resources

Retail Participant: Access to resources

We are able to use this fully recyclable material, but it is not readily available and it's not accessible from a funding or scale perspective.

Franchising Participant: Interesting comment on the shortage of raw materials

Another internal barrier is the shortage and the crisis around sustainable raw materials, because of COVID we had to ration our stock.

Evidence on the strategic barriers: Short-term focus on sustainability

Franchising Participant

I find the short-term focus on sustainability a barrier. People are still very much judged by short-term results. So, sustainability is a shift from short to long-term and there is no point talking about how we want to save the world by 2050, and then beating people up because of their weekly profit results.

5.2.1.3 Cross-case and In-case Analysis on the Internal Barriers

The evidence of the internal barriers of BM transformation towards sustainability presented a few similarities and differences between the industry sectors as well as a potential new theme.

Regarding the similarities, the main similarity was identified in the high frequency of mentions of internal operational barriers. Both the retail and franchising industries had similar views and mentioned operational barriers most frequently as the internal barrier. However, the difference was that suppliers had low mentions of operational barriers.

In addition, another similarity was seen in the number of mentions of organisational barriers. Organisational barriers had low mentions in both the retail and supplier sectors. However, the franchising sector mentioned organisational barriers the most number of times which was evident in the difference in views. Organisational barriers, as a category, was identified as a potential new theme.

Furthermore, the franchising participants most frequently mentioned the short-term focus of sustainability as their strategic barrier of BM transformation towards sustainability. Whereas strategic barriers had no mentions by the retail and supplier participants.

5.2.1.4 Interpretation and Conclusion on the Internal Barriers

The analysis of the findings indicated three themes of internal barriers of BM transformation towards sustainability, which were classified into operational, organisational, and strategic barriers. Access to resources were the most mentioned operational barrier in the retail industry. Leadership was mentioned the most number of times by the franchising sector regarding the organisational barriers. Organisational barriers were noted as a potential new theme. In addition, the franchising participants also most frequently mentioned the short-term focus of sustainability as their strategic barrier of BM transformation towards sustainability.

Concluding the analysis and interpretation of the internal barriers themes, the key barriers identified with the most number of mentions were leadership, lack of resources, and the short-term focus of sustainability.

5.2.2 Construct 2: Research Findings on the External Barriers of BM Transformation towards Sustainability

5.2.2.1 Introduction on the External Barriers

Table 13e is an extract from Table 13, which indicated the patterns between the industry sectors on the external barriers, which were most and least mentioned by the participants. The franchising industry and supplier sector both mentioned institutional barriers multiple times, but the franchising industry had the most frequent mentions. The institutional barriers were the least mentioned by the retail participants.

The market barriers were most frequently mentioned by the franchising participants and were also frequently mentioned by suppliers, but the least mentioned by the retail sector. Interestingly, the participants mentioned socio-political unrest and energy security as institutional barriers, as well as COVID-19 as market barriers. These potential new sub-themes were highlighted in blue.

Furthermore, it is interesting to note that the retail industry had low mentions of TBL barriers, but this external barrier had the most number of mentions by both the franchising and supplier sectors. In addition, the supplier sector mentioned TBL barriers most frequently as an external barrier of sustainability.

Table 13e

Cross-tabulation of the external barriers themes by industry sector

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
9	External Barriers: Institutional	Barriers	45%	17%	38%	*Lack of government involvement & initiatives*	*Energy security & socio-political unrest*	5.2.2
10	External Barriers: Market	Barriers	37%	26%	37%	*COVID-19*	*COVID-19*	5.2.2
11	External Barriers: Triple Bottom Line	Barriers	40%	7%	53%	*Balance between profit versus sustainability rewards*		5.2.2

Note. Author's own.

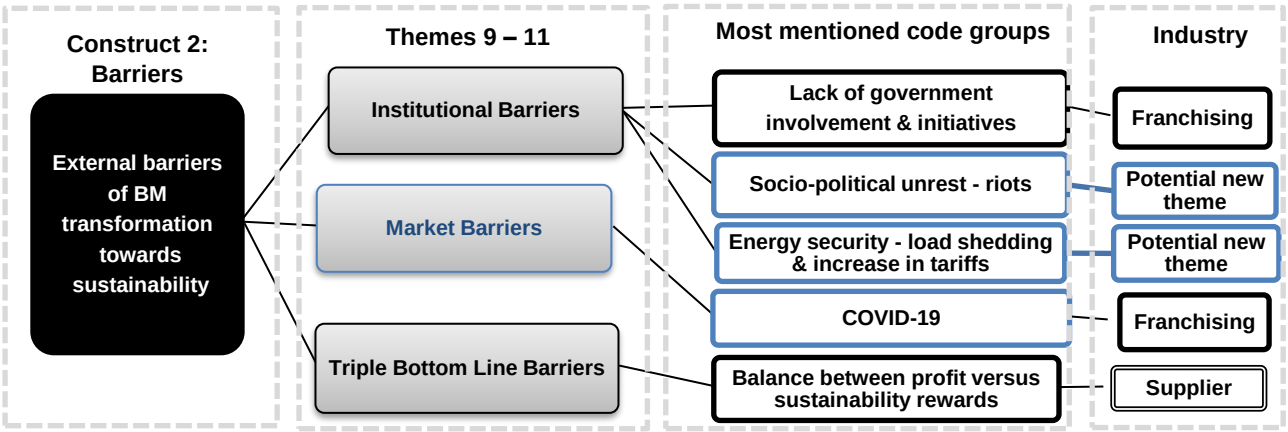
The most mentioned code groups were also analysed to identify which theme the codes related to the theoretical construct on external barriers, as illustrated in Figure 9. The institutional barriers theme consisted of three mostly mentioned codes which were lack of government involvement, socio-political unrest, and energy security. COVID-19 was the most frequently mentioned code that formed the market barriers theme. The market barriers, as a category, was identified as a potential new theme and COVID-19 identified as a potential new sub-theme, which were both highlighted in blue. The TBL barriers theme had one mostly mentioned code which was the balance between profits versus the rewards of sustainability.

Furthermore, Figure 9 represented the evidence of data patterns, in relation to the predominant code groups most frequently mentioned by each industry sector. Lack of government involvement was the most mentioned institutional barrier in the franchising industry, but it also had a high frequency of mentions in the supplier sector. However, it is interesting to note that participants also mentioned socio-political unrest and energy security as institutional barriers, which were highlighted in blue as potential new sub-themes.

Regarding the market barriers, COVID-19 was mentioned the most by the franchising sector. In addition, the supplier participants most frequently mentioned the balance between profits versus the rewards of sustainability as the TBL barrier of BM transformation towards sustainability.

Figure 9

External barriers of BM transformation towards sustainability



Note. Author's own.

5.2.2.2 Introduction on the External Barriers

The evidence on the external barriers was based on the comparison of the most mentioned code groups in the external barriers themes, as presented in Table 13e. The respective participant quotes were used as evidence and summarised below:

Evidence on the institutional barriers: Lack of government involvement

Franchising Participant

The first challenge we face is that government needs to provide recycling facilities and infrastructure. Infrastructure is lacking which puts a strain on our business model. Government really needs to take sustainability seriously and I unfortunately don't think sustainability has been taken as a super serious role.

Supplier Participant: New potential theme on socio-political unrest

Business is tough enough and then we have external barriers like the riots, and then load shedding, and also COVID.

Supplier Participant: New potential theme on energy security

The external barrier is that we have a massive electricity problem in South Africa.

Evidence on the market barriers: COVID-19

Franchising Participant: New potential theme and sub-theme on COVID-19

The South African economy is not doing very well at the moment due to COVID. So, your first business strategy is to just try to survive, be profitable, and just do what you do, and sustainability comes second.

Evidence on the TBL barriers:

Balance between profit versus sustainability rewards

Supplier Participant

At the moment we are literally chasing sales and profit, and chasing profit means you make different decisions. The cost of being sustainable versus the reward is not balancing. It doesn't balance and, in a world where we are private equity, if there's no return on our investment, there is not going to be any desire to do it.

5.2.2.3 Cross-case and In-case Analysis on the External Barriers

The evidence of the external barriers of BM transformation towards sustainability presented many similarities and differences between the industry sectors as well as a potential new theme and sub-themes.

The main similarities were identified in the high frequency of mentions of institutional and market barriers by both the franchising and supplier sectors. However, the retail sector had low number of mentions of the institutional and market barriers, with the TBL barrier having had the fewest mentions. Potential new sub-themes were also identified under the institutional barriers which were labelled as socio-political unrest and energy security.

Market barriers were also identified as a potential new theme. In addition, the impact of COVID-19 was identified as a potential new sub-theme. There were multiple mentions of market barriers in all three industries. However, the franchising industry mentioned market barriers the most number of times.

Another similarity was seen in the number of mentions by both the franchising and supplier sector on the TBL barriers. This barrier had a few mentions by the retail sector. However, the supplier sector mentioned TBL barriers most frequently as the external barrier of BM transformation towards sustainability.

5.2.2.4 Interpretation and Conclusion on the External Barriers

The analysis of the findings indicated three themes of external barriers of BM transformation towards sustainability, which were classified into institutional, market, and TBL barriers. Lack of government involvement was the most mentioned institutional barrier by the franchising industry. In addition, socio-political unrest and energy security were identified as potential new sub-themes.

The impact of COVID-19 was also mentioned the most number of times by the franchising sector as a market barrier, which was noted as a potential sub-theme. In addition, the supplier participants most frequently mentioned the balance between profits and the rewards of sustainability as the TBL barrier of BM transformation towards sustainability.

Concluding the analysis and interpretation of the external barrier themes, the key barriers identified with the most number of mentions were lack of government involvement, the impact of COVID-19, and the balance between profits versus the rewards of sustainability.

5.2.3 Construct 2: Conclusion on the Research Findings on the Internal and External Barriers of BM Transformation towards Sustainability

The theoretical construct on the *barriers* of sustainability consisted of six themes which were categorised under internal and external drivers, as summarised in Table 13f. The internal barriers included three themes which were classified as operational, organisational, and strategic barriers.

The external barriers also included three themes which were classified as institutional, market and TBL barriers of BM transformation towards sustainability.

Table 13f

Cross-tabulation of the barriers themes by industry sector

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
6	Internal Barriers: Operational	Barriers	39%	40%	21%	*Resources*		5.2.1
7	Internal Barriers: Organisational	Barriers	52%	21%	27%	*Leadership*		5.2.1
8	Internal Barriers: Strategic	Barriers	100%	0%	0%	*Short-term focus*		5.2.1
9	External Barriers: Institutional	Barriers	45%	17%	38%	*Lack of government involvement & initiatives*	*Energy security & socio-political unrest*	5.2.2
10	External Barriers: Market	Barriers	37%	26%	37%	*COVID-19*	*COVID-19*	5.2.2
11	External Barriers: Triple Bottom Line	Barriers	40%	7%	53%	*Balance between profit versus sustainability rewards*		5.2.2

Note. Author's own.

Regarding the *internal barriers*, the franchising industry and retail sector both mentioned operational barriers multiple times, but the retail industry mentioned it the most number of times. The operational barriers were the least mentioned by the supplier participants. The organisational barriers were most frequently mentioned by the franchising participants. It was interesting to note that both the retail and supplier sectors did not mention any strategic barriers. The franchising sector was the only industry that mentioned strategic barriers to sustainability.

Regarding the *external barriers*, the franchising industry and supplier sector both mentioned institutional barriers multiple times, but the franchising industry mentioned it the most number of times. The institutional barriers were the least mentioned by the retail participants. The market barriers were most frequently mentioned by the franchising participants and were also frequently mentioned by suppliers, but the least mentioned by the retail sector. It was interesting to note that the retail industry had low mentions of TBL barriers, but this external barrier was highly mentioned by both the franchising and supplier sectors. In addition, the supplier sector mentioned TBL barriers the most number of times as an external barrier of sustainability transformation.

Based on analysis of the findings on the *internal barriers* of sustainability, the key barriers identified with the most number of mentions were leadership, access to resources, and the short-term focus of sustainability. Furthermore, based on analysis of the findings on the *external barriers* of sustainability, the key barriers identified with the most number of mentions were lack of government involvement, the impact of COVID-19, and the balance between profits versus the rewards of sustainability.

Furthermore, *potential new themes* were identified as barriers to BM transformation towards sustainability. Firstly, organisational barriers, as a category, was noted as a potential new theme. Secondly, socio-political unrest and energy security were identified as potential new sub-themes of institutional barriers. Lastly, COVID-19 was noted as potential new sub-themes of market barriers.

5.3 Construct 3: Research Findings on the Outcomes derived from the BM Transformation towards Sustainability

The theoretical construct on outcomes was linked to the third research question:

What are the outcomes derived from the transformation into a SBM?

The data analysis revealed four themes related to this construct which were categorised under internal and external outcomes. The internal outcomes included BM transformation and economic value creation, whereas the external outcomes included environmental value creation and social value creation.

5.3.1 Construct 3: Research Findings on the Internal Outcomes of BM Transformation towards Sustainability

5.3.1.1 Introduction on the Internal Outcomes

Table 13g is an extract from Table 13, which indicated the patterns between the industry sectors on the internal outcomes, which were most and least mentioned by the participants. The franchising industry and supplier sector both mentioned BM transformation multiple times, but the retail industry had the most frequent mentions of BM transformation as an outcome.

The BM transformation theme was identified as a potential new theme which was highlighted in blue. Economic value creation was the least mentioned as an outcome by the franchising participants. Both the retail and supplier sectors mentioned economic value creation multiple times, but the supplier participants mentioned it the most number of times.

Table 13g

Cross-tabulation of the internal outcomes themes by industry sectors

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
12	Internal Outcome: Business Model Transformation	Outcomes	32%	36%	32%	*Re-defining the existing BM*		5.3.1
13	Internal Outcome: Economic Value Creation	Outcomes	30%	34%	35%	*Increase in profitability*		5.3.1

Note. Author's own.

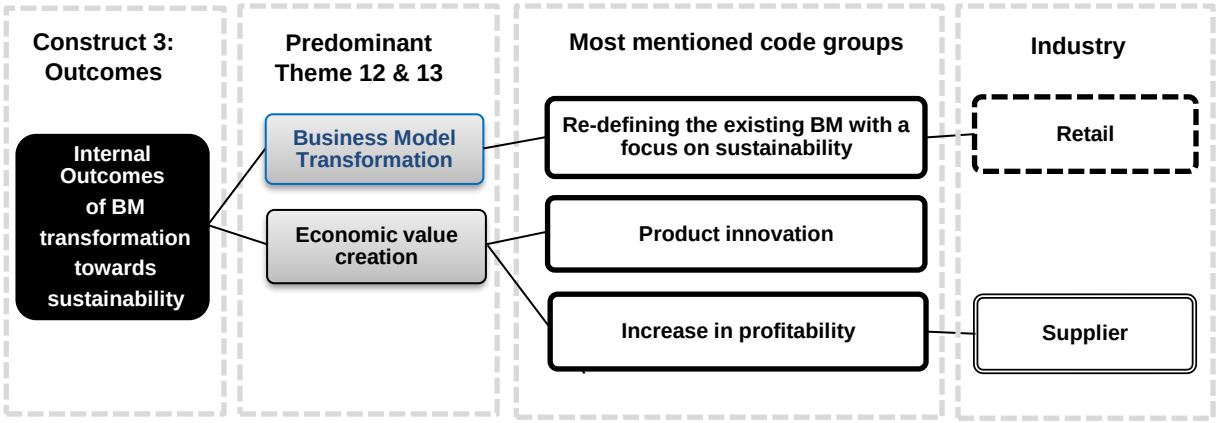
The most mentioned code groups were also analysed to identify which theme the codes related to the theoretical construct on internal outcomes, as illustrated in Figure 10. The BM transformation theme consisted of one mostly mentioned code which was re-defining the existing BM with the focus on sustainability. Product innovation and an increase in profitability were the most frequently mentioned codes that formed the economic value creation theme.

Furthermore, Figure 10 represented the evidence of the data patterns, in relation to the predominant code groups most mentioned by each industry sector. Re-defining an existing BM with the focus on sustainability was the most mentioned BM transformation outcome in the retail industry and identified as a potential new theme.

Regarding the economic value creation outcome, product innovation and the increase in profitability were the most mentioned code groups. However, the supplier participants most frequently mentioned the increase in profitability as an internal outcome derived from BM transformation towards sustainability.

Figure 10

Internal outcomes of BM transformation towards sustainability



Note. Author's own.

5.3.1.2 Evidence on the Internal Outcomes

The evidence on the internal outcomes was based on the comparison of the most mentioned code groups in the internal outcomes themes, as presented in Table 13g. The respective participant quotes were used as evidence and summarised below:

Evidence on the BM transformation outcome: Re-defining an existing BM

Retail Participant

We're trying to change our business model so that our managers become the nucleus of each store in each community. This is because traditional corporations, which we trying to buck the trend, manage the business from the outside-in and we want to make decisions from the inside-out.

Evidence on the economic value creation outcome: Increase in profitability

Supplier Participant

The biggest driver and outcome of sustainability is that it does have an impact on the bottom line over time.

Franchising Participant: Interesting comment on innovation

So especially now during COVID, innovation is key, and we used this time on research. So, the main thing is research and development, and innovation.

5.3.1.3 Cross-case and In-case Analysis on the Internal Outcomes

The evidence of the internal outcomes derived from BM transformation towards sustainability presented many similarities between the industry sectors.

The main similarities were identified in the high frequency of mentions of BM transformation by all industry sectors, but it was the most mentioned outcome for the retail industry in terms of re-defining the BM.

Another similarity was seen in the number of mentions by both the retail and supplier sectors on the economic value creation. However, the supplier sector mentioned the increase in profitability as the economic value creation the most number of times as the internal outcome derived from BM transformation towards sustainability. This internal outcome had the least mentions by the franchising participants. Furthermore, a franchising participant had an interesting view of innovation as the economic value outcome of sustainability.

5.3.1.4 Interpretation and Conclusion on the Internal Outcomes

The analysis of the findings indicated two themes of internal outcomes derived from BM transformation towards sustainability, which were classified as BM transformation and economic value creation. Re-defining an existing BM with a focus on sustainability was the most mentioned BM transformation outcome in the retail industry.

BM transformation was identified as a potential new theme. Supplier participants most frequently mentioned the increase in profitability as the economic value creation outcome derived from BM transformation towards sustainability.

Concluding the analysis and interpretation of the internal outcome themes, the key outcomes identified by the participants, with multiple mentions, were the re-defining of an existing BM towards sustainability and the increase in profitability.

5.3.2 Construct 3: Research Findings on the External Outcomes of BM Transformation towards Sustainability

5.3.2.1 Introduction on the External Outcomes

Table 13h is an extract from Table 13, which indicated the patterns between the industry sectors on the external outcomes, which were most and least mentioned by the participants. The retail industry mentioned environmental value creation multiple times as the external outcome of sustainability. However, environmental value creation was the least mentioned theme by the franchising industry, followed by the supplier participants.

The franchising industry and retail sector both mentioned social value creation multiple times, but the supplier industry mentioned this outcome the least number of times. Whereas the retail participants mentioned social value creation the most number of times as the external outcome of sustainability.

Table 13h

Cross-tabulation of the external outcomes themes by industry sector

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
14	External Outcome: Environmental Value Creation	Outcomes	29%	42%	30%	*Reduction of waste*		5.3.2
15	External Outcome: Social Value Creation	Outcomes	36%	39%	25%	*Community upliftment*		5.3.2

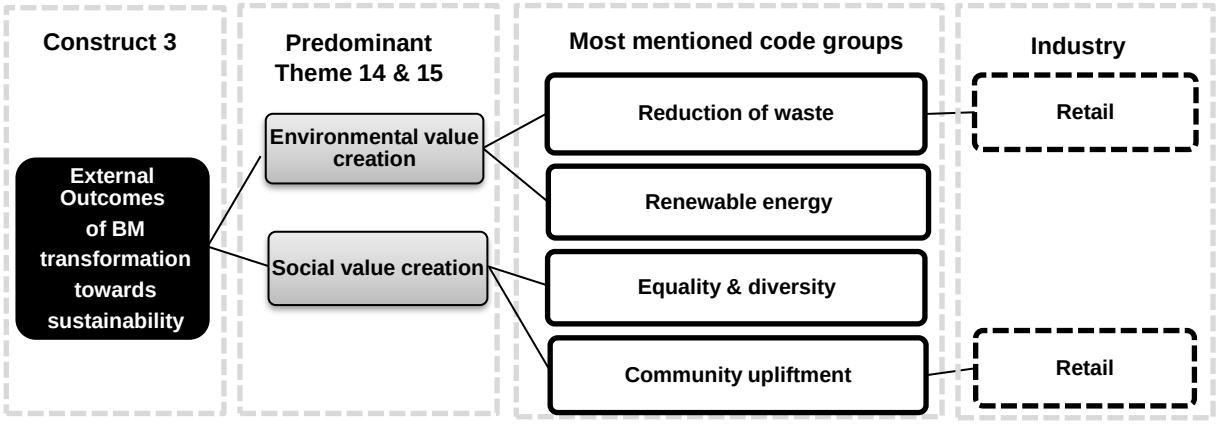
Note. Author's own.

The most mentioned code groups were also analysed to identify which theme the codes related to the theoretical construct on external outcomes, as illustrated in Figure 11. The environmental value creation theme consisted of two frequently mentioned codes which were the reduction of waste and the use of renewable energy. Equality and diversity, and community upliftment were the most frequently mentioned codes that formed the social value creation theme.

Furthermore, Figure 11 represented the evidence of the data patterns in relation to the predominant code groups most mentioned by the relevant industry sector. The reduction of waste was the most frequently mentioned environmental value creation outcome by the retail industry. Regarding the social value creation outcome, the retail participants mentioned community upliftment the most number of times as an outcome derived from BM transformation towards sustainability.

Figure 11

External outcomes of BM transformation towards sustainability



Note. Author's own.

5.3.2.2 Evidence on the External Outcomes

The evidence on the external outcomes was based on the comparison of the most mentioned code groups in the external outcomes themes, as presented in Table 13h. The respective participant quotes were used as evidence and summarised below:

Evidence on the environmental value creation: Reduction of waste

Retail Participant

Waste is what we need to try and eradicate because obviously that's part of sustainability. So, for us, our strategy is very simple, is recycle if you can, but reusing is key.

Evidence on the economic value creation: Community upliftment

Retail Participant

Our goal of sustainability is to put back into each community and to raise the communities within which we serve.

Franchising Participant: An interesting view on equality and diversity in the workplace

An outcome of sustainability is the transformation of our workforce, as we are a big company in South Africa.

5.3.2.3 Cross-case and In-case Analysis on the External Outcomes

The evidence of the external outcomes of BM transformation towards sustainability presented similarities and differences between the industry sectors.

Regarding the similarities, both the franchising and supplier sectors had multiple mentions on the environmental value creation outcomes. However, the retail sector mentioned the reduction of waste as the environmental value creation the most number of times as the external outcome derived from BM transformation towards sustainability.

Another similarity was seen in the number of mentions by both the franchising and retail sector on the social value creation outcome, but this external outcome had the least number of mentions by the supplier participants. In addition, it was the most mentioned external outcome for the retail industry in terms of community upliftment. Furthermore, a franchising participant had a different view and mentioned the social value outcome to be the transformation of their workforce.

5.3.2.4 Interpretation and Conclusion on the External Outcomes

The analysis of the findings indicated two themes of external outcomes derived from BM transformation towards sustainability, which were classified into environmental value creation and social value creation.

Reducing waste was the most mentioned environmental value creation outcome in the retail industry. Furthermore, retail participants also most frequently mentioned community upliftment as the social value creation outcome derived from BM transformation towards sustainability.

Concluding the analysis and interpretation of the external outcomes theme, the key outcomes identified by the participants, with multiple mentions, were the reduction of waste and community upliftment.

5.3.3 Construct 3: Conclusion on the Research Findings on the Internal and External Outcomes derived from BM Transformation towards Sustainability

The theoretical construct on the outcomes of sustainability consisted of four themes which were categorised under internal and external outcomes, as summarised in Table 13i. The internal outcomes included two themes which were classified as BM transformation and economic value creation. The external outcomes also included two themes which were classified as environmental value creation and social value creation.

Table 13i

Cross-tabulation of the outcomes theme by industry sector

	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*	Chapter Section
12	Internal Outcome: Business Model Transformation	Outcomes	32%	36%	32%	*Re-defining the existing BM*		5.3.1
13	Internal Outcome: Economic Value Creation	Outcomes	30%	34%	35%	*Increase in profitability*		5.3.1
14	External Outcome: Environmental Value Creation	Outcomes	29%	42%	30%	*Reduction of waste*		5.3.2
15	External Outcome: Social Value Creation	Outcomes	36%	39%	25%	*Community upliftment*		5.3.2

Note. Author's own.

It was interesting to note that all industry participants mentioned internal and external outcomes of sustainability multiple times.

Regarding the *internal outcomes*, the franchising industry and supplier sector both mentioned BM transformation multiple times, but the retail industry had the most number of mentions of BM transformation as an outcome. The BM transformation theme was identified as a potential new theme. Economic value creation was the least mentioned as an outcome by the franchising participants. Both the retail and supplier sectors mentioned economic value creation multiple times, but the supplier participants mentioned it as an outcome the most number of times.

Regarding the *external outcomes*, the retail industry mentioned environmental value creation multiple times as the external outcome of sustainability. However, environmental value creation was the least mentioned theme by the franchising industry, followed by suppliers. The franchising industry and retail sector both mentioned social value creation multiple times, but the supplier industry mentioned this outcome the least

number of times. Whereas the retail participants mentioned social value creation the most number of times as the external outcome of sustainability.

Based on the analysis of the findings on the *internal outcome* themes, the key outcomes identified by the participants with multiple mentions, were the re-defining of an existing BM towards sustainability and the increase in profitability. Furthermore, based on analysis of the findings on the *external outcomes* of sustainability, the key outcomes identified with the most mentions were the reduction of waste and community upliftment.

5.4 Conclusion: Research Findings on the Drivers, Barriers and Outcomes of BM Transformation towards sustainability

This Chapter presented the key research findings derived from the data gathering and data analysis process. A comparative, thematic analysis was conducted on the findings of the three theoretical constructs, namely the drivers, barriers, and outcomes. Furthermore, the construct themes were identified and qualitatively analysed by utilising Atlas.ti's *Code-Document Table* analysis tool. This analysis tool facilitated the cross-tabulation of the qualitative data which indicated the number of codes per theme as well as the most mentioned code groups per theme, as seen in Table 14. Potential new themes and sub-themes were also identified, as highlighted in blue.

Based on the analysis of the findings on the *drivers* of BM transformation towards sustainability, the key internal drivers identified with the most number of mentions were the participation of employees, incentives to change mind-sets, and implementing corporate strategies based on sustainability. In addition, the key external drivers identified with the most number of mentions were pressure from customers and collaboration with government and NGO associations.

Furthermore, two *potential new themes and sub-themes* were identified as drivers of BM transformation towards sustainability. Firstly, the reduction of waste was noted as a potential new sub-themes of operational drivers. Secondly, organisational drivers were identified as a new theme. Thirdly, market drivers were identified as a potential new theme, and lastly, pressure from customers was noted as a potential new sub-theme of market drivers.

In addition, based on the analysis of the findings on the *barriers* of BM transformation towards sustainability, the key internal barriers identified with the most number of mentions were leadership, access to resources, and the short-term focus of sustainability. Furthermore, key external barriers identified with the most number of mentions were lack of government involvement, the impact of COVID-19, and the balance between profits versus the rewards of sustainability.

Potential new themes were also identified as barriers to BM transformation towards sustainability. Firstly, the organisational drivers were identified as a new theme. Secondly, energy security and socio-political unrest were identified as potential sub-themes of institutional barriers. Lasty, COVID-19 was noted as a potential new sub-theme of market barriers.

Concluding the analysis of the findings on the *outcomes* derived from BM transformation towards sustainability, identified key internal outcomes which had multiple mentions were re-defining an existing BM towards sustainability and the increase in profitability. The BM transformation category was identified as a *potential new theme*. Furthermore, the key external outcomes identified which had the most number of mentions were the reduction of waste and community upliftment.

Table 14 presented a summary of the most mentioned code groups and potential new themes identified through the thematic data analysis and comparative process.

Table 14

Summary of the most mentioned codes, potential new themes, and sub-themes

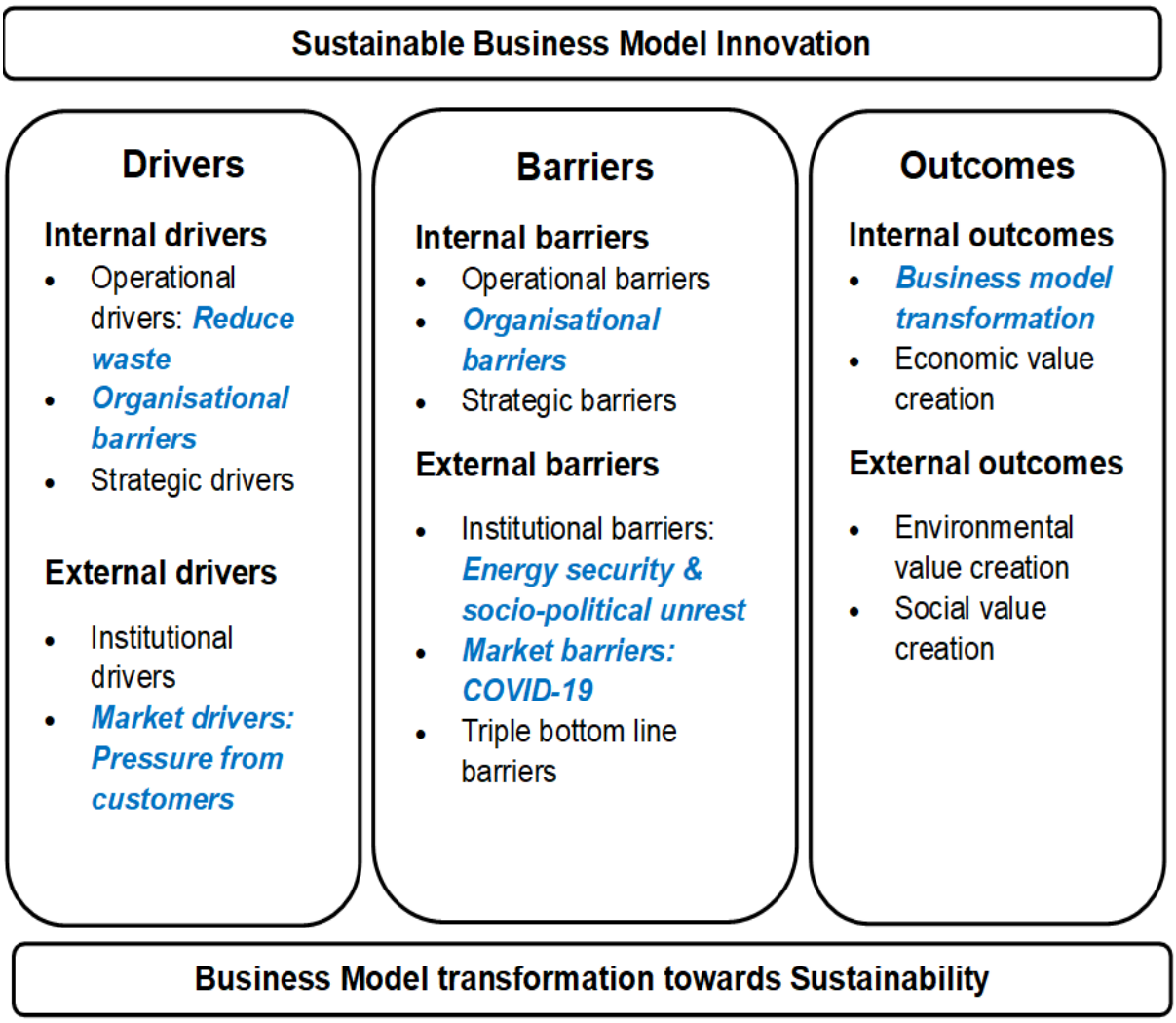
	Themes & potential new themes	Theoretical Construct	Franchising Industry	Retail Industry	Supplier Industry	*Most mentioned code group*	*Potential new sub-themes*
1	Internal Drivers: Operational	Drivers	20%	33%	46%	*Incentives: Employee & customer*	*Reduce waste*
2	Internal Drivers: Organisational	Drivers	31%	43%	26%	*Employees: Retention & attraction*	
3	Internal Drivers: Strategic	Drivers	22%	33%	46%	*Sustainability ingrained into DNA & strategies*	
4	External Drivers: Institutional	Drivers	32%	33%	36%	*Collaborations with government & NGOs Associations*	
5	External Drivers: Market	Drivers	45%	26%	30%	*Pressure from customers*	*Pressure from customers*
6	Internal Barriers: Operational	Barriers	39%	40%	21%	*Resources*	
7	Internal Barriers: Organisational	Barriers	52%	21%	27%	*Leadership*	
8	Internal Barriers: Strategic	Barriers	100%	0%	0%	*Short-term focus*	
9	External Barriers: Institutional	Barriers	45%	17%	38%	*Lack of government involvement & initiatives*	*Energy security & socio-political unrest*
10	External Barriers: Market	Barriers	37%	26%	37%	*COVID-19*	*COVID-19*
11	External Barriers: Triple Bottom Line	Barriers	40%	7%	53%	*Balance between profit versus sustainability rewards*	
12	Internal Outcome: Business Model Transformation	Outcomes	32%	36%	32%	*Re-defining the existing BM*	
13	Internal Outcome: Economic Value Creation	Outcomes	30%	34%	35%	*Increase in profitability*	
14	External Outcome: Environmental Value Creation	Outcomes	29%	42%	30%	*Reduction of waste*	
15	External Outcome: Social Value Creation	Outcomes	36%	39%	25%	*Community upliftment*	

Note. Author's own.

The summary of the research findings in Chapter 5 was used to update the conceptual framework as presented in Chapter 2. This updated conceptual framework, as seen in Figure 12, was used as the foundation for discussing the research findings in Chapter 6.

Figure 12

Updated conceptual framework of the BM transformation towards sustainability



Note. Author's own, adapted from the conceptual framework presented in Chapter 2.

The next Chapter discusses the key research findings from this study.

CHAPTER 6: DISCUSSION OF THE RESEARCH FINDINGS

This Chapter discusses the key research findings presented in Chapter 5. The research findings on the three theoretical constructs, new potential themes, and sub-themes, were compared to the literature as presented in Chapter 2.

Table 15 summarised the three research sub-questions related to each construct, with their potential new themes and sub-themes, as identified in Chapter 5. The key scholars by theoretical construct were also presented in Table 15, which related to the systematic search and comparative approach. This systematic approach was adopted by comparing the key research findings, to the key scholars identified in Chapter 2, in order to answer the research questions which were identified in Chapter 3.

Five potential themes and five potential sub-themes emerged from the research findings as highlighted in blue in Table 15. The five potential themes included, internal organisational drivers, external market drivers, internal organisational barriers, external market barriers, and BM transformation as an internal outcome. The five potential sub-themes included pressure from customers, energy security, socio-political unrest, and COVID-19.

Three steps were implemented during the systematic search and comparative approach which involved the comparisons of the key research findings with the key literature. These three steps facilitated the aim to enhance the validity and reliability of the research as discussed in Chapter 4. Step 1 covered a thorough word search within the existing literature review in Chapter 2. Step 2 was implemented if no search results were found from step 1. This step involved the comparison of the findings to key scholars identified for under each theoretical construct. Step 1 and step 2 were targeted searches to find literature to confirm the similarities or differences between the findings and the literature.

As seen in Table 15, Bocken and Geradts (2020), Rauter et al. (2017), Sousa-Zomer, and Cauchick-Miguel (2019) were the key scholars who were identified for the comparison of the construct on the *drivers* of sustainability. The key scholars who were selected for the comparison of *barriers* construct were Bocken and Geradts (2020), Evans et al. (2017), Guldmann and Huulgaard (2020), Sousa-Zomer, and Cauchick-Miguel (2019). Regarding the *outcomes* construct, Evans et al. (2017), Laukkanen and

Tura (2020), Tate and Bals (2018) were the key scholars who were identified for the comparison of the findings on the outcomes of sustainability.

Step 3 broadened the search of steps 1 and 2 by including a thorough and targeted word and phrase search within the SBMI literature of the Author's Mendeley Reference Manager library. This step was only implemented when no search results were found in steps 1 and 2. The word and phrase searches within the Mendeley database covered 156 published articles on SBMI literature. Therefore, the scope of the literature selected for this comparison was confined to SBMI literature.

Table 15

Summary of the key themes and potential new themes with the key scholars

Research Questions		Themes & potential new themes	Theoretical Construct	*Potential new sub-themes*	Literature Review Key authors by construct
What are the **drivers** involved in transforming an existing BM to a SBM?	1	Internal Drivers: Operational	Drivers	*Reduce waste*	Bocken and Geradts (2020), Rauter et al. (2017), Sousa-Zomer and Cauchick-Miguel (2019)
	2	Internal Drivers: Organisational	Drivers		
	3	Internal Drivers: Strategic	Drivers		
	4	External Drivers: Institutional	Drivers		
	5	External Drivers: Market	Drivers	*Pressure from customers*	
What are the ***barriers*** involved in transforming an existing BM to a SBM?	6	Internal Barriers: Operational	Barriers		Bocken and Geradts (2020), Evans et al. (2017), Guldmann and Huulgaard (2020), Sousa-Zomer and Cauchick-Miguel (2019)
	7	Internal Barriers: Organisational	Barriers		
	8	Internal Barriers: Strategic	Barriers		
	9	External Barriers: Institutional	Barriers	*Energy security & socio-political unrest*	
	10	External Barriers: Market	Barriers	*COVID-19*	
	11	External Barriers: Triple Bottom Line	Barriers		
What are the ***outcomes*** from the transformation into a SBM?	12	Internal Outcome: Business Model Transformation	Outcomes		Evans et al. (2017), Laukkanen and Tura (2020), Tate and Bals (2018)
	13	Internal Outcome: Economic Value Creation	Outcomes		
	14	External Outcome: Environmental Value Creation	Outcomes		
	15	External Outcome: Social Value Creation	Outcomes		

Note. Author's own.

This Chapter followed a similar structure which was presented in Chapter 5. Firstly, the discussion of the findings under the construct on the *drivers* were presented. Secondly, the *barriers* key findings were discussed, and the Chapter was concluded with the discussion of the findings on the *outcomes* construct. The Chapter sections related to each theoretical construct were presented in the last column of Table 15 for reference.

6.1 Construct 1: Discussion of the Findings on the Drivers of BM Transformation towards Sustainability

The findings on the theoretical construct on the *drivers* aimed to answer the first research sub-question about the *drivers* involved in transforming an existing BM into a SBM.

The key findings related to the *drivers* construct were categorised under internal drivers and external drivers. The findings on the internal drivers were categorised into three themes namely, organisational, operational, and strategic drivers. The findings on the external drivers related to market and institutional drivers.

6.1.1 Construct 1: Discussion of the Findings on the Internal Drivers of BM Transformation towards Sustainability

6.1.1.1 Internal Drivers: Analysis of the Key Research Findings

Table 15a is an extract from Table 15 which summarised the key findings, potential new themes, and sub-themes identified through the analysis of the findings in Chapter 5. The analysis of the findings indicated three themes of internal drivers of BM transformation towards sustainability, which were classified into organisational, operational, and strategic drivers.

The key research findings on the operational drivers indicated that employee and customer incentives were viewed as the main internal driver of sustainability. Furthermore, the reduction of waste was noted as a potential new sub-theme.

Furthermore, the insights on the organisational drivers of sustainability indicated that the retention and attraction of employees were viewed as strong internal drivers. In addition, organisational drivers were identified as a potential new theme. The insights on strategic drivers revealed that the entrenchment of sustainability into a company's DNA and strategies were seen as the catalyst of sustainability within an organisation.

Table 15a

Summary of the key findings on internal drivers

Research Questions		Themes & potential new themes	Theoretical Construct	*Potential new sub-themes*	Literature Review Key authors by construct	Chapter Section
What are the **drivers** involved in transforming an existing BM to a SBM?	1	**Internal Drivers: Operational**	**Drivers**	***Reduce waste***	**Bocken and Geradts (2020), Rauter et al. (2017), Sousa-Zomer and Cauchick-Miguel (2019)**	**6.1.1**
	2	**Internal Drivers: Organisational**	**Drivers**			**6.1.1**
	3	**Internal Drivers: Strategic**	**Drivers**			**6.1.1**

Note. Author's own.

6.1.1.2 Internal Drivers: Analysis of the Key Literature

Table 16 summarises the key literature which was reviewed on the internal drivers of SBMI in Chapter 2. The key scholars who were selected for the comparison of the internal drivers were Bocken and Geradts (2020), Rauter et al. (2017), and Sousa-Zomer and Cauchick-Miguel (2019). The reason for their selection was based on their recently published papers in highly ranked academic journals.

Table 16

Analysis of the literature on the internal drivers of SBMI

Internal Drivers of Sustainable Business Model Innovation			
Authors	**Rauter et al. (2017)**	**Sousa-Zomer and Cauchick-Miguel (2019)**	**Bocken and Geradts (2020)**
Journal	Journal of Cleaner Production	Total Quality Management and Business Excellence	Long Range Planning
Key topics and concepts covered	**Internal drivers** in the development of business models for sustainability: • Leadership • Employee satisfaction and willingness • Staff turnover • Transparent, sustainability-oriented organisational culture • Sustainability ingrained in the corporate strategy	Co-operative, strategic, and collaborative arrangements between stakeholders was identified as enablers for business model innovation for sustainability.	Three categories of drivers to sensing, seizing, and transforming for sustainable business model innovation: • **Institutional drivers** • **Strategic drivers** • **Operational drivers**

Note. Author's own, adapted from Bocken and Geradts (2020), Rauter et al. (2017), and Sousa-Zomer and Cauchick-Miguel (2019)

As presented in Table 16, the analysis of the literature on internal drivers of SBMI indicated the importance of staff turnover, employee satisfaction, and their willingness to implement sustainability initiatives as internal drivers (Rauter et al., 2017). In addition, a sustainability-oriented organisational culture, where sustainability is ingrained in the corporate strategy was also seen as a vital internal driver (Rauter et al., 2017). Furthermore, Sousa-Zomer and Cauchick-Miguel (2019) suggested that co-operative, strategic, and collaborative arrangements between stakeholders were identified as drivers of sustainability.

Bocken and Geradts (2020) categorised the drivers of SBMI as institutional drivers, strategic drivers, and operational drivers. The scholars classified strategic drivers as collaborative innovation, the strategic focus on SBMI, and investing into sustainability (Bocken & Geradts, 2020). Furthermore, the analysis indicated that operational drivers included the development of people capabilities, enabling innovation, dedicating resources for SBMI, incentivising sustainability initiatives, and developing sustainability performance metrics (Bocken & Geradts, 2020).

6.1.1.3 Internal Drivers: Comparative Analysis of the Key Findings with the Key Literature

Table 17 summarises the comparative analysis of the key findings, potential new theme, and sub-theme, with the key literature. This systematic comparison identified similarities between the research findings on the internal drivers and the literature.

Table 17

Comparison of the key findings on the internal drivers with the key literature

Themes & potential new themes		Theoretical Construct	Comparison of key findings to the key literature	*Potential new sub-themes*	Comparison of the potential new themes to the key literature
1	Internal Drivers: Operational	Drivers	Consistent with the operational drivers classification by Bocken and Geradts (2020)	*Reduce waste*	Similar to the reference on improving the environmental performance of an organisation by Rauter et al. (2017). Relabelled the sub-theme as an external outcome under environmental value creation.
2	Internal Drivers: Organisational	Drivers	Consistent with the operational drivers classification by Bocken and Geradts (2020) on people capability development		Consistent with the classification by Rauter et al. (2017) on internal drivers within an organisation. However, relabelled the theme as operational drivers based on the classification by Bocken and Geradts (2020). It is no longer a separate theme but merged into the operational theme from Bocken and Geradts (2020).
3	Internal Drivers: Strategic	Drivers	Consistent with the strategic drivers classification by Bocken and Geradts (2020) & internal drivers classification by Rauter et al. (2017)		

Note. Author's own.

Regarding the similarities, the insights from the research on the operational drivers, related to employee and customer incentives, which were consistent with the operational drivers classification by Bocken and Geradts (2020). Furthermore, the reduction of waste was noted as a potential new sub-theme based on the research findings. Step 1 of the systematic search revealed that this sub-theme was like the reference made by Rauter et al. (2017), on reducing waste to improve the environmental performance of an organisation in terms of sustainability. This could be viewed as an internal driver, but reducing waste was better classified as an external outcome of sustainability that related to environmental value creation. Therefore, the potential new sub-theme of reducing waste was relabelled as an outcome of *environmental value creation*.

Another similarity between the key research findings and the literature was identified on the organisational drivers. The retention and attraction of employees as an internal driver was consistent with the internal drivers identified by Rauter et al. (2017), which related to staff turnover and satisfaction. In addition, the retention and attraction of employees were also similar to the operational drivers identified by Bocken and Geradts (2020), which related to the development of people's capabilities.

Furthermore, organisational drivers were identified as a potential new theme based on the research findings. After implementing the systematic search, the organisational drivers theme was noted as being consistent with the classification of internal drivers within an organisation by Rauter et al. (2017). However, the difference was based on the classification of operational drivers by Bocken and Geradts (2020). Therefore, the organisational drivers category was relabelled as *operational drivers* for consistency in relation to the classification of the themes from the research findings.

Regarding the comparative analysis of the strategic drivers theme, the research insights regarded the entrenchment of sustainability into a company’s DNA and corporate strategy as catalysts of sustainability within an organisation. This insight was similar to the classification of internal drivers by Rauter et al. (2017) which referred to sustainability as being ingrained into the corporate strategy. Additionally, the research findings on the strategic drivers were consistent with the strategic drivers classification by Bocken and Geradts (2020), which related to the strategic focus on SBMI.

6.1.1.4 Internal Drivers: Conclusion on the Discussion of the Findings

The comparative analysis of the findings with the literature indicated many similarities between the research findings and the key literature on the internal drivers. Firstly, the findings on operational drivers were consistent with the operational drivers classification by Bocken and Geradts (2020). However, the potential new sub-theme of reducing waste was relabelled a sub-theme of *environmental value creation.*

Secondly, the key findings on organisational drivers were similar to the operational drivers identified by Bocken and Geradts (2020). However, the difference identified was in the classification and description of operational drivers by Bocken and Geradts (2020). Therefore, the new potential organisational drivers theme was relabelled as *operational drivers* and no longer a separate theme. Lastly, the research findings on the strategic drivers were similar to the classification of internal drivers by Rauter et al. (2017) and consistent with the strategic drivers classification by Bocken and Geradts (2020).

Concluding the discussion of the findings on the internal drivers themes, the key insights revealed consistency with the literature regarding the operational and strategic drivers. However, the research findings on reducing waste as a potential new sub-theme of operational drivers was relabelled as a sub-theme of *environmental value creation*. Furthermore, the key insights on the organisational drivers, as a potential new theme, were relabelled as *operational drivers* based on the systematic search and comparative approach.

6.1.2 Construct 1: Discussion of the Findings on the External Drivers of BM Transformation towards Sustainability

6.1.2.1 External Drivers: Analysis of the Key Research Findings

Table 15b is an extract from Table 15 which summarised the key findings, potential new theme, and sub-theme identified through the analysis of the research findings. The analysis of the findings indicated two themes of external drivers of BM transformation towards sustainability, which were classified into institutional and market drivers.

The key research findings on the institutional drivers indicated that collaboration with government and NGO associations were viewed as the leading external driver of BM transformation towards sustainability.

Furthermore, the insights on the market drivers of sustainability indicated that pressure from customers was viewed as a strong external driver. In addition, market drivers were identified as a potential new theme, and pressure from customers as a potential new sub-theme.

Table 15b: *Summary of the key findings on external drivers*

Research Questions		Themes & potential new themes	Theoretical Construct	*Potential new sub-themes*	Literature Review Key authors by construct	Chapter Section
What are the **drivers** involved in transforming an existing BM to a SBM?	4	**External Drivers: Institutional**	**Drivers**		**Bocken and Geradts (2020), Rauter et al. (2017), Sousa-Zomer and Cauchick-Miguel (2019)**	**6.1.2**
	5	**External Drivers: Market**	**Drivers**	***Pressure from customers***		**6.1.2**

Source: Author's own

6.1.2.2 External Drivers: Analysis of the Key Literature

Table 18 summarised the key literature which was reviewed on the external drivers of SBMI in Chapter 2. The key scholars who were selected for the comparison of the external drivers were Bocken and Geradts (2020), Rauter et al. (2017), and Sousa-Zomer and Cauchick-Miguel (2019). The reason for selecting these scholars was based on their recently published papers in highly ranked academic journals.

Table 18

Analysis of the literature on the external drivers of SBMI

External Drivers of Sustainable Business Model Innovation			
Authors	**Rauter et al. (2017)**	**Sousa-Zomer and Cauchick-Miguel (2019)**	**Bocken and Geradts (2020)**
Journal	Journal of Cleaner Production	Total Quality Management and Business Excellence	Long Range Planning
Key topics and concepts covered	**External driver** in the development of business models for sustainability: • Legal regulation	Co-operative, strategic, and collaborative arrangements between stakeholders was identified as enablers for business model innovation for sustainability.	Three categories of drivers to sensing, seizing, and transforming for sustainable business model innovation: • **Institutional drivers** • **Strategic drivers** • **Operational drivers**

Note. Author's own, adapted from Bocken and Geradts (2020), Rauter et al. (2017), and Sousa-Zomer and Cauchick-Miguel (2019).

As presented in Table 18, the analysis of the literature on the external drivers of SBMI indicated that strategic and collaborative partnerships with both internal and external stakeholders were identified as an instrumental driver of SBMI (Sousa-Zomer & Cauchick-Miguel, 2019).

Regarding external stakeholders, Rauter et al. (2017) categorised legal regulators as an external driver, which related to the collaboration with government, NGO Associations, and universities, to promote and raise awareness of sustainability. Furthermore, Bocken and Geradts (2020) elaborated that balancing shareholder and stakeholder value were institutional drivers of sustainability (Bocken & Geradts, 2020).

6.1.2.3 External Drivers: Comparative Analysis of the Key Findings with the Key Literature

Table 19 summarises the comparative analysis of the key findings, potential new theme, and sub-theme, with the key literature. This systematic comparison identified similarities and differences between the research findings on the external drivers and the literature.

Table 19

Comparison of the key findings on the external drivers with the key literature

	Themes & potential new themes	Theoretical Construct	Comparison of key findings to the key literature	*Potential new sub-themes*	Comparison of the potential new themes to the key literature
4	External Drivers: Institutional	Drivers	Consistent with Sousa-Zomer and Cauchick-Miguel (2019), Rauter et al. (2017), & Bocken and Geradts (2020) on collaborating with stakeholders		
5	External Drivers: Market	Drivers	Similar to the classification of market level barriers by Guldmann and Huulgaard (2020)	*Pressure from customers*	Similar to the market level barriers by Guldmann and Huulgaard (2020) related to unclear customer demand. Relabelled the market drivers theme as a market barrier. Pressure from customers as a sub-theme was relabelled as a market level barrier sub-theme.

Note. Author's own.

Regarding the similarities, the insights from the research on the institutional drivers were consistent with the classification of institutional drivers by Bocken and Geradts (2020). Furthermore, the description of the importance of collaborating with government and NGO Associations from the findings was similar to the classification by Rauter et al. (2017) and Sousa-Zomer and Cauchick-Miguel (2019), which related to the legal regulations and strategic partnerships with external stakeholders.

However, steps 1 and 2 of the targeted searches presented no results in the literature with regards to the classification of the potential new theme, market drivers, and the potential new sub-theme, pressure from customers. Therefore, step 3 was implemented as a further targeted search within the Mendeley database. The following phrases were used for the search within the Mendeley database, namely, ‘customer pressure’, ‘customer demand’, ‘pressure from customers’, ‘market drivers’, ‘market pressure’, and ‘pressure from the market’. The targeted search presented 16 hits, however after the search was filtered down further by only including sustainability related references, one article from Guldmann and Huulgaard (2020) was identified as applicable for this comparison.

This comparative analysis revealed similarities in the classification of market level barriers by Guldmann and Huulgaard (2020). The scholars referred to external factors, such as ambiguous customer demand, as being an external barrier to sustainability (Guldmann & Huulgaard, 2020). Therefore, based on the comparative analysis in step 3, the potential new theme of market drivers was relabelled as market barriers, and the potential new sub-theme of pressure from customers, were relabelled as a market level barrier sub-theme.

6.1.2.4 External Drivers: Conclusion on the Discussion of the Findings

The comparative analysis of the findings and the literature indicated similarities and differences between the research findings and the key literature on the external drivers. Regarding the similarities, the findings on institutional drivers were consistent with the institutional drivers classification by Bocken and Geradts (2020).

Furthermore, similarities in the classification of market level barriers by Guldmann and Huulgaard (2020) were identified through the targeted search within the SBMI literature. Therefore, based on the comparative analysis, the potential new theme of market drivers was relabelled as market barriers, and the potential new sub-theme of pressure from customers, were relabelled as a market level barrier sub-theme.

Concluding the discussion of the findings on the external drivers themes, the key insights revealed consistency with the literature regarding the institutional drivers related to strategic partnerships with stakeholders. However, the research findings on market drivers, as a potential new theme, and pressure from customers, as a potential new sub-theme, were relabelled as market barriers of BM transformation towards sustainability.

6.1.3 Construct 1: Conclusion on the Discussion of the Findings on the Drivers of BM Transformation towards Sustainability

The theoretical construct on the *drivers* of sustainability consisted of five themes which were categorised under internal and external drivers, as summarised in Table 20. The internal drivers theme included three themes which were classified as operational, organisational, and strategic barriers. The internal drivers also included a potential new sub-theme of reducing waste and a potential new theme of organisational drivers.

The external drivers theme included two themes which were classified as institutional and market drivers of BM transformation towards sustainability. The external drivers also included a potential new theme of market drivers, and a potential new sub-theme of pressure from customers.

Table 20

Comparison of the key findings on the drivers with the key literature

Themes & potential new themes		Theoretical Construct	Comparison of key findings to the key literature	*Potential new sub-themes*	Comparison of the potential new themes to the key literature
1	Internal Drivers: Operational	Drivers	Consistent with the operational drivers classification by Bocken and Geradts (2020)	*Reduce waste*	Similar to the reference on improving the environmental performance of an organisation by Rauter et al. (2017). Relabelled the sub-theme as an external outcome under environmental value creation.
2	Internal Drivers: Organisational	Drivers	Consistent with the operational drivers classification by Bocken and Geradts (2020) on people capability development		Consistent with the classification by Rauter et al. (2017) on internal drivers within an organisation. However, relabelled the theme as operational drivers based on the classification by Bocken and Geradts (2020). It is no longer a separate theme but merged into the operational theme from Bocken and Geradts (2020).
3	Internal Drivers: Strategic	Drivers	Consistent with the strategic drivers classification by Bocken and Geradts (2020) & internal drivers classification by Rauter et al. (2017)		
4	External Drivers: Institutional	Drivers	Consistent with Sousa-Zomer and Cauchick-Miguel (2019), Rauter et al. (2017), & Bocken and Geradts (2020) on collaborating with stakeholders		
5	External Drivers: Market	Drivers	Similar to the classification of market level barriers by Guldmann and Huulgaard (2020)	*Pressure from customers*	Similar to the market level barriers by Guldmann and Huulgaard (2020) related to unclear customer demand. Relabelled the market drivers theme as a market barrier. Pressure from customers as a sub-theme was relabelled as a market level barrier sub-theme.

Note. Author's own.

Regarding the discussion of the findings on the *internal drivers* themes, the key insights revealed consistency with the literature regarding the operational and strategic drivers. However, the research findings on reducing waste as a potential new sub-theme of operational drivers was relabelled as sub-theme of *environmental value creation*. Furthermore, the key insights on the organisational drivers, as a potential new theme, was relabelled as an *operational driver*.

Regarding the discussion of the findings on the *external drivers* themes, the key insights revealed consistency with the literature regarding the institutional drivers related to strategic partnerships with stakeholders. However, the research findings on market drivers, as a potential new theme, and pressure from customers, as a potential new sub-theme, were relabelled as market barriers of BM transformation towards sustainability.

Regarding the discussion of the findings on the *potential new themes and sub-themes* of the *drivers* construct, revealed the relabelling of the sub-theme, reducing waste, to a sub-theme of environmental value creation.

Furthermore, organisational drivers, as a potential new theme, was relabelled as an operational driver. In addition, pressure from customers, as a potential new sub-theme, were relabelled as a sub-theme of market barriers of BM transformation towards sustainability.

6.2 Construct 2: Discussion of the Findings on the Barriers of BM Transformation towards Sustainability

The findings on the theoretical construct on the *barriers* aimed to answer the second research question about the *barriers* involved in transforming an existing BM into a SBM.

The key findings related to the *barriers* construct were categorised under internal barriers and external barriers. The findings on the internal barriers were categorised into three themes namely, operational, organisational, and strategic barriers. The findings on the external barriers were also categorised into three themes, namely institutional, market, and TBL barriers.

6.2.1 Construct 2: Discussion of the Findings on the Internal Barriers of BM Transformation towards Sustainability

6.2.1.1 Internal Barriers: Analysis of the Key Research Findings

Table 15c is an extract from Table 15 which summarised the key findings on the internal barriers and the potential new theme identified through the analysis of the findings in Chapter 5. The analysis of the findings indicated three themes of internal barriers of BM transformation towards sustainability, which were classified into operational, organisational, and strategic barriers.

The key research findings on the operational barriers indicated that access to resources was viewed as the main internal barrier on BM transformation towards sustainability. Furthermore, the insights on the organisational barriers of sustainability indicated that leadership was viewed as the key internal barrier. In addition, organisational barriers were identified as a potential new theme. The insights on strategic barriers revealed that the short-term focus of sustainability was a barrier to sustainability within an organisation.

Table 15c

Summary of the key findings on internal barriers

Research Questions		Themes & potential new themes	Theoretical Construct	*Potential new sub-themes*	Literature Review Key authors by construct	Chapter Section
What are the ***barriers*** involved in transforming an existing BM to a SBM?	6	Internal Barriers: Operational	Barriers		Bocken and Geradts (2020), Evans et al. (2017), Guldmann and Huulgaard (2020), Sousa-Zomer and Cauchick-Miguel (2019)	6.2.1
	7	Internal Barriers: Organisational	Barriers			6.2.1
	8	Internal Barriers: Strategic	Barriers			6.2.1

Note. Author's own.

6.2.1.2 Internal Barriers: Analysis of the Key Literature

Table 21 summarises the key literature which was reviewed on the internal barriers of SBMI in the literature review. The key scholars who were selected for the comparison of the internal barriers were Bocken and Geradts (2020), Evans et al. (2017), Guldmann and Huulgaard (2020), and Sousa-Zomer and Cauchick-Miguel (2019). The reason for selecting these scholars was based on their recently published papers in highly ranked academic journals.

Table 21

Analysis of the literature on the internal barriers of SBMI

Internal Barriers of Sustainable Business Model Innovation				
Authors	**Evans et al. (2017)**	**Sousa-Zomer and Cauchick-Miguel (2019)**	**Bocken and Geradts (2020)**	**Guldmann and Huulgaard (2020)**
Journal	Business Strategy and the Environment	International Journal of Management Reviews	Long Range Planning	Journal of Cleaner Production
Key topics and concepts covered	Challenges for the creation of sustainable business models for sustainability: • Triple bottom line barriers • Mind-set challenges • **Resource barriers** • Technological innovation challenges • External relationship barriers • Business model methods restrictions	Collaborative barriers of business model innovation for sustainability: • Lack of consumer acceptance • Lack of initiatives involving multiple actors and government • Cultural barriers • Lack of knowledge	Three categories of barriers to sensing, seizing, and transforming for sustainable business model innovation: • **Institutional barriers** • **Strategic barriers** • **Operational barriers**	Four socio-technical level barriers in circular business model innovation: • Market level • Value chain level • **Organisational level** • Employee level

Note. Author's own, adapted from Bocken and Geradts (2020), Evans et al. (2017), Guldmann and Huulgaard (2020), and Sousa-Zomer and Cauchick-Miguel (2019).

As presented in Table 21, the analysis of the literature on the internal barriers of SBMI indicated mindset challenges within a firm, lack of allocated resources, and BM restrictions in terms of standard operating procedures, as internal barriers (Evans et al., 2017). In addition, socio-technical level barriers were identified in circular BMI by Guldmann and Huulgaard (2020) which included organisational level, and employee level barriers. The organisational level barriers referred to the leadership team and their commitment towards sustainability (Guldmann & Huulgaard, 2020).

Furthermore, Bocken and Geradts (2020) categorised the barriers of SBMI as institutional, strategic, and operational barriers. The scholars classified strategic barriers as prioritising short-term growth, as a barrier within an organisation (Bocken & Geradts, 2020). The scholars also identified five operational barriers, which included excellence barriers, barriers in the processes of innovation, resource allocation barriers, short-term incentive barriers, and lastly, financial performance metrics barriers (Bocken & Geradts, 2020).

6.2.1.3 Internal Barriers: Comparative Analysis of the Key Findings with the Key Literature

Table 22 summarised the comparative analysis of the key findings and a potential new theme, with the key literature on the internal barriers. This systematic comparison identified similarities and differences between the research findings on the internal barriers and the literature.

Table 22

Comparison of the key findings on the internal barriers with the key literature

Themes & potential new themes		Theoretical Construct	Comparison of key findings to the key literature	*Potential new sub-themes*	Comparison of the potential new themes to the key literature
6	Internal Barriers: Operational	Barriers	Consistent with Bocken and Geradts (2020) and Evans et al. (2017) on the lack of resources		
7	Internal Barriers: Organisational	Barriers	Consistent with the organisational barriers classification by Guldmann and Huulgaard (2020)		Consistent with the organisational barriers classification by Guldmann and Huulgaard (2020)
8	Internal Barriers: Strategic	Barriers	Consistent with the strategic barriers classification by Bocken and Geradts (2020)		

Note. Author's own.

Regarding the similarities, the insights from the research on the operational barriers, related to access to resources, which was consistent with the operational barriers identified by Bocken and Geradts (2020) as well as the description of resource barriers by Evans et al. (2017).

Another similarity between the key research findings and the literature was identified on the organisational barriers, which was noted as a potential new theme. The targeted search revealed that this theme was consistent with the organisational barriers classification by Guldmann and Huulgaard (2020), which related to leadership teams. Therefore, the organisational barriers theme was no longer classified as a new potential theme. However, the theme's name remained unchanged due to the consistency with the literature.

Regarding the comparative analysis of the strategic barriers, the research insights regarded the short-term focus of sustainability as a barrier of sustainability, which was consistent with the strategic barriers classified by Bocken and Geradts (2020).

6.2.1.4 Internal Barriers: Conclusion on the Discussion of the Findings

The comparative analysis of the findings and the literature indicated many similarities between the research findings and the internal barriers literature. Firstly, the findings on operational barriers were consistent with the operational barriers classified by Bocken and Geradts (2020) and similar to the description by Evans et al. (2017).

Secondly, the key findings on the organisational barriers were consistent with the organisational barriers identified by Guldmann and Huulgaard (2020). Therefore, based on the comparative analysis, the potential new theme of organisational barriers kept the research theme label and description due to the consistency with the literature. Lastly, the research findings on the strategic barriers were consistent with the classification of strategic barriers by Bocken and Geradts (2020).

Concluding the discussion of the findings on the internal barriers themes, the key insights revealed consistency with the literature regarding all three research themes. In addition, the key insights on the organisational barriers, as a potential new theme, remained unchanged based on the systematic comparative analysis with the key literature.

6.2.2 Construct 2: Discussion of the Findings on the External Barriers of BM Transformation towards Sustainability

6.2.2.1 External Barriers: Analysis of the Key Research Findings

Table 15d is an extract from Table 15 which summarised the key findings, potential new theme, and sub-themes identified through the analysis of the findings in Chapter 5. The analysis of the findings indicated three themes of external barriers of BM transformation towards sustainability, which were classified into the institutional, market, and TBL barriers.

The key research findings on the institutional barriers indicated that the lack of government involvement was viewed as the leading external barrier of BM transformation towards sustainability. Additionally, energy security and the socio-political unrest in the emerging market of South Africa were identified as potential new sub-themes based on the research findings. These potential new sub-themes were classified under the institutional barriers theme due to the supplier of energy in South Africa being state-owned and funded.

Furthermore, the insights on the market barriers of sustainability indicated the impact of COVID-19 as the main external barrier. In addition, market drivers were identified as a potential new theme, and COVID-19 was identified as a potential new sub-theme. Regarding the TBL barriers, the insights from the research indicated that the balance between profits versus the sustainability rewards was the major external barrier.

Table 15d

Summary of the key findings on external barriers

Research Questions		Themes & potential new themes	Theoretical Construct	*Potential new sub-themes*	Literature Review Key authors by construct	Chapter Section
What are the ***barriers*** involved in transforming an existing BM to a SBM?	9	External Barriers: Institutional	Barriers	*Energy security & socio-political unrest*	Bocken and Geradts (2020), Evans et al. (2017), Guldmann and Huulgaard (2020), Sousa-Zomer and Cauchick-Miguel (2019)	6.2.2
	10	External Barriers: Market	Barriers	*COVID-19*		6.2.2
	11	External Barriers: Triple Bottom Line	Barriers			6.2.2

Note. Author's own.

6.2.2.2 External Barriers: Analysis of the Key Literature

Table 23 summarises the key literature which was reviewed on the external barriers of SBMI in Chapter 2. The key scholars who were selected for the comparison of the external barriers were Bocken and Geradts (2020), Evans et al. (2017), Guldmann and Huulgaard (2020), and Sousa-Zomer and Cauchick-Miguel (2019). The reason for selecting these scholars was based on their recently published articles in highly rated academic journals.

Table 23

Analysis of the literature on the external barriers of SBMI

External Barriers of Sustainable Business Model Innovation				
Authors	**Evans et al. (2017)**	**Sousa-Zomer and Cauchick-Miguel (2019)**	**Bocken and Geradts (2020)**	**Guldmann and Huulgaard (2020)**
Journal	Business Strategy and the Environment	International Journal of Management Reviews	Long Range Planning	Journal of Cleaner Production
Key topics and concepts covered	Challenges for the creation of sustainable business models for sustainability: • **Triple bottom line barriers** • Mind-set challenges • Resource barriers • Technological innovation challenges • **External relationship barriers** • Business model methods restrictions	Collaborative barriers of business model innovation for sustainability: • Lack of consumer acceptance • **Lack of initiatives involving multiple actors and government** • Cultural barriers • Lack of knowledge	Three categories of barriers to sensing, seizing, and transforming for sustainable business model innovation: • **Institutional barriers** • Strategic barriers • Operational barriers	Four socio-technical level barriers in circular business model innovation: • **Market level** • **Value chain level** • Organisational level • Employee level

Note. Author's own, adapted from Bocken and Geradts (2020), Evans et al. (2017), Guldmann and Huulgaard (2020), and Sousa-Zomer and Cauchick-Miguel (2019).

As presented in Table 23, the analysis of the literature on external barriers of SBMI indicated TBL barriers by Evans et al. (2017) which related to the balance between profits, social and environmental value. In addition, Evans et al. (2017) identified external relationship barriers with stakeholders, government, and legal regulators as external barriers to sustainability. Furthermore, Sousa-Zomer and Cauchick-Miguel (2019) identified collaborative barriers to SBMI, which were related to the lack of initiatives with government and external stakeholders.

Regarding the institutional barriers, Guldmann and Huulgaard (2020) identified market and institutional level barriers which referred to regulatory and external partnership barriers. However, the institutional barriers identified by Bocken and Geradts (2020) included uncertainty avoidance, and short-termism by the stakeholders (Bocken & Geradts, 2020).

6.2.2.3 External Barriers: Comparative Analysis of the Key Findings with the Key Literature

Table 24 summarised the comparative analysis of the key findings, potential new theme, and sub-themes, with the key literature. This systematic search and comparison identified similarities and differences between the research findings on the external barriers and the literature.

Table 24

Comparison of the key findings on the external barriers with the key literature

Themes & potential new themes		Theoretical Construct	Comparison of key findings to the key literature	*Potential new sub-themes*	Comparison of the potential new themes to the key literature
9	External Barriers: Institutional	Barriers	Consistent with Bocken and Geradts (2020, Evans et al. (2017), Guldmann and Huulgaard (2020), Sousa-Zomer and Cauchick-Miguel (2019) on the lack of government involvement.	*Energy security & socio-political unrest*	Appears to be a nuance of difference in the SBMI literature related to the two sub-themes.
10	External Barriers: Market	Barriers	Similar to the classification of market level barriers by Guldmann and Huulgaard (2020).	*COVID-19*	Appears to be a nuance of difference in the SBMI literature related to the sub-theme.
11	External Barriers: Triple Bottom Line	Barriers	Consistent with the classification of triple bottom line barriers by Evans et al. (2017)		

Note. Author's own.

Regarding the similarities, the insights from the research on the institutional barriers were consistent with the classification of institutional barriers by Bocken and Geradts (2020), as well as the identification of the external relationship barriers with government and legal regulators by Evans et al. (2017), Guldmann and Huulgaard (2020), and Sousa-Zomer and Cauchick-Miguel (2019).

However, steps 1 and 2 of the targeted searches presented no results in the literature with regards to the classification of the potential new sub-themes of energy security and socio-political unrest based on the research. Therefore, step 3 was implemented as a further targeted search within the Mendeley database. The following phrases were used for the search for energy security references within the Mendeley database, namely, 'energy security, 'electricity security', 'energy scarcity', 'electricity shortages', and 'load shedding'.

This targeted search presented no hits within the SBMI literature. Furthermore, the following words and phrases were used to search for references to socio-political unrest within the Mendeley database, namely, ‘socio-political unrest’, ‘riots’, ‘crisis’, ‘political uncertainty, and ‘government uncertainty’. This targeted search also presented no hits within the SBMI literature. This targeted and systematic search revealed no reference to energy security as well as socio-political unrest as an external barrier to sustainability within the SBMI literature. Therefore, based on the three steps, the potential new sub-themes of institutional barriers appeared to reveal nuances of difference between the findings and the SBMI literature.

Regarding the potential new theme of market barriers, the targeted search revealed similarities in the classification of market level barriers by Guldmann and Huulgaard (2020), which referred to external factors, such as ambiguous customer demand, being an external barrier of sustainability (Guldmann & Huulgaard, 2020). Therefore, the market barriers theme was no longer classified as a new potential theme, and the theme’s name remained unchanged due to the consistency with the literature.

However, steps 1 and 2 of the targeted searches presented no results in the literature with regards to the classification of the potential new sub-theme of COVID-19 based on the research. Therefore, step 3 was implemented as a further targeted search within the Mendeley database. The following words and phrases were used for the search for COVID-19 references within the Mendeley database, namely, ‘COVID-19’, ‘COVID’, ‘COVID-19 Pandemic’, ‘COVID Pandemic’, ‘COVID-19 crisis’, ‘Coronavirus’, ‘Corona’, and ‘Corona Pandemic’.

This targeted and systematic search presented no hits or reference to COVID-19 as an external barrier to sustainability within the SBMI literature. Therefore, based on the three steps, the potential new sub-theme of market barriers appeared to reveal a nuance of difference between the findings and the SBMI literature.

Regarding the TBL barriers, the insights on the balance between profits versus sustainability rewards as an external barrier were consistent with the classification of TBL barriers by Evans et al. (2017).

6.2.2.4 External Barriers: Conclusion on the Discussion of the Findings

The comparative analysis of the findings and the literature indicated similarities and nuances of difference between the research findings and the key literature on the external barriers.

Regarding the similarities, the findings on institutional barriers were consistent with the institutional barriers classified by Bocken and Geradts (2020). Furthermore, the systematic search of the potential new theme of market barriers revealed similarities in the classification of market level barriers by Guldmann and Huulgaard (2020). Therefore, the market barriers theme was no longer classified as a new potential theme, and the theme's name remained unchanged due to the consistency with the literature. In addition, the insights on the TBL barriers were also consistent with the classification of TBL barriers by Evans et al. (2017).

However, nuances of difference appeared through the targeted search on the potential new sub-themes, energy security, socio-political unrest, and COVID-19, as no reference was made of these sub-themes as external barriers of sustainability within the SBMI literature.

Concluding the discussion of the findings on the external barriers themes, the key insights revealed consistency with the literature regarding the institutional, market, and TBL barriers. The market barriers theme was no longer classified as a new potential theme due to the consistency with the literature. However, the comparison of energy security and socio-political unrest, as new potential sub-themes of institutional barriers, revealed nuances of difference in the SBMI literature. In addition, COVID-19, as a sub-theme of market barriers, also appeared to be a nuance of difference from the literature on external barriers of BM transformation towards sustainability.

6.2.3 Construct 2: Conclusion on the Discussion of the Findings on the Barriers of BM Transformation towards Sustainability

The theoretical construct on the *barriers* of BM transformation towards sustainability consisted of six themes which were categorised under internal and external barriers, as summarised in Table 24. The internal barriers included three themes which were classified as operational, organisational, and strategic barriers. The internal barriers also included a potential new theme which was labelled organisational barriers.

The external barriers included three themes which were classified as institutional, market and TBL barriers of BM transformation towards sustainability. The external barriers also included a potential new theme labelled market barriers, and potential new sub-themes of energy security, socio-political unrest, and COVID-19.

Table 25

Comparison of the key findings on the barriers with the key literature

Themes & potential new themes		Theoretical Construct	Comparison of key findings to the key literature	*Potential new sub-themes*	Comparison of the potential new themes to the key literature
6	Internal Barriers: Operational	Barriers	Consistent with Bocken and Geradts (2020) and Evans et al. (2017) on the lack of resources		
7	Internal Barriers: Organisational	Barriers	Consistent with the organisational barriers classification by Guldmann and Huulgaard (2020)		Consistent with the organisational barriers classification by Guldmann and Huulgaard (2020)
8	Internal Barriers: Strategic	Barriers	Consistent with the strategic barriers classification by Bocken and Geradts (2020)		
9	External Barriers: Institutional	Barriers	Consistent with Bocken and Geradts (2020, Evans et al. (2017), Guldmann and Huulgaard (2020), Sousa-Zomer and Cauchick-Miguel (2019) on the lack of government involvement.	*Energy security & socio-political unrest*	Appears to be a nuance of difference in the SBMI literature related to the two sub-themes.
10	External Barriers: Market	Barriers	Similar to the classification of market level barriers by Guldmann and Huulgaard (2020).	*COVID-19*	Appears to be a nuance of difference in the SBMI literature related to the sub-theme.
11	External Barriers: Triple Bottom Line	Barriers	Consistent with the classification of triple bottom line barriers by Evans et al. (2017)		

Note. Author's own.

Regarding the discussion of the findings on of the *internal barriers* themes, the key insights revealed consistency with the literature regarding the operational, organisational, and strategic barriers. In addition, the key insights on the organisational barriers, as a potential new theme, remained unchanged based on the systematic comparative analysis with the key literature.

Regarding the discussion of the findings on the *external barriers* themes, the key insights revealed consistency with the literature regarding the institutional, market, and TBL barriers. The market barriers theme was no longer classified as a new potential theme due to the consistency with the literature. However, the research finding on energy

security, socio-political unrest, and COVID-19, were noted as nuances of difference relating to the literature on external barriers of BM transformation towards sustainability. Regarding the discussion of the findings on the *potential new themes and sub-themes* of the *barriers* construct, the systematic search revealed consistency on the organisational barriers theme against the SBMI literature. Therefore, this new theme was no longer classified as a potential new theme under internal barriers. Furthermore, energy security and socio-political unrest as new potential sub-themes of institutional barriers, revealed nuances of difference related to the SBMI literature. In addition, COVID-19, as a sub-theme of market barriers, also appeared to be a nuance of difference related to the literature on external barriers of BM transformation towards sustainability

6.3 Construct 3: Discussion of the Finding on the Outcomes derived from BM Transformation towards Sustainability

The findings on the theoretical construct on the *outcomes* aimed to answer the third research question about the *outcomes* derived from transforming an existing BM into a SBM. The key findings related to the *outcomes* construct were categorised under internal outcomes and external outcomes. The findings on the internal outcomes were categorised into two themes namely, BM transformation, and economic value creation. The findings on the external outcomes were also categorised into two themes, namely environmental value creation, and social value creation.

6.3.1 Construct 3: Discussion of the Finding on the Internal Outcomes derived from BM Transformation towards Sustainability

6.3.1.1 Internal Outcomes: Analysis of the Key Research Findings

Table 15d is an extract from Table 15 which summarised the key findings on the internal barriers and the potential new theme identified through the analysis of the findings in Chapter 5. The analysis of the findings indicated two themes of internal outcomes of BM transformation towards sustainability, which were classified into BM transformation, and economic value creation.

The key research findings on the BM transformation theme indicated that re-defining an existing BM was viewed as the main internal outcome of BM transformation towards sustainability. In addition, BM transformation was identified as a potential new theme. Furthermore, the insights on the economic value creation of sustainability indicated that an increase in profitability was viewed as the key internal outcome.

Table 15d

Summary of the key findings on internal outcomes

Research Questions		Themes & potential new themes	Theoretical Construct	*Potential new sub-themes*	Literature Review Key authors by construct	Chapter Section
What are the ***outcomes*** from the transformation into a SBM?	12	Internal Outcome: Business Model Transformation	Outcomes		Evans et al. (2017), Laukkanen and Tura (2020), Tate and Bals (2018)	6.3.1
	13	Internal Outcome: Economic Value Creation	Outcomes			6.3.1

Note. Author's own.

6.3.1.2 Internal Outcomes: Analysis of the Key Literature

Table 26 summarised the key literature which was reviewed on the internal outcomes of SBMI in the literature review. The key scholars who were selected for the comparison of the internal outcomes were Evans et al. (2017), Laukkanen and Tura (2020), Tate and Bals (2018). The reason for selecting these scholars were based on their recently published papers in highly ranked academic journals.

Table 26

Analysis of the literature on the internal outcomes of SBMI

Internal Outcomes derived from Sustainable Business Model Innovation			
Authors	**Laukkanen and Tura (2020)**	**Tate and Bals (2018)**	**Evans et al. (2017)**
Journal	Journal of Cleaner Production	Journal of Business Ethics	Business Strategy and the Environment
Key topics and concepts covered	Conceptual framework for analysing sustainable value creation: • Environmental • Social • **Economic**	Shared triple bottom line objectives: • Environment (reduce emission, waste, effluents, and waste & environmental concerns) • **Economic (higher revenue, higher profits, and product innovation)** • Social (community development, access to education, energy, financial service, health, and human rights protection, transparency of information)	Sustainable value is classified in three forms: • Environmental value (renewable resources, low emissions and waste, biodiversity, and pollution prevention) • Social value (equality and diversity, community development, labour standards, and secure livelihoods) • **Economic value (profits, return on investments, financial resilience, long-term viability, and business stability)**

Note. Author's own, adapted from Evans et al. (2017), Laukkanen and Tura (2020), and Tate and Bals (2018).

The analysis of the literature on internal outcomes of SBMI, as presented in Table 26, identified cost-efficiency, brand equity, and socio-economic welfare of employees as economic value creation elements (Laukkanen & Tura, 2020). Furthermore, the economic value objectives of sustainability were to produce higher revenue, profits, and innovation (Tate & Bals, 2018). In addition, Evans et al. (2017) classified sustainable economic value as an increase in profits, higher ROI, financial resilience, and business stability.

6.3.1.3 Internal Outcomes: Comparative Analysis of the Key Findings with the Key Literature

Table 27 summarised the comparative analysis of the key findings and a potential new theme, with the key literature on the internal outcomes. This systematic comparison identified similarities between the research findings on the internal outcomes and the literature.

Table 27

Comparison of the key findings on the internal outcomes with the key literature

Themes & potential new themes		Theoretical Construct	Comparison of key findings to the key literature	*Potential new sub-themes*	Comparison of the potential new themes to the key literature
12	Internal Outcome: Business Model Transformation	Outcomes	Similar to the classification of BM transformation for sustainability by Rauter et al. (2017)		Similar to the classification of BM transformation for sustainability by Rauter et al. (2017)
13	Internal Outcome: Economic Value Creation	Outcomes	Consistent with classification of economic value outcomes by Evans et al. (2017) and Tate and Bals (2018), and similar to Laukkanen and Tura (2020)		

Note. Author's own.

Steps 1 and 2 of the targeted searches presented no results in the literature with regards to the classification of the potential new sub-theme of BM transformation. Therefore, step 3 was implemented as a further targeted search within the Mendeley database. The following phrases were used for the search for BM transformation references within the Mendeley database, namely, 'BM transformation', 'BM transformation outcome', 'BM transformation towards sustainability, 'BM transformation for sustainability, 'sustainability outcomes', 'outcomes of sustainability transformation', and 'outcomes of BM transformation'. This targeted search presented 9 hits within the SBMI literature; however, the search was narrowed down to a published paper by Rauter et al. (2017).

The comparative analysis of the BM transformation findings with the Rauter et al. (2017) paper revealed similarities in the classification of BM transformation. The scholars referred to re-defining and transforming an existing BM towards sustainability as an objective and outcome of sustainability (Rauter et al., 2017). Therefore, the BM transformation theme was no longer classified as a new potential theme and the theme's name remained unchanged due to the consistency with the SBMI literature.

Regarding the comparative analysis of the economic value creation theme, the research insights regarded the increase in profitability as an outcome of sustainability, which was consistent with the classification of economic value outcomes by Evans et al. (2017), Laukkanen and Tura (2020), Tate and Bals (2018).

6.3.1.4 Internal Outcomes: Conclusion on the Discussion of the Findings

The comparative analysis of the findings and the literature indicated many similarities between the research findings and the internal outcomes literature. Firstly, the key findings on BM transformation were consistent with the classification of BM transformation by Rauter et al. (2017). Therefore, based on the targeted search, the potential new theme of BM transformation kept the research theme label and description due to the consistency with the literature. Secondly, the findings on the economic value creation were consistent with the economic value outcomes identified by Evans et al. (2017), Laukkanen and Tura (2020), Tate and Bals (2018).

Concluding the discussion of the findings on the internal outcomes, the key insights revealed consistency with the literature regarding the BM transformation and economic value creation themes. In addition, the key insights on the BM transformation, as a potential new theme of internal outcomes, remained unchanged based on the systematic search within the SBMI literature.

6.3.2 Construct 3: Discussion of the Findings on the External Outcomes of BM Transformation towards Sustainability

6.3.2.1 External Outcomes: Analysis of the Key Research Findings

Table 15e is an extract from Table 15 which summarised the key findings identified through the analysis of the findings in Chapter 5. The analysis of the findings indicated two themes of external outcomes of BM transformation towards sustainability, which were classified into the environmental and social value creation. The key research findings on the environmental value outcomes indicated that the reduction of waste was

viewed as the leading external outcome derived from BM transformation towards sustainability. Additionally, the insights on the social value outcomes of sustainability indicated the upliftment of communities as the main external outcome derived from BM transformation towards sustainability.

Table 15e: *Summary of the key findings on external outcomes*

Research Questions		Themes & potential new themes	Theoretical Construct	*Potential new sub-themes*	Literature Review Key authors by construct	Chapter Section
What are the ***outcomes*** from the transformation into a SBM?	14	External Outcome: Environmental Value Creation	Outcomes		Evans et al. (2017), Laukkanen and Tura (2020), Tate and Bals (2018)	6.3.2
	15	External Outcome: Social Value Creation	Outcomes			6.3.2

Source: Author's own

6.3.2.2 External Outcomes: Analysis of the Key Literature

Table 28 summarised the key literature which was reviewed on the external outcomes of SBMI in Chapter 2. The key scholars who were selected for the comparison of the external outcomes were Evans et al. (2017), Laukkanen and Tura (2020), Tate and Bals (2018). The reason for selecting these scholars were based on their recently published papers in highly ranked academic journals.

Table 28

Analysis of the literature on the external outcomes of SBMI

External Outcomes derived from Sustainable Business Model Innovation			
Authors	**Laukkanen and Tura (2020)**	**Tate and Bals (2018)**	**Evans et al. (2017)**
Journal	Journal of Cleaner Production	Journal of Business Ethics	Business Strategy and the Environment
Key topics and concepts covered	Conceptual framework for analysing sustainable value creation: • **Environmental** • **Social** • Economic	Shared triple bottom line objectives: • **Environment (reduce emission, waste, effluents, and waste & environmental concerns)** • Economic (higher revenue, higher profits, and product innovation) • **Social (community development, access to education, energy, financial service, health, and human rights protection, transparency of information)**	Sustainable value is classified in three forms: • **Environmental value (renewable resources, low emissions and waste, biodiversity, and pollution prevention)** • **Social value (equality and diversity, community development, labour standards, and secure livelihoods)** • Economic value (profits, return on investments, financial resilience, long-term viability, and business stability)

Note. Author's own, adapted from Evans et al. (2017), Laukkanen and Tura (2020), and Tate and Bals (2018).

As presented in Table 28, the analysis of the literature on external outcomes of SBMI indicated environmental and social value creation (Evans et al., 2017). Environmental value creation related to renewable resources, reduction of waste, and pollution prevention (Evans et al., 2017). Where social value creation included elements of equality and diversity, community development, and labour standards (Evans et al., 2017).

Furthermore, Tate and Bals (2018) stated that the shared TBL objectives for sustainability were to produce a positive and significant impact on the environment through the reduction of emissions and waste. Furthermore, the social value outcomes were to develop communities through access to education, health, and human rights protection (Tate & Bals, 2018).

In addition, Laukkanen and Tura (2020) identified potential environmental value outcomes which increased the environmental well-being through repairment of previous environmental damages (Laukkanen & Tura, 2020). Laukkanen and Tura (2020) added social outcomes which included elements of respecting the laws, regulations, and rights as well as respecting employee, stakeholder, and individual rights.

6.3.2.3 External Outcomes: Comparative Analysis of the Key Findings with the Key Literature

Table 29 summarised the comparative analysis of the key findings with the key literature. This systematic comparison identified similarities between the research findings on the external outcomes and the literature.

Table 29

Comparison of the key findings on the external outcomes with the key literature

Themes & potential new themes		Theoretical Construct	Comparison of key findings to the key literature	*Potential new sub-themes*	Comparison of the potential new themes to the key literature
14	External Outcome: Environmental Value Creation	Outcomes	Consistent with classification of environmental value outcomes by Evans et al. (2017) and Tate and Bals (2018), and similar to Laukkanen and Tura (2020)		
15	External Outcome: Social Value Creation	Outcomes	Consistent with classification of social value outcomes by Evans et al. (2017) and Tate and Bals (2018), and similar to Laukkanen and Tura (2020)		

Note. Author's own.

Regarding the similarities, the insights from the research on the environmental value creation were consistent with the classification of environmental value outcomes by Evans et al. (2017), as well as the identification of the TBL environmental objectives by Tate and Bals (2018), and similar to the environmental outcomes identified by Laukkanen and Tura (2020).

Furthermore, the systematic search revealed further similarities on the social value creation which was classified by Evans et al. (2017) and Tate and Bals (2018), and similar to the social outcomes identified by Laukkanen and Tura (2020).

6.3.2.4 External Outcomes: Conclusion on the Discussion of the Findings

The comparative analysis of the findings and the literature indicated many similarities between the research findings and the key literature on the external outcomes.

Regarding the similarities, the findings on both environmental and social value creation were consistent with the classification by Evans et al. (2017) and Tate and Bals (2018) and similar to the classification by Laukkanen and Tura (2020).

Concluding the discussion of the findings on the external outcomes, the key insights revealed consistency with the literature regarding environmental and social value creation as outcomes derived from BM transformation towards sustainability.

6.3.3 Construct 3: Conclusion on the Discussion of the Findings on the Outcomes derived from BM Transformation towards Sustainability

The theoretical construct on the *outcomes* of sustainability consisted of four themes which were categorised under internal and external outcomes, as summarised in Table 30. The internal outcomes included two themes which were classified as BM transformation and economic value creation. The internal outcomes also included a potential new theme of BM transformation.

The external outcomes also included two themes which were classified as environmental and social value creation which were outcomes derived from BM transformation towards sustainability.

Table 30

Comparison of the key findings on the outcomes with the key literature

	Themes & potential new themes	Theoretical Construct	Comparison of key findings to the key literature	*Potential new sub-themes*	Comparison of the potential new themes to the key literature
12	Internal Outcome: Business Model Transformation	Outcomes	Similar to the classification of BM transformation for sustainability by Rauter et al. (2017)		Similar to the classification of BM transformation for sustainability by Rauter et al. (2017)
13	Internal Outcome: Economic Value Creation	Outcomes	Consistent with classification of economic value outcomes by Evans et al. (2017) and Tate and Bals (2018), and similar to Laukkanen and Tura (2020)		
14	External Outcome: Environmental Value Creation	Outcomes	Consistent with classification of environmental value outcomes by Evans et al. (2017) and Tate and Bals (2018), and similar to Laukkanen and Tura (2020)		
15	External Outcome: Social Value Creation	Outcomes	Consistent with classification of social value outcomes by Evans et al. (2017) and Tate and Bals (2018), and similar to Laukkanen and Tura (2020)		

Note. Author's own.

Regarding the discussion of the findings on the *internal outcomes*, the key insights revealed consistency with the literature regarding the BM transformation and economic value creation themes. In addition, the key insights on the BM transformation, as a potential new internal outcomes theme, remained unchanged based on the systematic search with the SBMI literature.

Regarding the discussion of the findings on the *external outcomes*, the key insights revealed consistency with the literature regarding environmental and social value creation as outcomes of BM transformation towards sustainability.

Regarding the discussion of the findings on the *potential new theme* of the *outcomes* construct, revealed consistency on the BM transformation classification as an outcome of sustainability. Therefore, this new theme was no longer classified as a potential new theme under the outcomes construct.

6.4 Conclusion: Discussion of the Research Findings and the Research Outcomes

This Chapter discussed the key research findings presented in Chapter 5. The research findings, potential new themes, and sub-themes were systematically compared to the key literature presented in Chapter 2, through a three-step process. Step 1 covered a thorough word search within the existing literature review in Chapter 2. Step 2 was implemented when no search results appeared in step 1. This step involved the comparison of the findings to key scholars identified under each theoretical construct. Step 1 and step 2 were targeted searches to identify literature that confirmed the similarities or differences between the findings and the literature.

Step 3 broadened the search of steps 1 and 2 by including a thorough and targeted word and phrase search within the SBMI literature in the Author's Mendeley Reference Manager library. This step was only implemented if no search results were found in steps 1 and 2. The scope of the literature which was selected for this comparison was confined to SBMI literature.

The summary of the research outcomes from the discussion of the research findings, presented in Table 31. The conclusions from the discussion between the key findings and the key literature presented three sets of outcomes. Firstly, two *sub-themes* were identified as similar to the literature and were highlighted in green in Table 31:

- *Reduce waste*

The study revealed a potential new sub-theme of reducing waste under the operational drivers. However, this insight was relabelled as a sub-theme of external outcomes under environmental value creation, based on the similarity to the reference on improving the environmental performance of an organisation by Rauter et al. (2017).

- *Pressure from customers*

The research identified a potential new sub-theme of pressure from customers under the market drivers theme but it was relabelled as a sub-theme of market level barriers. This was based on the similarity to the market level barriers by Guldmann and Huulgaard (2020) which related to ambiguous customer demand.

Secondly, five *themes* were identified as similar to the literature and were highlighted in purple in Table 31:

- *Organisational drivers*

The study discovered a potential new theme of organisational drivers under the construct of internal drivers. However, this insight was relabelled as operational drivers, based on the classification of operational drivers by Bocken and Geradts (2020). It was no longer a separate theme but merged into the operational drivers theme.

- *Market drivers*

The potential new theme of market drivers under the construct of external drivers was identified in the study but it was relabelled as a market barrier due to the similarity to the market level barriers identified by Guldmann and Huulgaard (2020).

- *Organisational barriers*

The study revealed a potential new theme of organisational barriers under the construct of internal barriers which remained unchanged due to its consistency with the organisational barriers classified by Guldmann and Huulgaard (2020).

- *Market barriers*

The research identified market barriers as a potential new theme under the construct of external barriers which remained unchanged due to the similarity to the market level barriers identified by Guldmann and Huulgaard (2020).

- *BM transformation*

The study revealed a potential new theme of BM transformation under the construct of internal outcomes which remained unchanged due to its similarity with the classification of BM transformation for sustainability by Rauter et al. (2017).

Lastly, three *sub-themes* appeared to have nuances of difference between the literature and the research findings, and were highlighted in blue in Table 31:

- *Energy security*
- *Socio-political*
- *COVID-19*

These research outcomes on the similarities and nuances of difference from the discussion of the research findings were discussed in Chapter 7.

Table 31

Summary of the research outcomes from the discussion of the research findings

Themes & potential new themes		Theoretical Construct	*Potential new sub-themes*	*Relabelled sub-themes*	*Relabelled themes*	*Similar*	*Nuance of difference*	Comparison of the potential new themes & sub-themes to the key literature
1	Internal Drivers: Operational	Drivers	*Reduce waste*	*Reduce waste = Sub-theme of environmental value creation*		✓		Sub-theme level: Relabelled the sub-theme as an external outcome under environmental value creation.
2	Internal Drivers: Organisational	Drivers			*Organisational Driver = Operational Drivers*	✓		Theme level: Relabelled the theme as operational drivers. It is no longer a separate theme but merged into the operational theme.
3	Internal Drivers: Strategic	Drivers						
4	External Drivers: Institutional	Drivers						
5	External Drivers: Market	Drivers	*Pressure from customers*	*Pressure from customers = Sub-theme of market level barriers*	*Market Drivers = Market Barriers*	✓ ✓		Theme level: Relabelled the market drivers theme as a market barrier. Sub-theme level: Pressure from customers as a sub-theme was relabelled a sub-theme of market level barriers.
6	Internal Barriers: Operational	Barriers						
7	Internal Barriers: Organisational	Barriers				✓		Consistent with the organisational barriers classification by Guldmann and Huulgaard (2020)
8	Internal Barriers: Strategic	Barriers						
9	External Barriers: Institutional	Barriers	1.Energy security 2.Socio-political unrest				✓ ✓	Sub-theme level: Appears to be a nuance of difference in the SBMI literature related to the two sub-themes.
10	External Barriers: Market	Barriers	3. COVID-19			✓	✓	Theme level: Similar to the classification of market level barriers by Guldmann and Huulgaard (2020). Sub-theme level: Appears to be a nuance of difference in the SBMI literature related to the sub-theme.
11	External Barriers: Triple Bottom Line	Barriers						
12	Internal Outcome: Business Model Transformation	Outcomes				✓		Theme level: Similar to the classification of BM transformation for sustainability by Rauter et al. (2017)
13	Internal Outcome: Economic Value Creation	Outcomes						
14	External Outcome: Environmental Value Creation	Outcomes						
15	External Outcome: Social Value Creation	Outcomes						

Note. Author's own.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

This Chapter presents the key research outcomes derived from the theoretical analysis and research discussion, detailed in Chapter 6. This was an exploratory study on BM transformation towards sustainability, which explored the three theoretical constructs on the drivers, barriers, and outcomes of SBMI. Additionally, the research setting of this qualitative study was divided into three industries within the South African emerging market, namely, franchising, retail, and suppliers.

Furthermore, the purpose of this research was to develop a conceptual framework on SBMI with the aim to assist business leaders with the transformation of an existing BM. In addition, this study was conducted with the aim to answer the main research question and three research sub-questions, as identified by Bocken and Geradts (2020), Foss and Saebi (2016), and Geissdoerfer et al. (2018) on how an organisation could transform its existing BM towards a SBM. The summary of the research outcomes from Chapter 6, related to the specific research questions, are presented in Table 32.

Table 32

Summary of the research outcomes related to the research questions

Research Questions		Revised Themes	Theoretical Construct	Key Research Outcomes			
				Similar	*Nuance of difference*	Refinements to the Literature	Revised Sub-themes
What are the **drivers** involved in transforming an existing BM to a SBM?	1	Internal Drivers: Operational	Drivers	✓			*Incentives: Employee & customer Employees: Retention & attraction*
	2	Internal Drivers: Strategic	Drivers				*Sustainability ingrained into DNA & corporate strategies*
	3	External Drivers: Institutional	Drivers				*Collaboration with government & NGO Associations*
What are the ***barriers*** involved in transforming an existing BM to a SBM?	4	Internal Barriers: Operational	Barriers				*Access to resources*
	5	Internal Barriers: Organisational	Barriers	✓			*Leadership*
	6	Internal Barriers: Strategic	Barriers				*Short-term focus on sustainability*
	7	External Barriers: Institutional	Barriers		✓✓	1. Energy security 2. Socio-political unrest	*Lack of government involvement & initiatives*
	8	External Barriers: Market	Barriers	✓✓	✓	3. COVID-19	*Pressure from customers*
	9	External Barriers: Triple Bottom Line	Barriers				*Balance between profit versus sustainability rewards*
What are the ***outcomes*** from the transformation into a SBM?	10	Internal Outcome: Business Model Transformation	Outcomes	✓			*Re-defining the existing BM*
	11	Internal Outcome: Economic Value Creation	Outcomes				*Increase in profitability*
	12	External Outcome: Environmental Value Creation	Outcomes				*Reduction of waste*
	13	External Outcome: Social Value Creation	Outcomes				*Community upliftment*

Note. Author's own.

This Chapter was structured in four sections. Firstly, the principal theoretical conclusions were discussed, followed by the research contribution. Thirdly, the recommendations for manager and other stakeholders were outlined. Lastly, the limitations of this research and recommendations for future research conclude this Chapter and this research paper.

7.1 Principal Theoretical Conclusions of the Entire Research

7.1.1 Research Question 1: Principal Theoretical Conclusion on the Drivers

As seen in Table 32, the research outcomes on the theoretical construct on the *drivers* of sustainability consisted of three themes, which were categorised under internal and external drivers. The internal drivers included two themes which were classified as operational and strategic drivers. The external driver included one theme which was classified as an institutional driver of BM transformation towards sustainability.

Regarding the *internal drivers*, the research outcomes were consistent with the literature regarding the operational and strategic drivers identified by Bocken and Geradts (2020) and Rauter et al. (2017) as discussed in Chapter 2. The operational drivers identified in this study related to incentivising both employees and customers to drive sustainability transformation, which were both factors mentioned by Bocken and Geradts (2020) and Rauter et al. (2017). Furthermore, the retention of existing employees and the recruitment of talented employees were identified as important driving forces of sustainability within organisations, which also related to the classifications by Bocken and Geradts (2020) and Rauter et al. (2017).

The study also revealed the importance of strategically ingraining sustainability into the core of an organisation as well as into all corporate strategies, which were seen as the internal catalysts of sustainability transformation. These research outcomes were consistent with the classification of strategic drivers by Bocken and Geradts (2020) and the internal drivers categorised by Rauter et al. (2017) as discussed in section 2.5 of Chapter 2.

Regarding the *external drivers*, the key insights from this study on the institutional drivers were consistent with the institutional drivers categorised by Bocken and Geradts (2020), Rauter et al. (2017), and Sousa-Zomer and Cauchick-Miguel (2019), as identified in Chapter 2. The main institutional drivers from this study revealed that collaborating with government and NGO Associations were external drivers of sustainability.

The principal theoretical conclusions on the research question on the *drivers* of sustainability presented the following similarities to the literature:

- Operational drivers
- Strategic drivers
- Institutional drivers

In conclusion, the main drivers of BM transformation towards sustainability, based on the research outcomes from this study, were operational, strategic, and institutional drivers as presented in Table 32.

7.1.2 Research Question 2: Principal Theoretical Conclusion on the Barriers

As seen in Table 32, the research outcomes on the theoretical construct on the *barriers* of sustainability consisted of six themes which were categorised under internal and external barriers. The internal barriers included three themes which were classified as operational, organisational, and strategic barriers. The external barriers included three themes which were classified as institutional, market, and TBL barriers of BM transformation towards sustainability.

Regarding the *internal barriers*, the outcomes from this study revealed consistency with the literature regarding the operational and strategic barriers identified by Bocken and Geradts (2020) and Evans et al. (2017), in Chapter 2. The operational barriers identified in this study related to the challenge of accessing resources for sustainability, which was a barrier mentioned by Bocken and Geradts (2020) and Evans et al. (2017).

The study also revealed that the short-term focus on sustainability was a strategic barrier of sustainability which was consistent with the description of strategic barriers by Bocken and Geradts (2020), as discussed in section 2.6 of Chapter 2. Furthermore, the lack of management support and the lack of buy-in from the leadership team were outcomes from the study on the organisational barriers of sustainability within organisations, which related to the description by Guldmann and Huulgaard (2020).

Regarding the *external barriers*, the key research outcomes of this study revealed that the lack of government involvement was viewed as an institutional barrier which was consistent with the classification of institutional barriers by Bocken and Geradts (2020) and the external barrier descriptions by Evans et al. (2017), Guldmann and Huulgaard (2020), and Sousa-Zomer and Cauchick-Miguel (2019). In addition, energy security and

the socio-political unrest in the South African economy were seen as major institutional barriers of BM transformation towards sustainability.

Furthermore, the outcomes from the study indicated that the uncertain market demand and pressure from customers were external market barriers, which were identified as a market level barrier by Guldmann and Huulgaard (2020). In addition, the study also revealed that balancing profit versus the sustainability rewards were the main TBL barriers, which were consistent with the categorisation by Evans et al. (2017) as presented in Chapter 2.

The principal theoretical conclusions on the research question on the barriers of sustainability were divided under similarities and differences. The research outcomes revealed similarities to the literature in the following areas:

- Organisational barriers
- Market level barriers
- Pressure from customers

The research outcomes presented the following nuances of difference between the literature:

- *Energy security*
- *Socio-political unrest*
- *COVID-19*

In conclusion, the main barriers of BM transformation towards sustainability, based on the research outcomes from this study, were operational, organisational, strategic, institutional, market level, and TBL barriers as presented in Table 32.

7.1.3 Research Question 3: Principal Theoretical Conclusion on the Outcomes

As seen in Table 32, the research outcomes on the theoretical construct on the *outcomes* of sustainability consisted of four themes which were categorised under internal and external outcomes. The internal outcomes included two themes which were classified as BM transformation and economic value creation. The external outcomes included two themes which were classified as environmental and social value creation derived from BM transformation towards sustainability.

Regarding the *internal outcomes*, the research outcomes were consistent with the literature regarding the BM transformation, which involved re-defining an existing BM, as identified by Rauter et al. (2017) in Chapter 2. The economic value creation identified in this study related to the increase in profitability due to BM transformation towards sustainability, which was an outcome identified by Evans et al. (2017), Tate and Bals (2018), and Laukkanen and Tura (2020).

Regarding the *external outcomes*, the key research outcomes from this study revealed that the reduction of waste and community upliftment were viewed as external outcomes of social and environmental value creation, which related to the classifications by Evans et al. (2017), Tate and Bals (2018), and Laukkanen and Tura (2020) as discussed in section 2.6 of Chapter 2.

The principal theoretical conclusions on the research question on the outcomes derived from BM transformation towards sustainability revealed similarities to the literature in the following areas:

- Reduction of waste
- BM transformation

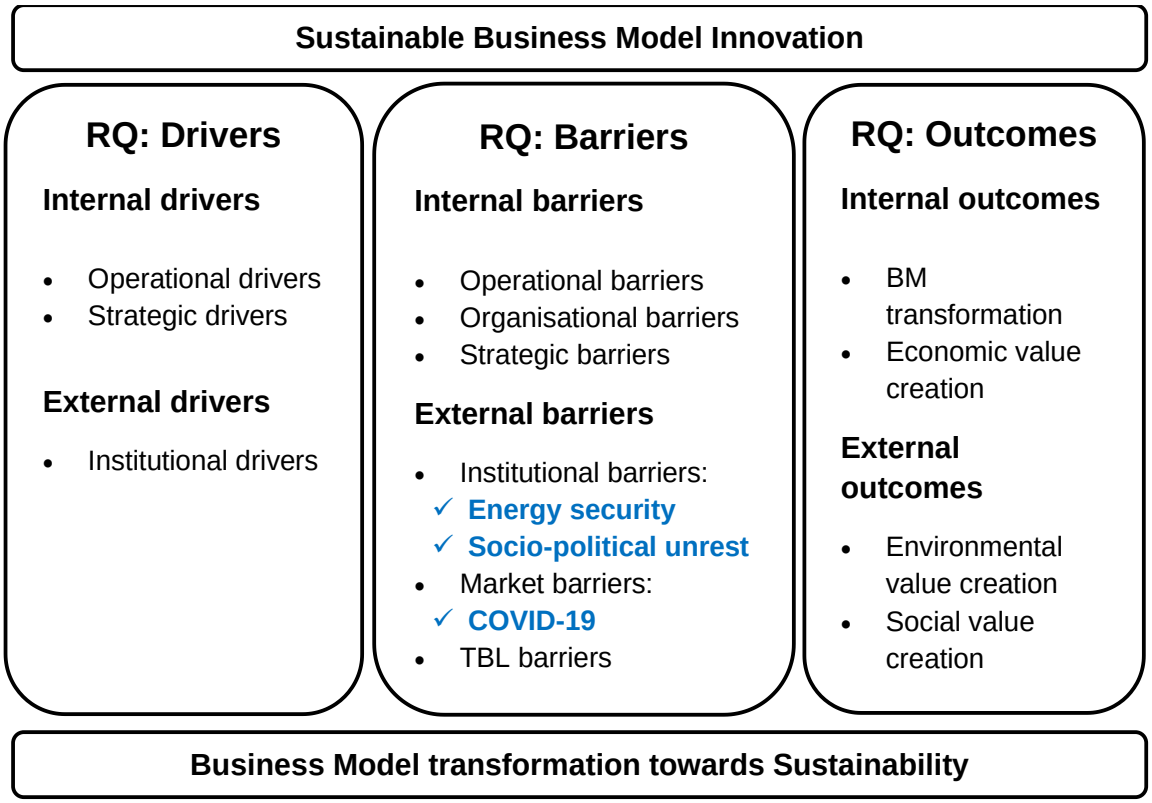
In conclusion, the main outcomes derived from BM transformation towards sustainability, based on the research outcomes from this study, were BM transformation, economic, environmental, and social value creation, as presented in Table 32.

7.1.4 Principal Theoretical Conclusions: Final Conceptual Framework on the BM Transformation towards Sustainability

The principal theoretical conclusions from this study were presented in the final conceptual framework on the BM transformation towards sustainability, as illustrated in Figure 13.

Figure 13

Final conceptual framework on the BM transformation towards sustainability based on the research outcomes



Note. Author's own, *adapted from the conceptual framework presented in Chapter 2.*

7.2 Research Contributions

This exploratory research study aimed to explore and refine the theory (Crane et al., 2016) with the purpose to make a theoretical contribution related to the SBMI literature. Based on the scope of the analysis conducted, the conclusions from this study presented consistency with the SBMI literature in the following areas:

7.2.1 Consistent with the SBMI Literature: Small Contribution to the Existing Body of Knowledge on SBMI Literature

- Internal drivers – Operational drivers
- Internal barriers – Organisational drivers
- External barriers – Market level barriers
- Internal outcomes – BM transformation

7.2.2 Nuances of Difference with the SBMI Literature: Refinements to the Existing Body of Knowledge on SBMI Literature

Three potential refinements to the literature were identified under the theoretical construct of external barriers of BM transformation towards sustainability, as depicted in blue in Figure 13 and discussed in section 6.2.2 of Chapter 6.

1. **Energy security**

The research outcome of energy security related to the institutional barrier of BM transformation towards sustainability. This barrier covered the challenges of load shedding and the high electricity tariffs in South Africa.

2. **Socio-political unrest**

The outcome of the institutional barrier of BM transformation towards sustainability related to the riots which occurred in July 2021 in South Africa.

3. **COVID-19**

The study outcome of COVID-19 related to the market level barrier of BM transformation towards sustainability. This barrier covered the negative impact which COVID-19 had on the South African economy.

These meaningful differences related to the barriers of sustainability identified in an emerging market. It was also interesting to note that these barriers occurred simultaneously within South Africa.

7.3 Recommendations for Management and Other Stakeholders

The recommendations for managers and business leaders were categorised under the theoretical constructs of the drivers, barriers, and outcomes of BM transformation towards sustainability. These recommendations were aimed to assist business leaders in *transforming* their existing BMs in order to become more sustainable, due to the increased pressure by governments and customers for an improved sustainable future (United Nations Global Compact, n.d.).

7.3.1 Recommendations: Drivers of BM Transformation towards Sustainability

- It is important for managers to get the commitment and dedication of the workforce within an organisation for the sustainability strategies to be successfully implemented.
- Furthermore, business leaders need to understand that employees play a meaningful role in contributing to the significant impact and lasting outcomes of the successful implementation of sustainability strategies.
- In addition, to increase the probability of success, managers need to develop strategic and collaborative partnerships with their local government as well as any associations, by working together to drive impactful sustainability transformation.

7.3.2 Recommendations: Barriers of BM Transformation towards Sustainability

It is recommended that managers become aware of the possible internal and external barriers to sustainability:

- Firstly, business leaders should become sustainability warriors, which should create a culture and passion for sustainability within an organisation, as many leadership teams hinder the success of the BM transformation towards sustainability.
- Secondly, managers should use the South African emerging market barriers of load shedding, socio-political instability, and COVID-19, as opportunities to innovate and reinvent their sustainability strategies. This would contribute to the positive and sustainable impact in the communities in which these businesses serve.

7.3.3 Recommendations: Outcomes derived from BM transformation towards Sustainability

- The recommendation is for managers to redefine their current BMs towards sustainability. The BM should continuously transform to align with the global call for action and the global issues related to sustainability.
- Business leaders in emerging markets need to place community upliftment as a principal objective of sustainability.

7.4 Limitations of the Research

The limitations of the entire research were identified in the following areas:

- This study explored three specific industry sectors, namely franchising, supplier, and retail organisations. Furthermore, this study was conducted in South Africa which is an emerging market.

- Therefore, the outcomes of this study specifically related to those industry sectors within South Africa.
- There were limitations in the research design and methods which were detailed in section 4.12 of Chapter 4.
- This study broadly explored the drivers, barriers, and outcomes of sustainability and did not provide in depth outcomes on any other constructs of sustainability.
- The scope of the literature in this study were confined to SBMI literature. Furthermore, academic papers on SBMI which were published during this study were not included in the literature review.

7.5 Suggestions for Future Research

During the research, the author identified possible areas for future research in the following areas:

- As this study focused on three industry sectors, other industry sectors could be selected to provide a comparative analysis by comparing those outcomes to this study's industry sectors. In addition, only one industry sector could be studied, and those outcomes could be compared to this study.
- As previous studies on SBMI were conducted in developed countries and this study was bound to organisations in South Africa, future studies could include other emerging countries.
- Future studies could also include more depth on a specific area of sustainability as this study covered a broad scope on the drivers, barriers, and outcomes of sustainability.
- The author did not have the opportunity to research the nuances of difference which were revealed in this study in more depth. These differences related to energy security, socio-political unrest, and COVID-19 as barriers of sustainability. These barriers could provide meaningful topics for future studies.

REFERENCES

Accenture. (2021). *Shaping the sustainable organization: how responsible leaders create lasting value and equitable impact for all stakeholders*.

Adams, R., Jeanrenaud, S., Bessant, J., Benyer, D., & Overy, P. (2016). Sustainability-oriented innovation: a systematic review. *International Journal of Management Reviews*, *18*, 180–205. https://doi.org/10.1111/ijmr.12068

Baldassarre, B., Calabretta, G., Bocken, N. M. P., & Jaskiewicz, T. (2017). Bridging sustainable business model innovation and user-driven innovation: a process for sustainable value proposition design. *Journal of Cleaner Production*, *147*, 175–186. https://doi.org/10.1016/j.jclepro.2017.01.081

Bell, E., Bryman, A., & Harley, B. (2019). *Business research methods* (5th ed.). Oxford University Press.

Bhattacharya, C. B., & Polman, P. (2017). Sustainability lessons from the front lines. *MIT Sloan Management Review*, *58*(2), 71–78.

Bocken, N. M. P., & Geradts, T. H. J. (2020). Barriers and drivers to sustainable business model innovation: organization design and dynamic capabilities. *Long Range Planning*, *53*(4), 101950. https://doi.org/10.1016/j.lrp.2019.101950

Bolton, R., & Hannon, M. (2016). Governing sustainability transitions through business model innovation: towards a systems understanding. *Research Policy*, *45*(9), 1731–1742. https://doi.org/10.1016/j.respol.2016.05.003

Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: state-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, *45*, 9–19. https://doi.org/10.1016/j.jclepro.2012.07.007

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Crane, A., Henriques, I., & Husted, B. W. (2018). Quants and poets: advancing methods and methodologies in business and society research. *Business and Society*, *57*(1), 3–25. https://doi.org/10.1177/0007650317718129

Crane, A., Henriques, I., Husted, B. W., & Matten, D. (2016). Publishing country studies in business and society: or, do we care about CSR in Mongolia? *Business and Society*, *55*(1), 3–10. https://doi.org/10.1177/0007650315619507

Eisenhardt, K. M., Graebner, M. E., & Sonenshein, S. (2016). Grand challenges and inductive methods: rigor without rigor mortis. *Academy of Management Journal*, *59*(4), 1113–1123. https://doi.org/10.5465/amj.2016.4004

Evans, S., Vladimirova, D., Holgado, M., van Fossen, K., Yang, M., Silva, E. A., & Barlow, C. Y. (2017). Business model innovation for sustainability: towards a unified perspective for creation of sustainable business models. *Business Strategy and the Environment*, *26*(5), 597–608. https://doi.org/10.1002/bse.1939

Foss, N. J., & Saebi, T. (2016). Fifteen years of research on business model innovation: how far have we come, and where should we go? *Journal of Management*, *43*(1), 200–227. https://doi.org/10.1177/0149206316675927

Gehman, J., Glaser, V. L., Eisenhardt, K. M., Gioia, D., Langley, A., & Corley, K. G. (2018). Finding theory–method fit: a comparison of three qualitative approaches to theory building. *Journal of Management Inquiry*, *27*(3), 284–300. https://doi.org/10.1177/1056492617706029

Geissdoerfer, M., Vladimirova, D., & Evans, S. (2018). Sustainable business model innovation: a review. *Journal of Cleaner Production*, *198*, 401–416. https://doi.org/10.1016/j.jclepro.2018.06.240

Guldmann, E., & Huulgaard, R. D. (2020). Barriers to circular business model innovation: a multiple-case study. *Journal of Cleaner Production*, *243*, 118160. https://doi.org/10.1016/j.jclepro.2019.118160

Ismail, A. G. (2020). *Here's why the business of sustainability has come of age*. https://www.weforum.org/agenda/2020/11/here-s-why-the-business-of-sustainability-has-come-of-age/

Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, *39*(8), 2255–2276. https://doi.org/10.1002/smj.2904

Khan, M., Serafeim, G., & Yoon, A. (2015). Corporate sustainability: first evidence on materiality. *Harvard Business School*, 1–34. http://nrs.harvard.edu/urn-3:HUL.InstRepos:14369106

Laukkanen, M., & Tura, N. (2020). The potential of sharing economy business models for sustainable value creation. *Journal of Cleaner Production*, *253*, 120004. https://doi.org/10.1016/j.jclepro.2020.120004

Lloret, A. (2016). Modeling corporate sustainability strategy. *Journal of Business Research*, *69*(2), 418–425. https://doi.org/10.1016/j.jbusres.2015.06.047

Lozano, R. (2018). Sustainable business models: providing a more holistic perspective. *Business Strategy and the Environment*, *27*(8), 1159–1166. https://doi.org/10.1002/bse.2059

Massa, L., Tucci, C. L., & Afuah, A. (2017). A critical assessment of business model research. *Academy of Management Annals*, *11*(1), 73–104. https://doi.org/10.5465/annals.2014.0072

McCormick, N., & Smith, J. (2021). *How business can be part of the solution to solving our nature and climate crises*. https://www.wbcsd.org/Overview/News-Insights/WBCSD-insights/How-business-can-be-part-of-the-solution-to-solving-our-nature-and-climate-crises

Rauter, R., Jonker, J., & Baumgartner, R. J. (2017). Going one's own way: drivers in developing business models for sustainability. *Journal of Cleaner Production*, *140*, 144–154. https://doi.org/10.1016/j.jclepro.2015.04.104

Richter, C., Kraus, S., Brem, A., Durst, S., & Giselbrecht, C. (2017). Digital entrepreneurship: innovative business models for the sharing economy. *Creativity and Innovation Management*, *26*(3), 300–310. https://doi.org/10.1111/caim.12227

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality and Quantity*, *52*(4), 1893–1907. https://doi.org/10.1007/s11135-017-0574-8

Sousa-Zomer, T. T., & Cauchick-Miguel, P. A. (2019). Exploring business model innovation for sustainability: an investigation of two product-service systems. *Total Quality Management and Business Excellence*, *30*(5–6), 594–612. https://doi.org/10.1080/14783363.2017.1317588

Tate, W. L., & Bals, L. (2018). Achieving shared triple bottom line (TBL) value creation: toward a social resource-based view (SRBV) of the firm. *Journal of Business Ethics*, *152*(3), 803–826. https://doi.org/10.1007/s10551-016-3344-y

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, *51*(1), 40–49. https://doi.org/10.1016/j.lrp.2017.06.007

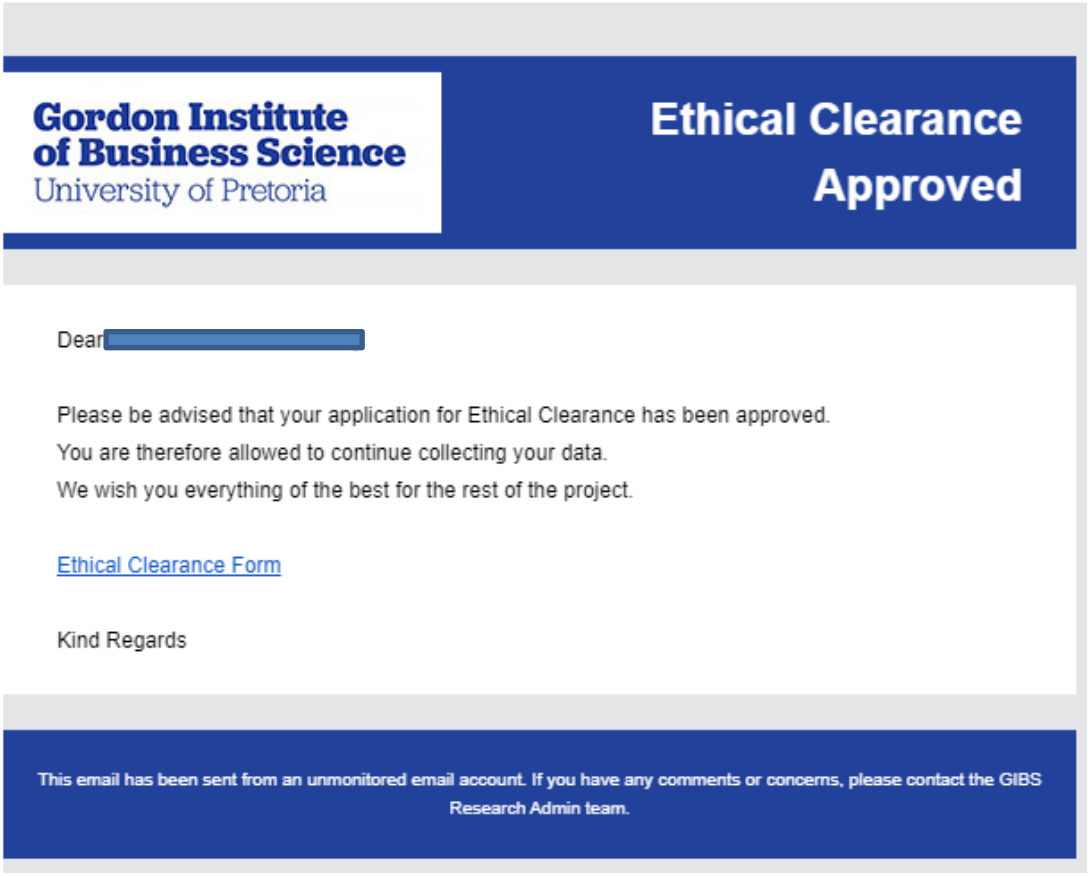
United Nations Global Compact. (n.d.). *Advancing sustainable development*. Retrieved May 30, 2021, from https://www.unglobalcompact.org/what-is-gc/our-work/sustainable-development

World Economic Forum. (2021). *Global shapers community celebrating a decade of impact: driving action to achieve the global goals*.

APPENDIX A: INTERVIEW GUIDE

Interview Guide		
Research Questions	**Research Themes**	**Interview Questions**
Background	**Introduction**	1. Please tell me about your role in the organisation. 2. Tell me how you got involved in sustainability.
Main Research Question: How does an organisation transform an existing business model for sustainable business model innovation?	**Sustainable business model innovation**	3. How is the organisation transforming towards a business that is socially, environmentally, and economically sustainable? 4. To what extent is innovation a factor?
Research sub-question: What are the outcomes from the transformation into a sustainable business model?	**The outcomes from sustainable business model innovation**	5. What are the outcomes the organisation is looking to achieve in terms sustainability?
Research sub-question: What are the enablers and drivers involved in transforming an existing business model to sustainable business model innovation?	**The enablers and drivers of sustainable business model innovation**	6. This is a question on the drivers that are moving the organisation towards sustainability, and it has two parts: a. Firstly, in your experience what are the external drivers in terms of sustainability? b. Secondly, what are the internal drivers in terms of sustainability?
Research sub-question: How does an organisation overcome the barriers involved in transforming an existing business model to sustainable business model innovation?	**The barriers of sustainable business model innovation**	7. This question is on the challenges to achieve the outcomes and it has two parts: a. Firstly, in your experience what are the external challenges to doing this? b. Secondly, what are the internal challenges to doing this? 8. In your experience, how did you overcome these challenges?
Research sub-question: What are the outcomes from the transformation into a sustainable business model?	**The outcomes from sustainable business model innovation**	9. How do you assess the outcomes from the work you are doing to move towards sustainability?
End	**Conclusion**	10. Going forward, how do you see this progressing?
Interview guidance	**Probing questions**	• Clarifying questions will be used to clarify meanings or acronyms • Probing questions will be asked if more depth in the answers is required for example: o *I wonder if you can tell me more about that* o *I wonder if you can give me an example* o *Think about a situation when there was a particular challenge and what was the outcome* o *Tell me about what you were doing - when - with whom and what happened*

APPENDIX B: ETHICAL CLEARANCE APPROVAL



Gordon Institute of Business Science
University of Pretoria

Ethical Clearance Approved

Dear [redacted]

Please be advised that your application for Ethical Clearance has been approved.
You are therefore allowed to continue collecting your data.
We wish you everything of the best for the rest of the project.

Ethical Clearance Form

Kind Regards

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.

APPENDIX C: COPY OF THE CONSENT FORM

Gordon Institute of Business Science
University of Pretoria

Informed consent for interview

Good day Participant,

I am conducting research on *Sustainable business model innovation: the drivers, barriers, and outcomes* as part of my MPHIL Corporate Strategy degree at the Gordon Institute of Business Science (GIBS) through the University of Pretoria.

Our interview is expected to last 45 minutes and will help us understand *how an organisation innovates an existing business model, to transform into a sustainable business model.*

Your participation is voluntary, and you can withdraw at any time without penalty.

By signing this letter, you are indicating that you have given permission for:

- The interview to be recorded;
- The recording to be transcribed by a third-party transcriber, who will be subject to a standard non-disclosure agreement;
- Verbatim quotations from the interview may be used in the report, provided they are ***not identified with your name or that of your organisation***;
- The data to be used as part of a report that will be publicly available once theexamination process has been completed; and
- All data to be reported and stored ***without identifiers***.

If you have any concerns, please contact my supervisor or me. Our details are provided below:

Researcher name:	Research Supervisor name: **Dr Jill Bogie**
Email:	Email:
Phone:	Phone:

Signature of participant: _____

Date: _____

Signature of researcher:

APPENDIX D: LIST OF CODES

	1st Order Codes	Themes
1	2022 Focus on sustainability	Business Model Transformation Strategic Drivers
2	2025 Sustainability goal	Business Model Transformation Strategic Drivers
3	2026 sustainability goal	Business Model Transformation Strategic Drivers
4	ATLAS.ti - Code Report	
5	Attract talent and employees	Internal Drivers
6	Awareness Campaign	
7	BARRIERS	
8	Behaviour change (2)	Internal Drivers
9	Biodegradable - straws	
10	BM Transformation - Changing our business	Business Model Transformation
11	BUSINESS MODEL TRANSFORMATION	Business Model Transformation
12	Buying behaviour	Internal Drivers
13	Children	Internal Drivers
14	Collaborate - local community	Social Value Creation Outcomes
15	Collaborate - local municipality	Social Value Creation Outcomes
16	Collocate	Social Value Creation Outcomes
17	COMMUNITY	Social Value Creation Outcomes
18	Community - put back and be a community store	Social Value Creation Outcomes
19	Community - raise community	Social Value Creation Outcomes
20	Community building	Social Value Creation Outcomes
21	Community involvement	Social Value Creation Outcomes
22	Company DNA	Internal Drivers Strategic Drivers
23	Competitor advantage	Economic Value Creation Outcomes
24	Composting	
25	Considering all stakeholders	Social Value Creation Outcomes Triple Bottom Line Barriers
26	Consumer - behaviour	External Drivers
27	Core business	Internal Drivers
28	Corporates - manage business from outside	Internal Barriers
29	Cost barriers	Triple Bottom Line Barriers
30	Cost reduction	Economic Value Creation Outcomes
31	CRM systems	Business Model Transformation
32	CSI	Social Value Creation Outcomes
33	Cultural goals	Internal Drivers
34	Culture	Internal Drivers
35	CUSTOMER	External Drivers Internal Drivers
36	Customer - experience	External Drivers Internal Drivers
37	Customer - judge you on value and not price	External Drivers
38	Customer - perceptions	External Drivers
39	Customer - pressure	External Drivers
40	Customer - support	External Drivers
41	Customer- incentivise	Economic Value Creation Outcomes Operational Drivers
42	Dashboards	Business Model Transformation
43	Developing our people	Social Value Creation Outcomes
44	Do the right thing and to do good things	Internal Drivers
45	Do we really care about our people	Internal Drivers
46	Don't use single use plastics	Environmental Value Creation Outcomes
47	Driven from the heart by people in charge	Business Model Transformation
48	DRIVERS	Internal Drivers
49	Education	Business Model Transformation
50	Employment equity targets	Environmental Value Creation Outcomes

51	Empower	Social Value Creation Outcomes
52	Energy targets	Internal Drivers
53	Environment and planet sustainability	Environmental Value Creation Outcomes
54	Environmental Warrior	Environmental Value Creation Outcomes
55	Ethics	Internal Drivers
56	External barrier - Access to recycle point	External Barriers
57	External barrier - Balance between all stakeholders	Institutional Barriers
58	External barrier - Behaviour change	External Barriers
59	External barrier - COVID	External Barriers
60	External barrier - pessimism and lack of trust	Institutional Barriers
61	External barriers	External Barriers
62	External drivers	External Drivers
63	External drivers - consumers	External Drivers
64	Fair practice manufacturing partners	Operational Drivers
65	Financial barrier	Triple Bottom Line Barriers
66	Form a community	Social Value Creation Outcomes
67	Franchisee	Institutional Drivers
68	Government - involvement	Institutional Barriers Institutional Drivers
69	Government - provide recycling facilities	Institutional Barriers
70	Green initiative certificate	Environmental Value Creation Outcomes
71	Health - customers	Social Value Creation Outcomes
72	Health - staff	Social Value Creation Outcomes
76	High electricity	External Barriers Operational Barriers
77	How will it progress - Look at first world	Institutional Drivers
78	How will it progress?	
79	How you got involved in sustainability?	
80	Immediate change	
81	Impact of material use of products	
82	Implement change from the heart	Internal Drivers
83	Importance of sustainability	
84	Importance of the community	Social Value Creation Outcomes Strategic Drivers
85	Improve the lives in South Africa	Social Value Creation Outcomes
86	Income level	
87	Independent business	
88	Independent business - manage from inside out	
89	Informal recycling in South Africa	Institutional Barriers
90	Information is key and critical	Business Model Transformation
91	Infrastructure lacking	Institutional Barriers
92	Innovation	Business Model Transformation
93	Instant gratification	Operational Barriers Operational Drivers
94	Interesting quote for external driver	
95	Interesting quote for internal driver	
96	Interesting quote for social outcomes	
97	Interesting quote for TBL barrier	
98	Internal barrier - Access to market	Operational Barriers
99	Internal barrier - communication	Internal Barriers
100	Internal barriers	Internal Barriers

101	Internal Barriers - Board level - make decisions based on what their head thinks	Triple Bottom Line Barriers
102	Internal barriers - Boardroom sitting in their heads and look at Excel sheets	Triple Bottom Line Barriers
103	Internal driver - Act responsibly in terms of sustainability	Strategic Drivers
104	Internal driver - Adding value to South Africa	Strategic Drivers
105	Internal driver - At the heart is sustainability	Strategic Drivers
106	Internal driver - Champion brand for South Africa	Internal Drivers
107	Internal drivers	Internal Drivers
108	Internal drivers - Celebrate everything South African - manufacturing and workforce	Internal Drivers
109	Internal drivers - CEO	Strategic Drivers
110	Internal drivers and Outcome - Change mindsets	Internal Drivers Social Value Creation Outcomes
111	Introduce items	
112	Keep people in mind	
113	Keep the supplier in business	Operational Drivers
114	Know their customers	
115	KPIs	Economic Value Creation Outcomes
116	Lack of service delivery	Institutional Barriers
117	Lack of sustainability in public sector and government sector	Institutional Barriers
118	Leadership team	Strategic Drivers
119	Leave a legacy	Strategic Drivers
120	Legislation	Institutional Drivers
121	Less profitable	Business Model Transformation
122	Local community	Social Value Creation Outcomes
123	Local franchisees	Social Value Creation Outcomes
124	Local government	Institutional Barriers Institutional Drivers
125	Manufacturing barriers	Technological Innovation Barriers
126	Many franchisees are better in terms of the environment - their money	Internal Drivers
127	Materials are not easily available	Operational Barriers
128	Measure output of preboom	
129	Minimise carbon footprint	Strategic Drivers
130	Minimise impact on environment in the communities	Strategic Drivers
131	Money and profits	Triple Bottom Line Barriers
132	Mphil Research Project 2021	
133	Nature and environmental conservation	Environmental Value Creation Outcomes
134	Need to create a net deficit	Strategic Drivers
135	No financial gain	Triple Bottom Line Barriers
136	Not going to be able to exist as a consumer product	Business Model Transformation
137	Offset chemical output	Environmental Value Creation Outcomes
138	Operational barrier	Operational Barriers
139	Operational driver	Operational Drivers
140	Our people	Internal Drivers
141	Out of sight, out of mind	
142	Outcome - Employment creation	Social Value Creation Outcomes
143	Outcome - no child hunger	Social Value Creation Outcomes
144	Outcome - not monetary	Economic Value Creation Outcomes
145	OUTCOMES	
146	Outcomes - measurement	
147	Outcomes - measurement - bit behind	
148	Outcomes - measurement - difficult to find a measurement model	
149	Outcomes - measurement - difficult to measure in entire supply chain	
150	Outcomes - measurement - difficulty	

151	Outcomes - measurement - easier to measure	
152	Outcomes - measurement to be held accountable	Economic Value Creation Outcomes
153	OVERCOME BARRIERS	
154	Packaging - issue / tricky	
155	Paper straws	Environmental Value Creation Outcomes
156	part	
157	Partnerships	Institutional Drivers
158	Passion form our owner	Strategic Drivers
159	People shouting how green they are but do they really care about environment or cost of electricity	
160	People want to do good & people that want to look like they are doing good	
161	Persevere	
162	PETCO	
163	Philosophy	Business Model Transformation
164	Plant spekboom	
165	Positively impact	
166	Poverty	Social Value Creation Outcomes
167	President support	Institutional Drivers
168	Pressure from media	
169	Price of recycled plastic	
170	Problem are business schools	
171	Product Sustainability	Environmental Value Creation Outcomes
172	Progress model to measure impact on the environment	
173	Proudly South African	Strategic Drivers
174	Purpose driven business	Strategic Drivers
175	Quick consumption mindset	
176	Rebate	
177	Recycle	Environmental Value Creation Outcomes
178	Recycling in SA - issue	Institutional Barriers
179	Reduce plastic and plastic footprint	Environmental Value Creation Outcomes
180	Refill containers	Environmental Value Creation Outcomes
181	Relationships	Institutional Drivers
182	Renewables	Environmental Value Creation Outcomes
183	Responsibility to be sustainable	Strategic Drivers
184	responsibility within supply chain	Institutional Drivers
185	Responsible	Internal Drivers
186	Responsible for destruction	
187	Reuse	Environmental Value Creation Outcomes
188	Risk reduction	Operational Drivers
189	Secure water sources	Operational Drivers
190	Self sufficient	
191	Share the drivers with franchisees	Institutional Drivers Triple Bottom Line Barriers
192	Shareholders	Institutional Drivers Triple Bottom Line Barriers
193	Shifting people from heads to their hearts	Strategic Drivers
194	Shop locally	
195	Shortage of raw materials	Operational Barriers
196	Simple dashboard	
197	Skills development	Economic Value Creation Outcomes
198	Social cohesion	Social Value Creation Outcomes
199	Social inequality	Institutional Drivers
200	Social media - evil with regards to sustainability	

201	Social sustainability - people / staff	Social Value Creation Outcomes
202	South Africa is not there - First world countries	Institutional Barriers
203	South Africa is opportunity filled place	Institutional Drivers
204	Staff	Internal Drivers
205	Staff - identify talent	Internal Drivers
206	Staff - judged on short term results	Triple Bottom Line Barriers
207	Staff - minimum wage	Institutional Barriers
208	Staff - nurturing	Social Value Creation Outcomes
209	Staff - promoting	Social Value Creation Outcomes
210	Staff education	Social Value Creation Outcomes
211	Staff reduce mistakes	
212	Staff reduce wastage	Operational Drivers
213	Staff retention	Internal Drivers
214	Staff training	Internal Drivers
215	Stakeholders are vast	Triple Bottom Line Barriers
216	Strain on the business model	Business Model Transformation Technological Innovation Barriers
217	Strategic driver	Strategic Drivers
218	Straws	Environmental Value Creation Outcomes
219	Suppliers	Institutional Drivers
220	Supply and demand	
221	Supply chain	Institutional Drivers
222	Support local manufacturing is a safe and responsible fashion	
223	Sustainability - shift from short term or long term focus	Strategic Barriers Triple Bottom Line Barriers
224	Sustainability is cornerstone of the business	Strategic Drivers
225	Sustainability is in our DNA	Strategic Drivers
226	Sustainable business for next generation	Business Model Transformation
227	Sustainable pricing	
228	Technology barriers	Technological Innovation Barriers
229	The purpose	Strategic Drivers
230	The values	Strategic Drivers
231	Theft	External Barriers
232	Touch the environment lightly in our supply chain	Institutional Drivers
233	Traditional business / corporates	
234	Traditional Leaders	
235	Training	
236	Transformation of individuals first	Business Model Transformation
237	Transformation of workforce	Business Model Transformation
238	Transformation targets	Social Value Creation Outcomes
239	Triple Bottom Line Barrier	Triple Bottom Line Barriers
240	Type of sustainability	
241	Unemployed women	Social Value Creation Outcomes
242	Upliftment	Social Value Creation Outcomes
243	Upliftment - bursaries	Social Value Creation Outcomes
244	Upskill	Social Value Creation Outcomes
245	Want to do good business	Strategic Drivers
246	Waste Act	Institutional Drivers
247	Waste Warrior	
248	Water stress	External Drivers
249	Water targets	External Drivers
250	What is the role of corporates?	
251	What kind of future for we want to create	
252	What's in our hearts and not in our heads	
253	Who we work with	
254	Whole business model is in essence sustainability and green model	Business Model Transformation
255	WHY sustainability?	Internal Drivers
256	Working with board level	Triple Bottom Line Barriers

APPENDIX E: CONSISTENCY MATRIX

Consistency Matrix: Methodologies used to answer the specific research questions			
Research questions	**Literature review**	**Data collection tool**	**Data analysis**
Main Research Question: How does an organisation innovate an existing business model to transform to a sustainable business model?	Geissdoerfer et al. (2018)	Questions 3 – 7 in the interview guide	Content analysis through open-ended question
Research sub-question 1: What are the enablers and drivers involved in transforming an existing business model to a sustainable business model?	Foss and Saebi (2016); Bocken and Geradts (2020); Rauter et al. (2017)	Questions 8 – 10 in the interview guide	Content analysis through open-ended question
Research sub-question 2: How does an organisation overcome the barriers involved in transforming an existing business model to a sustainable business model?	Foss and Saebi (2016); Geissdoerfer et al. (2018); Bocken and Geradts (2020)	Questions 11 – 13 in the interview guide	Content analysis through open-ended question
Research sub-question 3: What are the outcomes from the transformation into a sustainable business model?	Foss and Saebi (2016); Bocken and Geradts (2020); Tate and Bals (2018); Evans et al. (2017)	Questions 14 – 16 in the interview guide	Content analysis through open-ended question

Note. Author's own, Bocken and Geradts (2020), Evens et al. (2017), Foss and Saebi (2016), Geissdoerfer et al. (2018), Rauter et al. (2017), and Tate and Bals (2018).