

**SUSTAINABLE BUSINESS MODELS AND  
ORGANISATIONAL RESILIENCE: A CASE STUDY OF  
SPIER WINE FARM  
IN SOUTH AFRICA**

Submitted in partial fulfilment of the requirements for the degree of

**MASTER OF BUSINESS ADMINISTRATION  
(RHODES BUSINESS SCHOOL)**

at

**RHODES UNIVERSITY**

by

**KURT MARTIN VAN STADEN**

22V1951

**NOVEMBER 2024**

**Supervisor:** Professor Owen Skae

## Declaration

I declare that the mini-thesis entitled, *Sustainable Business models in the South African Context: A Case Study on Spier Wine Farm*, which I hereby submit for the degree, Master of Business Administration at Rhodes University, is my own work. I also declare that this mini-thesis has not previously been submitted by me for a degree at this or any other tertiary institution and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.



---

Kurt van Staden

## **Acknowledgements**

I would like to thank Professor Owen Skae for his encouragement and guidance during the research process. Your belief in me has inspired me to do my very best during this degree and mini-thesis.

Attending Rhodes University has been a highlight of my life and I am a proud Rhodian.

## Abstract

The aim of the mini-thesis titled: “Sustainable Business Models and Organisational Resilience: A Case Study of Spier Wine Farm in South Africa” was to explore the relationship between sustainable business models and organisational resilience. Sustainability in wine makers extends beyond wine making techniques into other areas of the wine business to include hospitality, choice of glass and selecting suppliers of grapes. Spier Wine Farm, located outside the town of Stellenbosch in the Western Cape of South Africa, has been making wine since 1692. Spier has made a concerted effort in developing a sustainability strategy and introduction of sustainability into the business model. The South African wine industry is of importance to social and environmental sustainability in South Africa, creating over 270 000 jobs.

Sustainability involves taking future generations into account when meeting the needs of the current generation, considering the triple bottom line of: environmental, social and economic value creation. The sustainable business model is thus an adaptation of a traditional business model to include creating and sustaining environmental and social value, in addition to traditional economic value. Resilience theory is centred around change in adaptive systems, focussing both on the role of change and the source of change. Making use of a deductive approach based on existing literature, a case study method allowed for an in-depth understanding of the relationship between sustainable business models and organisational resilience. Through semi-structured interviews and pattern matching data analysis, themes were identified.

The research findings determined that a causal linkage between a sustainable business model and improved organisational resilience, in the South African context is likely to exist. The key themes that were considered to be contributing to this finding were: access to more sales markets, improved brand equity, reduced staff turnover and more efficient use of resources. An interdependence between sustainable business models and organisational resilience was found to likely not exist as a causal relationship between organisational resilience and sustainable business models was not found. The findings noted that sustainability was considered a contributing factor towards organisational resilience, but the relationship is not that of dependency as other ways to become resilient exist.

Finally, it was recommended that adopting a sustainable business model is likely to lead to improved organisational resilience.

# Table of Contents

<b>DECLARATION</b> .....	<b>II</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>III</b>
<b>ABSTRACT</b> .....	<b>IV</b>
<b>CHAPTER 1: INTRODUCTION</b> .....	<b>1</b>
1.1 INTRODUCTION .....	1
1.2 SUSTAINABILITY IN THE SOUTH AFRICAN WINE INDUSTRY .....	2
1.2.1 <i>Introduction</i> .....	2
1.2.2 <i>South African wine industry's role in sustainability</i> .....	2
1.3 BACKGROUND ON SPIER WINE FARM .....	4
1.4 PROBLEM STATEMENT .....	4
1.5 RESEARCH AIM .....	5
1.6 OBJECTIVES OF THE RESEARCH.....	5
<b>CHAPTER 2: LITERATURE REVIEW</b> .....	<b>6</b>
2.1 INTRODUCTION .....	6
2.2 UNDERPINNING THEORY: RESILIENCE THEORY.....	6
2.3 SUSTAINABILITY.....	7
2.3.1 <i>Introduction</i> .....	7
2.3.2 <i>Triple bottom line</i> .....	8
2.3.4 <i>Criticisms of triple bottom line</i> .....	10
2.3.5 <i>Social sustainability</i> .....	11
2.3.6 <i>Economic sustainability</i> .....	12
2.3.7 <i>Environmental sustainability</i> .....	13
2.4 SUSTAINABLE BUSINESS MODELS.....	13
2.4.1 <i>Introduction</i> .....	14
2.4.2 <i>Traditional business models defined</i> .....	14
2.4.3 <i>Sustainable business models defined</i> .....	15
2.4.4 <i>Sustainable business model conceptual framework</i> .....	16
2.5 ORGANISATIONAL RESILIENCE.....	18
2.5.1 <i>Introduction</i> .....	18
2.5.2 <i>Organisational resilience defined</i> .....	18
2.5.3 <i>Conceptual framework for organisational resilience</i> .....	20

2.6 LINK BETWEEN ORGANISATIONAL RESILIENCE AND SUSTAINABILITY .....	21
2.7 CONCEPTUAL FRAMEWORK AND PROPOSITIONS .....	22
2.8 CONCLUSION .....	24
<b>CHAPTER 3: RESEARCH METHODOLOGY .....</b>	<b>25</b>
3.1 INTRODUCTION .....	25
3.2 RESEARCH PARADIGM .....	25
3.3 RESEARCH DESIGN .....	26
3.3.1 Introduction .....	26
3.3.2 Methodology .....	26
3.3.3 Population and sample .....	27
3.3.4 Research method .....	28
3.3.5 Data collection technique .....	28
3.3.6 Data analysis .....	29
3.3.7 Quality criteria .....	29
3.3.8 Ethical considerations .....	30
3.4 CONCLUSION .....	30
<b>CHAPTER 4: RESEARCH FINDINGS .....</b>	<b>31</b>
4.1 INTRODUCTION .....	31
4.2 RESEARCH PROPOSITIONS .....	31
4.3 CONCLUSION .....	42
<b>CHAPTER 5: DISCUSSION OF FINDINGS .....</b>	<b>43</b>
5.1 INTRODUCTION .....	43
5.2 OBJECTIVE 1: EXPLORE THE DEVELOPMENT OF ORGANISATIONAL RESILIENCE WITHIN SPIER WINE FARM. ....	46
5.2.1 Preparedness .....	46
5.2.2 Responsiveness .....	46
5.2.3 Adaptability .....	47
5.2.4 Learning .....	48
5.3 OBJECTIVE 2: EXPLORE THE DEVELOPMENT OF THE CURRENT SUSTAINABLE BUSINESS MODEL BEING EMPLOYED .....	49
5.3.1 Environmental .....	49
5.3.2 Social .....	50
5.3.3 Economic .....	51
5.4 OBJECTIVE 3: EXPLORE THE RELATIONSHIP BETWEEN SUSTAINABILITY AND ORGANISATIONAL RESILIENCE .....	52
5.4.1 Causal linkage from sustainability to resilience .....	52
5.4.2 Causal linkage from resilience to sustainability .....	53
5.4.3 Interdependence between sustainable business models and organisational resilience .....	54
5.5 CONCLUSION .....	54

<b>CHAPTER 6: CONCLUSION .....</b>	<b>56</b>
6.1 INTRODUCTION .....	56
6.2 OVERVIEW OF THE RESEARCH .....	56
6.3 SUMMARY OF THE FINDINGS .....	58
6.3.1 <i>First objective</i> .....	58
6.3.2 <i>Second objective</i> .....	58
6.3.3 <i>Third objective</i> .....	59
6.4 RECOMMENDATION .....	59
6.5 DELIMITATIONS .....	60
6.6 LIMITATIONS.....	60
6.7 CONTRIBUTION OF THE RESEARCH .....	60
6.8 RECOMMENDATIONS FOR FURTHER RESEARCH .....	61
6.9 CONCLUSION .....	61
<b>REFERENCES .....</b>	<b>62</b>

## List of Appendices

APPENDIX 1: ETHICS APPROVAL LETTER.....	75
APPENDIX 2: GUIDELINES FOR SEMI-STRUCTURED INTERVIEWS .....	76
APPENDIX 3: INFORMED CONSENT FORM.....	79

## List of figures

FIGURE 2.1: THREE CATEGORIES OF SOCIAL SUSTAINABILITY .....	12
FIGURE 2.2: TRIPLE LAYER BUSINESS MODEL CANVAS .....	16
FIGURE 2.3: SUSTAINABLE VALUE .....	17
FIGURE 2.4: FRAMEWORK FOR ORGANISATIONAL RESILIENCE .....	20
FIGURE 2.5: CONCEPTUAL FRAMEWORK.....	23

## List of tables

TABLE 5.1 LINK BETWEEN OBJECTIVES AND PROPOSITIONS .....	44
--	----

# Chapter 1: Introduction

## 1.1 Introduction

Sustainability involves taking future generations into account when meeting the needs of the current generation (Brundtland Report, 1987). Lozano and Huisingh (2011) note that sustainability promotes an alternative view to be formed where businesses focus their efforts beyond short-term financial profitability. While there are many understandings and perspectives on what sustainability is and should and include, the triple bottom line developed by Elkington (1997) is considered the most widely used (Tatham, Eisenberg and Linkov, 2013). The triple bottom line view of sustainability considers social, environmental and economic aspects of value, rather than traditionally considering economic alone (Bocken et al., 2014).

Business models are at the core of how an organisation creates and sustains value for the customer and other stakeholders (Osterwalder and Pigneur, 2010; Abdelkafi and Täuscher, 2015; Bjartmarz and Bocken, 2024). A business model refers to a simplified representation of the elements within a business and the interactions of these elements that lead to the creation of value (Geissdoerfer, Bocken and Hultink, 2016).

Sustainable business models focus on the inclusion of sustainability into business models by considering three areas of performance: social, environmental and economic (Bocken et al., 2014). “Sustainable business models (SBMs) incorporate a triple bottom line approach and consider a wide range of stakeholder interests, including environment and society.” (Bocken et al., 2014 p.42). A sustainable business model can be considered as a furthering of a traditional business model, to include creating and sustaining environmental and social value, in addition to traditional economic value (Geissdoerfer, Vladimirova and Evans, 2018).

The key thread of resilience is the ability of a system to undergo an external disruption and proceed to return to a stable state (Gunderson, 2000; Meerow, Newell and Stults, 2016).

Building on this grounding, Crichton, Ramsay and Kelly (2009) include adapting to frequently changing new risk environments as a further characteristic of a resilient organisation.

## 1.2 Sustainability in the South African wine industry

### 1.2.1 Introduction

The wine industry has not undergone the same scrutiny as some other industries have regarding their contribution towards sustainability (Christ and Burritt, 2013). However, the industry has a large role to play in environmental sustainability through water use, organic and inorganic waste, synthetic chemicals used, energy use and greenhouse gas emissions and finally ecosystem impacts (such as soil erosion, destruction of local habitats and loss of biodiversity through vineyard monocultures) (Christ and Burritt, 2013; Flores, 2018). Wine producers that place an emphasis on sustainability in their business are seen to have gained a competitive advantage as Ferrer et al. (2022) notes that sustainable wineries are growing faster than their competitors.

In a study on sustainability in Italian wine farms, De Steur et al. (2020) determine that while external drivers play a role in motivating wine farms to adopt sustainable practices, it is internal factors such as ethical behaviour that is the largest motivator. The degree of focus on sustainability of a wine farm has a positive influencing relationship between customers purchasing behaviour (Fiore et al., 2017). However, consumer demand is not considered a major driver behind the adoption of sustainable practices in the wine industry (Gabzdylova, Raffensperger and Castka, 2009).

### 1.2.2 South African wine industry's role in sustainability

Sustainability in wine makers extends beyond wine making techniques into other areas of the wine business (Benedetto and Corinto, 2015). In a study on two Italian wine farms, Benedetto and Corinto (2015) note that sustainability in wine producers extends beyond the agricultural production of wine to include hospitality, the choice of sustainable glass bottling, labelling and

marketing as well as including social factors such as being fair treatment of laborers and their families.

The wine industry is strongly affected by environmental sustainability due to its dependence on climate and soil during the grape growing process (Corbo, Lamastra and Capri, 2014). As with other agricultural businesses, the conservation of the land used to grow grapes for wine is in the best interests of the business as well as the environment, leading to a link between the territory used and conservation (Ferrer et al., 2022). The wine industry is thus directly dependent on the environment, as well as contributes in positive and negative ways to the environment (Ayuda et al., 2020).

In South Africa, wine producers are of economic importance as well as social importance through the creation of jobs in South Africa. Wine production through the entire supply chain creates 270 000 jobs in South Africa (South African Wine Industry Information and Systems, 2024) and is thus of crucial social importance in a country where the expanded definition unemployment rate including discouraged job seekers is 41.9% (Statistics South Africa, 2024). Furthermore, the wine industry in South Africa contributed R19bn of taxes in 2022 towards the state fiscus (South African Wine Industry Information and Systems, 2024). From an economic standpoint, in 2018 South Africa was the eight largest wine producer in the world (International Organisation of Vine and Wine Intergovernmental Organisation, 2019) with the wine industry totalling R56bn and 0.9% of the South African Gross Domestic Product in 2022 (South African Wine Industry Information and Systems, 2024).

South Africa has voluntary wine sustainability certification standards such as the Integrity and Sustainability Certified, with the purpose of setting a standard and ensuring sustainable practices of members (Pomarici and Vecchio, 2014). Hoemmen, Altman and Rendleman (2015) determine that a participatory approach to wine sustainability results in financially better performance for the wine producers when compared to a regulatory approach. From a business case perspective, Pomarici and Vecchio (2014) note that the costs of participation in the voluntary wine sustainability certification programmes is outweighed by the economic and environmental benefits to the wine producer.

### 1.3 Background on Spier Wine Farm

Spier Wine Farm, located outside the town of Stellenbosch in the Western Cape of South Africa, has been making wine since 1692. Spier has made a concerted effort in developing a sustainability strategy and introduction of sustainability into the business model (Spier Wine Farm, 2024). Spier is one of the largest wine production businesses in South Africa and employs roughly 487 people, producing 8 ranges of wine from various cultivars each year (Spier Wine Farm, 2024). The operations on Spier Wine Farm include a hotel, winery, restaurant and farm shop selling food produced on the farm (Spier Wine Farm, 2024). Spier has implemented several social and environmental programmes in its winery resulting in many accolades and certifications being awarded for social responsibility, environmental sustainability and biodiversity (Spier Wine Farm, 2024). Spier's sustainability focused approach to business makes it an ideal example of the development and implementation of a sustainable business model in a South African context. For this reason, it has been selected as the unit of analysis for this study.

### 1.4 Problem Statement

Traditional business models are based on how the organisation builds and transfers value to customers (Teece, 2010). As the impacts of unsustainable practices increase, such as environmental destruction or exploitative working practices, there is a growing awareness for the need for sustainability (Raworth, 2005; Rockstrom et al., 2009). Businesses exert significant influence over unsustainable production systems and consumption trends (Michaelis, 2003). Sustainability and the role of businesses in sustainability in the African context has been sparsely researched relative to developed nations, with Africa seldom featuring as the central focus (Torres-Baumgarten and Rakotobe-Joel, 2023).

Organisational resilience is the ability of a system to undergo an external disruption and proceed to return to a stable state (Gunderson, 2000). As a business, Spier has survived for 350 years, demonstrating their resilience culture (Spier Wine Farm, 2024). More recently, since

1993 onwards, Spier has adapted their business model to include sustainability (Spier Wine Farm, 2024). The South African context presents many distinct characteristics which could influence the process of sustainable business modelling in a unique manner (Heinz and O'Connell, 2013). The cost of energy and its availability, drought and ageing vineyards are some of the unique factors affecting wine farms in South Africa (PWC, 2015). Further contributing to the uniqueness of the South African context is high level of unemployment experienced (Statistics South Africa, 2024).

This mini thesis aims to critically explore how the relationship between sustainable business models and organisational resilience manifests and whether this relationship presents paradoxical dynamics.

## 1.5 Research Aim

The research aims to critically explore the relationship between the concepts of sustainable business models and organisational resilience in the South Africa context.

## 1.6 Objectives of the research

The objectives are:

1. To explore the development of the current sustainable business model being employed by Spier Wine Farm.
2. To explore the development of organisational resilience within Spier Wine Farm.
3. To explore the relationship between the outcomes of the sustainable business model being employed by Spier Wine Farm and organisational resilience within Spier Wine Farm.

## 1.7 Research question

In the South African context, how would the relationship between sustainable business models and organisational resilience be characterised?

## Chapter 2: Literature Review

### 2.1 Introduction

In this chapter, a review of the literature of sustainability, sustainable business models and organisational resilience is undertaken. Resilience theory as the underpinning theory of this mini-thesis is presented. The triple bottom line is discussed and used as a framework to better understand the components of sustainability within business models (Bocken, Boons and Baldassarre, 2019). Sustainability is explored within the context of an organisation as well as in the South African context. Environmental, social and economic sustainability are explained. Furthermore, criticisms of the triple bottom line are considered. The concept of a business model is defined and its transition to a sustainable business model is explored. The literature review considers the definitions of organisational resilience and contextualises the relationship between organisational resilience and sustainable business models. Lastly, considering the literature, a conceptual framework is developed linking sustainable business models and resilience.

### 2.2 Underpinning theory: Resilience theory

Resilience theory is centred around change in adaptive systems, focussing both on the role of change and the source of change (Gunderson and Holling, 2002). There are four main assumptions underpinning resilience theory regarding ecosystems (Gunderson and Holling, 2002). Resilience theory that stems from an ecological perspective has broadened out towards a variety of fields, and thus *ecosystems* can be considered in a broader context of organisational ecosystems (Bhamra, Dani and Burnard, 2011). The first assumption is that change within an ecosystem is episodic. It does not happen gradually at a slower pace, nor consistently at a high pace. Secondly, processes are not uniform across all scales, meaning that increasing the scale of a process is not as straightforward as an aggregation. Thirdly, ecosystems have several equilibriums across different states, that rely on both destabilising forces as well as stabilising forces. Finally, resilience theory uses the assumption that systems gradually lose resilience

through the use of fixed rules across changing contexts, requiring management to be flexible, as the ecosystem is flexible too.

Resilience theory incorporates two concepts as building blocks, namely adaptability and transformability (Folke et al., 2010). Adaptability involves the ability to absorb change and reinforce a particular trajectory by remaining within a regime. Transformability is distinct from adaptability as it refers to a system's capacity to alter course from the current trajectory or regime to another (Walker et al., 2004).

Olsson, Galaz and Boonstra (2014) note that resilience theory is particularly applicable to use when considering sustainability transformation, and as such offers an appropriate paradigm through which to explore sustainable business models. Resilience theory highlights that humanity and ecology work together in a system requiring adaptation and transformation within an adaptive cycle (Olsson, Galaz and Boonstra, 2014). Thus, learning from past experiences as well as collaboration is emphasised under a resilience theory lens (Van Breda, 2018).

## 2.3 Sustainability

### 2.3.1 Introduction

The past years of intense advancement in development and industrialisation is increasingly being acknowledged as detrimental to long term social, environmental and economic well-being (Carley and Christie, 2000; Cairns, 2004). The concept of sustainability enjoyed a significant increase in awareness and interest after the publishing of the Brundland Report in 1987 (World Commission on Environment and Development, 1987).

What sustainability efforts aim to overcome is a world-wide scenario of the tragedy of the commons (Stanton, 2012). The seminal article by Hardin (1968) coining what is termed the tragedy of the commons explains the tendency for individuals to take advantage of a finite resource where access is not managed. As a result, the resource is gradually depleted.

Sustainability is based on the preface of an abundance of commons (such as clean air and water) and where a risk of depletion of commons occurs, so too is sustainability at risk (Stanton, 2012).

The private market has a role to play in sustainability. The United Nations Sustainable Development Goals have sparked the involvement of companies in sustainable development (Florencio, Oliveira and Oliveira, 2023). However, Florencio, Oliveira and Oliveira (2023) go on to highlight that management involvement is key to integrating sustainability into the business model. Businesses, through their leadership, are increasingly participating voluntarily to contribute towards sustainability through an acknowledgement of the impact and responsibility they have toward society, for example through Life Cycle Assessments, and Sustainability Reporting (Benn, Edwards and Williams, 2018).

A variety of different sustainability frameworks can be used to describe and analyse an organisation's sustainability efforts, such as the circular economy, Blue Economy and Cradle-to-Cradle approach (Shnayder, van Rijnsoever and Hekkert, 2015). Cradle-to-Cradle is aimed at reducing waste through upcycling (Braungart, McDonough and Bollinger, 2007). The Blue Economy is a way of design thinking that includes biomimicry for design innovation to improve efficiency (Pauli, 2010).

Sustainability efforts within a business differ in focus between developed and developing markets. *Developed* markets have an over-weighting towards profitability and environmental facets of sustainability (Visser et al., 2008). This is in contrast to business sustainability efforts in *developing* markets where social issues of poverty, inequality and education are of a greater need than in developed markets (Visser et al., 2008). Nkamnebe (2011) and Huq and Stevenson (2020) propose that the current lens through which sustainability is viewed through has been tilted over time towards a developed market perspective due research focussing mostly on developed market sustainability models. As a result of the skewed lens, Nkamnebe (2011) argues that social dimension of sustainability is often overlooked and deemed as less pertinent than the economic and environmental pillars.

### 2.3.2 Triple bottom line

Sustainability involves taking future generations into account when meeting the needs of the current generation (Brundtland Report, 1987). The concept of a triple bottom line was introduced by John Elkington in the seminal book *Cannibals with Forks: The Triple Bottom Line of 21st Century Business* (Elkington, 1997). Through a triple bottom line view, sustainability involves a focus on three areas of performance: social, environmental and economic (Bocken et al., 2014), rather than economic performance alone.

Sustainability offers an alternative view to the traditional socio-economic paradigm of businesses focussing almost entirely on short-term financial profitability (Lozano and Huisingh, 2011). As the concept became more researched, an emerging lack of consensus regarding the definition and measurement of sustainability mounted a challenge to practical implementation (Phillis and Andriantiatsaholiniaina, 2001). The lack of standardised quantitative information that could be used to measure the indicators of sustainability meant that setting criteria for sustainability and determining progress was difficult (Phillis and Andriantiatsaholiniaina, 2001). The vagueness of the idea of sustainability and the complexities in its definition resulted in a slow initial implementation (Labuschagne and Brent, 2005).

The lack of consensus was particularly apparent initially in the realm of social sustainability where soft themes such as happiness were also being included alongside hard themes of reducing poverty and increasing employment (Colantonio, 2007). As a result, social sustainability was not weighted as an equal priority to environmental and economic sustainability in implementation and research until later in the 1990s (Colantonio, 2007). Historically there exist many instances where a bias towards sustainability being solely focussed on environmental sustainability can be observed (Costanza, 1999; Atkinson, 2000; Lozano, 2008).

The most widely used framework to characterise the efforts of an organisation towards achieving sustainability is the triple bottom line (Tatham, Eisenberg and Linkov, 2013). However, other views on the concept of sustainability were found in the literature. In the seminal article, Carroll (1991) regarded the components of corporate sustainability to be economic, legal, ethical and philanthropic in the form of a pyramid. Cato (2012) considered only social justice as the key criteria in assessing the efforts of an organisation towards sustainability. More recently, from 2010 onwards, there has been a snowballing of academic

research on sustainability driven in part by the need to transition toward more sustainable production and consumption as evidence of climate change and social disparities becomes clearer (Kassier, 2024).

#### 2.3.4 Criticisms of triple bottom line

In spite of its popularity, the triple bottom line is not free of shortcomings (Flammer and Bansal, 2017). Three criticisms of the triple bottom line framework are offered by Shnayder, van Rijnsoever and Hekkert (2015).

A first criticism is the difficulty in clearly quantifying efforts and impacts of the social and environmental “bottom lines” in a consistent and comparable nature (Norman and MacDonald, 2004). As a result, the reporting focus in the organisations is on sustainability input efforts as opposed to the aggregation of outcomes (Sridhar and Jones, 2013). It is thus difficult to determine the level of an organisation’s sustainability focus and achievements. This is clearly contrasted with economic sustainability, where information in financial statements can be used as a clear comparable indicator of a bottom line.

A second criticism is the use of a triple bottom line framework in sustainability reporting by organisations encourages organisations to categorise efforts into one of the three bottom lines, limiting attention on interdependence and integration (Sridhar and Jones, 2013). Companies are unintentionally achieving synergies through pursuit of improving the individual elements of the triple bottom line, and intentional synergies are being neglected (Lozano and Huisingh, 2011). This limited focus on synergies within the three bottom lines is a result of reporting that focusses on compartmentalising the three elements of a triple bottom line (Lozano and Huisingh, 2011). As such, sustainability has been criticised in several cases for being compartmentalised (Lozano, 2008).

A third criticism is offered by Flammer and Bansal (2017). The consideration of the three elements of sustainability (environmental, social and economic) as bottom lines, promotes a traditional annualised accounting and short-term mind-set, as opposed to a longer-term intertemporal view (Flammer and Bansal, 2017).

### 2.3.5 Social sustainability

Along with physical factors, social sustainability includes non-physical factors. Non-physical factors introduce difficulty in identifying and measuring progress towards social sustainability as factors like quality of life, community and social cohesion are hard to objectively measure (Eizenberg and Jabareen, 2017). Furthermore, non-physical factors are considered to be in a constant state of flux, are difficult to anticipate and are considered difficult to control (Eizenberg and Jabareen, 2017). Non-physical factors that are considered as components of developing social sustainability include (Dempsey et al., 2011, p.291):

- Education and training
- Social justice: inter- and intra-generational
- Participation and local democracy
- Health, quality of life and well-being
- Social inclusion (and eradication of social exclusion)
- Social capital
- Community
- Safety
- Fair distribution of income
- Social order
- Social cohesion
- Community cohesion (i.e. cohesion between and among different groups)
- Employment

Jabareen (2006) suggests that social sustainability can be linked to physical factors such as population density and urban greening. The physical factors can be evaluated and their success determined due to their measurability (Dempsey et al., 2011). Other physical factors of social sustainability include (Dempsey et al., 2011, p.291):

- Attractive public realm
- Decent housing
- Local environmental quality and amenity
- Accessibility (e.g. to local services and facilities/employment/green space)

Social sustainability promotes the consideration of community concerns and social equity in a business (Cirella et al., 2020). Businesses have a role to play in social sustainability within their direct contact through employees as well as the local community (Cirella et al., 2020). From the perspective of a business, social sustainability has three broad categories shown in the figure

2.1 below: learning and growth; safety and security; community development (Ajmal et al., 2018).

Figure 2.1: Three categories of social sustainability



Source: Ajmal et al. (2018, p.333)

The first source of social sustainability from a business perspective is learning and growth (education and training, job security and employment); second is safety and security (labour practices, health and safety) and finally, social sustainability considers the concerns of the external community beyond employees (Ajmal et al., 2018).

### 2.3.6 Economic sustainability

Economic sustainability is described by Cirella et al. (2020) as traditional economic practice that includes a focus on long-term financial stability and efficient use of resources. Much like in an ecological sense Goerner, Lietaer and Ulanowicz (2009) describe economic sustainability as the ability to maintain a financial system's vitality over a long period of time through the balance of efficiency and resilience. Where a system has too much efficiency through limited resilience, this leads to a brittle system that limits long-term sustainability. Furthermore, system

that is overly resilient leading to inefficiencies results in a decrease in long term sustainability (Goerner, Lietaer and Ulanowicz, 2009).

### 2.3.7 Environmental sustainability

Fatoki (2018) in the South African business context, and Geissdoerfer, Vladimirova and Evans (2018) in a global sense, describe environmental sustainability as the production of products that are considered environmentally friendly, the reduction of waste in the production and distribution process as well as the conservation of energy. Evans et al. (2017) notes the relationship between environmental sustainability efforts in a business leading to a reduction of indirect costs and promoting economic sustainability.

The entire supply chain in the production of products is considered in the concept described as the circular economy (De Angelis, Howard and Miemczyk, 2018). The circular economy is characterised by forming a closed loop flow of the product through its lifecycle by ensuring that the product enters the supply chain again as opposed to being discarded at the end of its useful life (Rashid et al., 2013). The concept of a circular economy places focus on recycling, remanufacturing or reusing a product to reduce both waste and the harmful effects associated with excessive production (Rashid et al., 2013). Along with environmental sustainability benefits, the circular economy contributes to economic and social benefits as well (Geissdoerfer, Vladimirova and Evans, 2018).

## 2.4 Sustainable business models

### 2.4.1 Introduction

A complete change in the understanding of the concept of traditional value within a business is necessary to achieve a sustainable business model (Bocken, Boons and Baldassarre, 2019). The sustainable business model is thus an adaptation of a traditional business model to include creating and sustaining environmental and social value, in addition to traditional economic value (Geissdoerfer, Vladimirova and Evans, 2018).

Incorporating sustainability into the business model through business model innovation requires a shift away from an efficiency improvement approach (reducing negative environmental and social impact) to an entirely new business model that includes value creation in three all pillars (Gorissen, Vrancken and Manshoven, 2016). Put differently, optimising a current business model to include a sustainability approach is flawed, as the traditional business model still has its primary focus on economic value. The South African context presents many distinct characteristics which could influence the process of sustainable business modelling in a unique manner (Heinz and O'Connell, 2013).

### 2.4.2 Traditional business models defined

Traditional business models are based on how the organisation builds and transfers value to customers (Teece, 2010). Osterwalder and Pigneur (2010) describe traditional business models as the process of how an organisation “creates, delivers and captures value” (Osterwalder and Pigneur, 2010, p.14). “We describe business models as simplified representations of the elements and interactions between these elements that an organisational unit chooses in order to create, deliver, capture, and exchange value” (Geissdoerfer et al., 2016 p. 1218). The common theme between these definitions is the creation of value, for customers as well as other stakeholders.

Teece (2010) considered the purpose of a business model to support the customer value proposition through providing evidence such as logic and data as well as cost and revenues for the company providing the value to the customer. Christensen, Bartman and Van Bever (2016) considers the definition of business models by Teece (2010) as the most widely accepted in

literature. The scope of what to include when analysing business models has been made difficult to define due to the broad definition of business models (Christensen, Bartman and Van Bever, 2016). Furthermore, Massa, Tucci and Afuah (2017) determine that business models could be considered to be an extension of the fields of business strategy, as opposed to a new standalone concept.

### 2.4.3 Sustainable business models defined

Using the understanding of a traditional business model, the sustainable business model is considered. As the impacts of unsustainable practices increase, such as environmental destruction or exploitative working practices, there is a growing awareness for the need for sustainability (Raworth, 2005; Rockstrom et al., 2009). Businesses exert significant influence over unsustainable production systems and consumption trends (Michaelis, 2003). Sustainable business models consider three areas of performance: social, environmental and economic (Bocken et al., 2014). “Sustainable business models (SBMs) incorporate a triple bottom line approach and consider a wide range of stakeholder interests, including environment and society. They are important in driving and implementing corporate innovation for sustainability, can help embed sustainability into business purpose and processes, and serve as a key driver of competitive advantage” (Bocken et al., 2014 p.42).

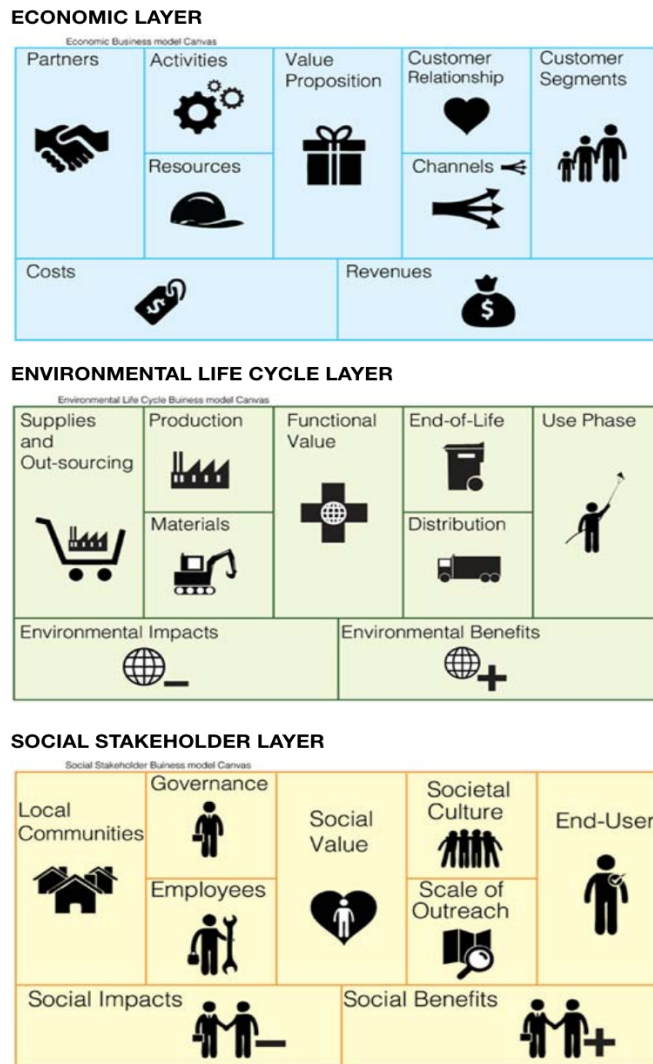
Using the understanding that traditional business models are all about creating value, the business model canvas lays out the different building blocks that can be used to create this value (Osterwalder and Pigneur, 2010):

- Customer value proposition
- Customer segments
- Customer relationships
- Sales Channels
- Key resources
- Key activities
- Partners
- Costs
- Revenues

But in a traditional business model, these levers are only used to gain economic value (profits). The transition towards a sustainable business model involves using these same levers of value,

but towards environmental value and social value as well. This is demonstrated in the triple layer business model canvas developed by Osterwalder and Pigneur (2010) demonstrated in figure 2.2 below.

Figure 2.2: Triple layer business model canvas



Source: (Joyce and Paquin, 2016, p.1478-1480)

#### 2.4.4 Sustainable business model conceptual framework

To summarise, a sustainable business model is an extension of a traditional model by considering value not only in economic terms, but also in social and environmental terms. This is demonstrated in figure 2.3 below:

*Figure 2.3: Sustainable value*

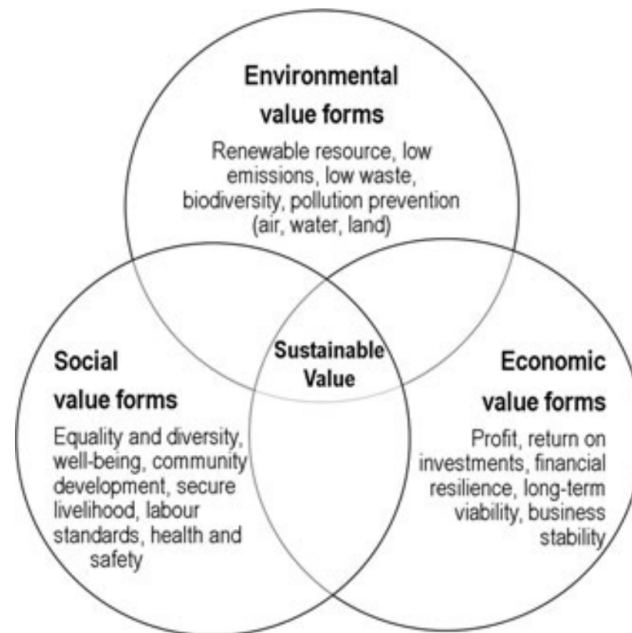


Figure 2.3

Source: (Evans et al., 2017, p.601)

In the conceptual framework developed by Evans et al. (2017), sustainable value is considered as containing economic value forms, social value forms, and environmental value forms. Economic value forms include profit, return on investments, financial resilience, long-term variability and business sustainability (Evans et al., 2017). Social value forms include equality and diversity, well-being, community development, labour standards and health and safety (Evans et al., 2017). Environmental value forms include low emissions, renewable resources, low waste, biodiversity and pollution prevention (Evans et al., 2017).

## 2.5 Organisational resilience

### 2.5.1 Introduction

The level of uncertainty and volatility in the current operating environment throughout the world brings with it new opportunities, but also demands a higher level of resilience needed to succeed (Gölgeci et al., 2020). Furthermore, businesses and organisations have been subjected to a global crisis in the form of the COVID-19 pandemic, the first of its kind since the concept of resilience started gaining popularity in literature in recent years (Paeffgen, 2022).

Resilience within organisations has become more important and relevant as sudden changes to the operating environment of a business through disruptions are no longer limited by borders (Smith and Fischbacher, 2009). Disruptions through a borderless nature are: difficult to predict; difficult to contain causing a knock-on effect that can cause more disruptions at a later stage; often have an unknown origin and an inability to determine the development and final scale of the disruption (Smith and Fischbacher, 2009).

### 2.5.2 Organisational resilience defined

Resilience as a researched topic has its roots in ecology where the concept was brought into popularity by the seminal research of Holling (1973). The concept of resilience has since spanned many fields from ecology to business and psychology, each taking a nuanced understanding (Burnard and Bhamra, 2011). In ecology, resilience has been described as the propensity for a system to maintain its primary function while being subjected to distress (Holling, 1973). In psychology, resilience is considered as an ability that can be learned and developed to bounce back after having experienced adversity (Luthans, Vogelgesang and Lester, 2006). Social resilience builds on traditional ecological understanding, but includes ongoing adjustment and anticipation of the next disturbance (Hamel and Välikangas, 2003). The key thread of resilience is the ability of a system to undergo an external disruption and proceed to return to a stable state (Gunderson, 2000). Building on this grounding, Crichton, Ramsay and Kelly (2009) include adapting to frequently changing new risk environments as a further characteristic of a resilient organisation.

The concept of organisational resilience is growing in academic popularity, but lacks clarity in definition as it is still in an undeveloped stage (Duchek, 2020). Paeffgen (2022) notes that disagreement exists between researchers on how to define organisational resilience, with no clear consensus on accepted definitions. The murky description of resilience in organisations is prefaced on the concept being focused on an outcome (bouncing back from difficulties) with little understanding of the physical process to achieve resilience (Duit, 2016). This research aims to understand the role of sustainability efforts as an element in developing a resilient business.

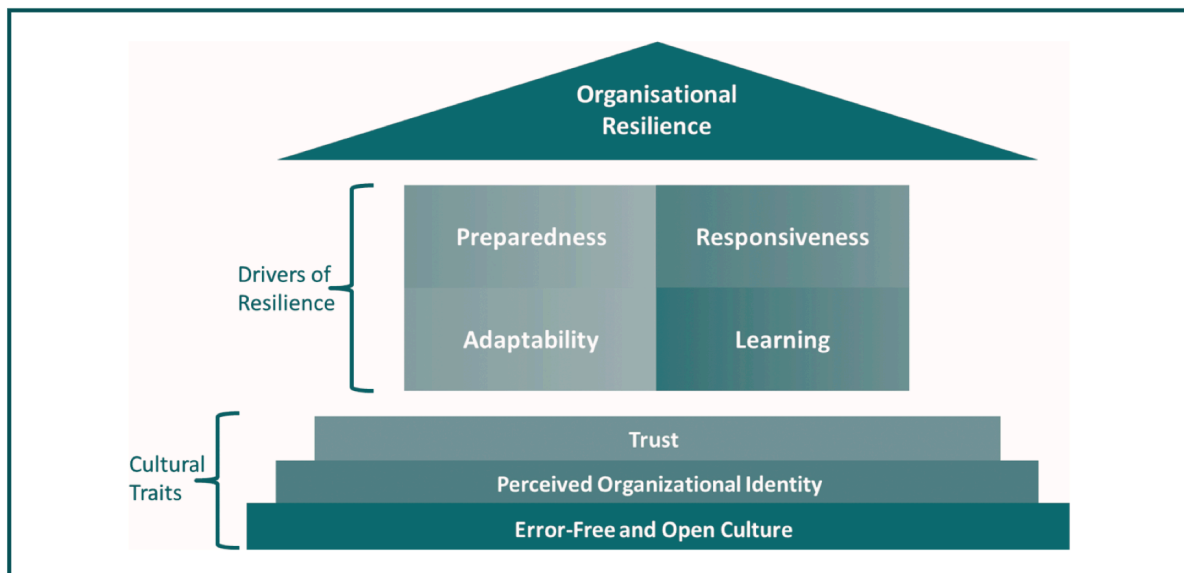
While flexibility and adaptability are ingredients necessary for a resilient organisation, they are separated from the concept resilience as they are often already a component of the organisation's capabilities in its current form in approaching daily problems (Lengnick-Hall, Beck and Lengnick-Hall, 2011). Adaptability focuses on the organisations ability to function in an externally forced, new operating environment, while resilience promotes organisational transformation from an inside-out perspective (Lengnick-Hall, Beck and Lengnick-Hall, 2011).

Ponomarov and Holcomb (2009) through a literature review describe organisational resilience both the ability to embrace both negative and positive external influences through flexibility and adaptability in order to recover from hardship and harness positive externalities. Furthermore, Youssef and Luthans (2007) focus of periods of change and uncertainty in an organisation to characterise resilience. Youssef and Luthans (2007) demonstrate that positive organisational behaviour such as flexibility, adaptation and improvisation are key characteristics of a resilient organisation.

### 2.5.3 Conceptual framework for organisational resilience

Koronis and Ponis (2009) developed a framework for organisational resilience consisting of a base of cultural traits on which drivers of resilience can be established. Three cultural traits act as the base layer of organisational resilience consists of: firstly, an error-free and open culture within the organisation, secondly the perceived organisational identity, and finally trust. The drivers of resilience that can be developed on the base of cultural traits are: preparedness, responsiveness, adaptability and learning. This is demonstrated in figure 2.4 below:

*Figure 2.4: Framework for organisational resilience*



Source: (Koronis and Ponis, 2009, p.39)

*Learning:* The ability of an organisation to learn from the experiences of other organisations as well as its own experiences of analysing problems and developing solutions is a large component of developing resilience (Koronis and Ponis, 2009).

*Responsiveness:* A resilient organisation is able respond to a challenge creatively, quickly and as well as efficiently (Crandall, Parnell and Spillan, 2010).

*Preparedness*: Planning including risk evaluations and impact predictions, as well as training for scenarios of organisational stress have a positive effect on the ability of the organisation to withstand external pressures (Koronis and Ponis, 2009).

*Adaptability*: Resilient organisations have a developed capability to change strategic course as a new reality emerges (Youssef and Luthans, 2007; Koronis and Ponis, 2009).

## 2.6 Link between organisational resilience and sustainability

Rai, Rai and Singh (2021) demonstrate that developing organisational resilience can lead to increased levels of socio-economic sustainability. Social and economic sustainability is deemed to be positively impacted by three key resilience inputs of crisis anticipation, organisational robustness and recoverability (Rai, Rai and Singh, 2021).

A directional relationship from organisational resilience contributing towards sustainability has been researched by a small number of authors (Weber, 2023a). Teixeira and Werther (2013) ascribe resilience as a building block of sustainability within an organisation. Conz and Magnani (2020) take the view that through organisational resilience, sustainability is also developed as a by-product. Fiksel, Goodman and Hecht (2014) are of a similar view and elaborate by describing that while the concepts are unique in definition, the actions and efforts taken in achieving organisational resilience and sustainability often overlap causing resilient organisations to have an increased sustainability focus.

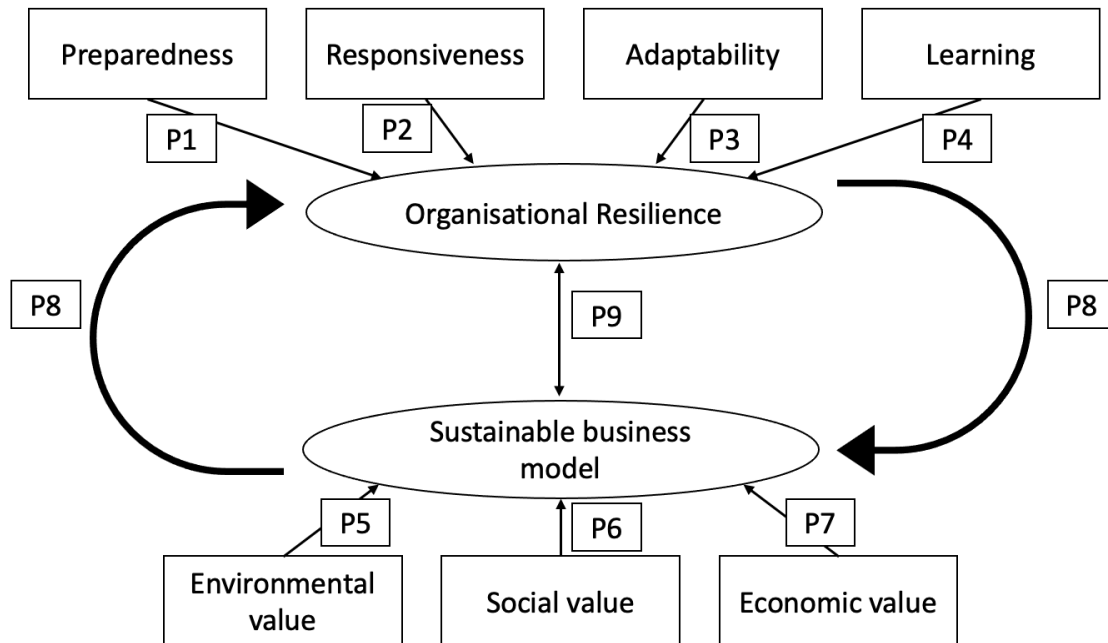
The alternate causal relationship of sustainability leading to organisational resilience is sparsely researched comprising of only a few academic studies all of which are theorized, bar one that is able to provide empirical evidence (Weber, 2023a). Ortiz-de-Mandojana and Bansal (2016) demonstrate through a large-scale quantitative study that a sustainability focus within an organisation promotes organisational resilience. The study determines this through using share prices to determine volatility, sales growth as a proxy for organisational growth and survival analysis to determine long term financial resilience. Here, the study by Ortiz-de-Mandojana and Bansal (2016) places sustainability as the primary goal that can lead to organisational resilience.

While the study by Ortiz-de-Mandojana and Bansal (2016) finds a causal linkage from sustainability to organisational resilience, the applicability remains limited for two reasons. Firstly, Ortiz-de-Mandojana and Bansal (2016) include only publicly listed companies who have access to shareholder capital that can be used to finance sustainability initiatives with an already established economy of scale. Secondly, the study is only in based on companies in the United States, which could view sustainability in a developed market lens limiting applicability to developing market countries (Nkamnebe, 2011). The limited literature investigating sustainability acting as an antecedent of organisational resilience and the lack of applicability in the developing market countries exposes a research knowledge gap this study intends to contribute toward.

## 2.7 Conceptual framework and propositions

Based on the key concepts/variables, the following conceptual framework (Figure 2.5) and proposition were generated. The generated conceptual framework combines the conceptual framework of organisational resilience by Koronis and Ponis (2009) and the conceptual framework developed by Evans et al. (2017) both discussed earlier in this chapter.

Figure 2.5: Conceptual Framework



Source: (Koronis and Ponis, 2009; Bocken et al., 2013) and author's own contribution

P1: Organisational preparedness contributes to organisational resilience.

P2: Organisational responsiveness contributes to organisational resilience.

P3: Organisational adaptability contributes to organisational resilience.

P4: Organisational learning contributes to organisational resilience.

P5: Efforts to create environmental value contributes to a sustainable business model.

P6: Efforts to create social value contributes to a sustainable business model.

P7: Efforts to create economic value contributes to a sustainable business model.

P8: There exists a cause-and-effect relationship between sustainable business models and organisational resilience.

P9: There is an interdependent relationship between sustainable business models and organisational resilience.

## 2.8 Conclusion

Resilience theory as the underlying theory for the research, is centred around change in adaptive systems, focussing both on the role of change and the source of change. Sustainability considers a triple bottom line. The relationship between these two concepts in an organisational context of a business model is not well researched and presents a gap in the literature.

## Chapter 3: Research Methodology

### 3.1 Introduction

This chapter undertakes to convey the research methodology used to conduct the research. The research paradigm through which the research is conducted is presented. The research design is discussed, consisting of: the research methodology, the selected population and sample, the research method, data collection and analysis techniques, the quality criterion used as well as the ethical considerations.

### 3.2 Research Paradigm

This research makes use of a post-positivist paradigm. Positivism focuses on knowledge that is rational and empirical (Ryan, 2006). Post-positivism makes use of the objective positivism view on knowledge, but furthers the understanding that knowledge is not always neutral and can be thought of as being socially constructed (Henderson, 2011). Moving away from what can be considered a narrow view on knowledge through positivism, post-positivism uses theory and practice in a broader view that is applied to real-world scenarios (Ryan, 2006; Henderson, 2011). Post-positivism is a deterministic paradigm where practitioners place focus on assessing and identifying the causes that influence outcomes (Creswell and Creswell, 2018). Qualitative data is seen as vital in a post-positivist paradigm as contextual or situational data is used (Henderson, 2011). Post-positivism acknowledges that human experiences vary from one person to the next and are complex, leading to multiple perspectives as opposed to a single reality (Creswell and Creswell, 2018). Dorsey and Collier (2018) note that under post-positivism bias is unavoidable, thus the researcher must try to reduce and correct any bias that appears. Finally, post-positivism has been selected as a paradigm for this mini-thesis as the context of a case study can take advantage of a paradigm that is able to include personal and professional experiences along with theoretical interpretations, while exploring a cause-effect relationship (Ryan, 2006; Creswell and Creswell, 2018).

## 3.3 Research Design

### 3.3.1 Introduction

Research design is considered by Philliber, Schwab and Sloss (1980) as a roadmap to answer four key questions: what questions to explore, the data that are appropriate to use, what data is needed to be obtained, finally how to analyse results. Case study research design is not a subset of research designs and has its own unique research design (Yin, 2014). Furthermore, “the interaction between a phenomenon and its context is best understood through in-depth case studies” (Dubois and Gadde, 2002, p. 554). To achieve this depth, this study will focus only on one case, that of the sustainable business model being employed by Spier Wine Farm. The literature on case study research design originally authored by Yin is considered as a seminal text for researchers undertaking research in a case study format (Hollweck, 2015). Yin’s (2014) case study design was adopted in this mini-thesis. In an updated edition of this seminal text, Yin (2014) identifies five elements that are particularly important in the design process of case studies. Firstly, the study’s questions; secondly, the study’s propositions; thirdly, unit of analysis considering who or what is within the context of the case study; fourthly, the logic that is used to draw the link between propositions and data; finally, criteria applied to interpret the findings from the data.

### 3.3.2 Methodology

A qualitative methodology was chosen to examine and understand the subjective experiences and understandings of participants regarding the sustainable business model employed by Spier Wine Farm and its link to organisational resilience (de Vos et al., 2011). Qualitative research is aimed at providing an understanding of a social phenomenon by studying non-numerical data regarding targeted populations or places (Punch, 2013). Qualitative research places an emphasis on the use of words as opposed to numbers, to obtain insights into people’s interpretation of their experiences (Walia, 2015). Qualitative research is used to gain knowledge on a complex, real-world phenomena that would ordinarily be difficult to analyse through an outside perspective from quantitative methods (Goethals, Sorenson and Burns,

2004). A qualitative approach is able to provide an understanding of people's perception of a concept in a natural setting at a specific moment in time (Gentles et al., 2015). Instead of taking an outside view, qualitative research takes the perspective of the population or individual that is studied to understand and interpret social phenomena (Goethals, Sorenson and Burns, 2004). As this study aimed to gain a contextual understanding of a phenomenon, a qualitative methodology was adopted to achieve this. The sources of data used in qualitative research are in a real-world and non-artificially manipulated setting (Mohajan, 2018). Gopaldas (2016) notes that qualitative research makes use of open-ended interviews that are semi-structured in nature, as well as purposive sampling based on a guideline for selection to collect and analyse data. Purposive sampling as a participant sampling technique involves the researcher using judgement of the most relevant and applicable sample of a population (Sibona, Walczak and Baker, 2020). As certain managerial employees are likely to have more specific involvement and knowledge regarding the business model as well as sustainability strategy and operations, judgement sampling as a subset of purposive sampling was conducted, using the criteria of exposure and knowledge of the business model and sustainability at Spier. Data gathering techniques used and sampling are discussed further in this chapter. As qualitative research focusses on people's perspectives, interpretations and experiences in a natural setting, it does not provide statistical analysis of empirical data but rather uses words to present analysis (Mohajan, 2018). Therefore, a deductive thematic data analysis approach was used to analyse and interpret the data collected.

### 3.3.3 Population and sample

The population for the study was all the employees at Spier Wine Farm. Purposive sampling was used in this study. Malterud, Siersma and Guassora (2016) argue that the quantity of the sample size is not the pure driver of information obtained, as the quality of the selected sample is also important. Fewer participants are needed in the sample if a high quality of relevant information is held by the selected sample (Malterud, Siersma and Guassora, 2016). As a result, purposive sampling was used to select the employees of Spier Wine Farm that were involved in operations, strategy and sustainability. Employees selected were deemed to have the most applicable knowledge on efforts of Spier Wine Farm in achieving organisational resilience and sustainability. Four employees, namely the Marketing Director, Regenerative Business Director, Human Resources Director and Cellar Master made up the sample. Case study

research making use of interviews typically require between three and sixteen interview sample participants to achieve a balance between achieving sufficient perspectives to achieve knowledge saturation while still aiming to offer individual perspectives to have a sufficient voice in the study (Smith, Flowers and Larkin, 2022). This study followed the recommendation of Smith, Flowers and Larkin (2022) to include four interview participants to allow a deeper analysis of the data, achieve a point of knowledge saturation as well as to prevent individual perspectives from being lost (Smith, Flowers and Larkin, 2022).

### 3.3.4 Research method

A deductive approach was used to carry out this study as an established theory is being tested. Research that follows a deductive research method makes use of an established theory consisting of theoretical propositions derived from the literature, that is then tested (Hyde, 2000). Deductive research makes use of a narrowing approach from the general to the particular, whereby a theory established in literature is the starting point from which propositions are determined and tested, resulting in a revising of the theory (Locke, 2007; Woiceshyn and Daellenbach, 2018).

### 3.3.5 Data collection technique

The study made use of individual, semi-structured interviews to collect data from the sample participants that consisted of pre-determined, open-ended questions. Semi-structured interviews allow for the participants' perceptions of events to be obtained and understood due to the flexible nature of the data collection method (Galletta and Cross, 2013). While a semi-structured interview offers flexibility, the underlying propositions must remain central to the formulation of questions (Pearse, 2019). Due to the flexibility offered by semi-structured interviews, the method of data collection is used frequently in qualitative studies (Kallio et al., 2016). Rubin and Rubin (2011) note that the advantage of semi-structured interviews is that it allows the interviewer to pursue a topic and ask additional questions based on the response of the participant. Semi-structured interview questions were used to collect data in this study as the method complements the deductive research methodology where propositions based on theoretical knowledge are used.

### 3.3.6 Data analysis

The method of data analysis was deductive thematic analysis. Thematic analysis involves coding and organising the transcribed data into themes and possibly sub-themes based on patterns identified within the data (Boyatzis, 1998). The technique described by Ose (2016) to code and sort the data in Excel and Word for analysis was used. The thematic process described by Ose (2016) involved separating the interview data based on key themes. Furthermore, the technique described by Pearse (2019) is then used where themes were ‘matched’ to propositions developed in the analysis of literature. In this mini-thesis, the qualitative data in the format of transcribed semi-structured interviews were analysed using deductive thematic analysis.

### 3.3.7 Quality criteria

Four key criteria are highlighted by Guba and Lincoln (1994) for evaluating the quality of data in qualitative studies, namely: credibility, transferability, dependability and confirmability. Member checking of interview data was used to ensure credibility. Member checking involves the participants reviewing the synthesised and analysed data in order to confirm whether the analysed data is an accurate representation of the reality discussed with the researcher (Harvey, 2015). This research aimed to be transferable by providing an in-depth description of the research context allowing the reader to determine whether the findings are transferable to their situation (Maher et al., 2018). Dependability was enhanced through the strategy of peer examination by the supervisor and members of Rhodes Business School academic staff providing greater integrity to the study (Krefting, 1991). Confirmability was determined by whether other researchers are able to corroborate the results from the study (Baxter and Eyles, 1997). This research made use of the audit trail method to provide confirmability and dependability. This involved preserving raw interview data, notes and records for cross-checking (Lincoln and Guba, 1985).

### 3.3.8 Ethical considerations

Since the study involved human subjects, an Ethics Application was submitted to the University's Ethics Committee for review and ethical approval was sought before the study commenced. Copies of ethics approval letters are attached in the Appendix. Informed consent was sought from all respondents involved in this study. An ethical clearance process was observed which Orb, Eisenhauer and Wynaden (2001) argue reduces potential harm to participants. Bos (2020) note that in the ethical storage of data, the following must be considered: who has access to the data, how the data can be accessed, where it will be stored and how long it will be stored for. It was deemed that only the researcher and supervisor will have access to the data, the data can be accessed by other researchers on request, the data will be stored on the researcher's digital storage system and stored for a period of five years. For this study, the ethical considerations included allowing interview participants to terminate the interview at any stage without a penalty and maintaining the confidentiality and/or anonymity of research participants (Orb, Eisenhauer and Wynaden, 2001).

## 3.4 Conclusion

This research makes use of a post-positivist paradigm that is applicable to real world scenarios like case studies where perceptions of objective reality are involved. Purposive sampling of participants from the population of managerial employees at Spier Wine Farm allowed for knowledge saturation. A deductive approach where established theory was tested. The study made use of individual, semi-structured interviews to collect data from the sample participants that consisted of pre-determined, open-ended questions. Pattern matching and the identification of themes was used to analyse the data. Credibility, transferability, dependability and confirmability were considered in establishing the quality of the data. An Ethics Application was submitted and approval received from the Rhodes University Ethics Committee.

## Chapter 4: Research Findings

### 4.1 Introduction

This chapter presents the research findings. The propositions, developed in Chapter 2 are presented. Research findings and themes based on responses by interview participants relating to the propositions are discussed.

### 4.2 Research Propositions

#### **P1 Organisational preparedness contributes to organisational resilience.**

Concerning preparedness in developing organisational resilience, the following themes emerged from the data analysis: (1) Foresight, (2) Planning, (3) Staff turnover.

All respondents noted that foresight and planning is important in developing preparedness. Respondents highlighted that being in the agricultural industry raised the importance of the availability of water for irrigation of the vineyards. The dry climate in the Stellenbosch region was noted to increase the risk of droughts that would have a serious negative effect on the ability of the farm to operate efficiently. Respondents highlighted that foresight was needed to understand the challenges that the business would face in the future. Reduced supply and availability of water was repeated as an example of the challenges that the business has faced and would continue to face over time.

Respondents followed on that planning was then needed to act on the foresight of the business. Respondents noted as an example that planning within the business involved determining the water usage required and planning the development of a grey and black water treatment system to augment the supply of water needed for irrigation of the vineyards in order to withstand drought conditions, “*..Being in farming, water scarcity is something we have had to look at with a great amount of foresight and planning...*”.

Having a low staff turnover was noted by some respondents as contributing to the preparedness of the organisation. *“A low staff turnover has helped tremendously in maintaining institutional knowledge and promoting a positive work culture that has assisted the business throughout many challenges over the years.”* It was highlighted that the experience and institutional knowledge of longer-term employees assisted in navigating the business in times of external strain.

## **P2 Organisational responsiveness contributes to organisational resilience.**

Concerning responsiveness in developing organisational resilience, the following themes emerged from the data analysis: (1) Strategy, (2) Data and Information and (3) Internal Capabilities.

During the analysis of the data, it was evident that some respondents made reference to the business strategy regarding long-term sustainability. As an example, one respondent noted the strategy regarding water management as contributing to responsiveness as there was a planned process on how to respond to various stages of water restrictions imposed during a drought *“...If the restrictions require us to reduce our water use by 10%, 20%, or 30% we are able to respond to this by knowing where and how we can source more water.”*

Having a wide variety of data and information was noted by all respondents as important for effective responses to external inputs. The effectiveness of the water strategy was partly attributed to having large amounts of data that determine the moisture levels in the soil on various places on the farm, the amount of water used in irrigation and the sources of water used for irrigation. Two respondents made reference to the use of data and information during the period where movement restrictions were imposed by the South African government as a result of COVID-19 pandemic *“...We know exactly how many people in our valley are unable to get work, how many people are employed and how many dependents there are in a family in our valley.”* This information allowed the business to support the employees and community through repurposing its vegetable farm to a vegetable garden for the community that lost

income and employees during COVID-19. “...*By repurposing our vegetable garden, we were able to support our staff by being responsive...*”.

Internal capabilities were mentioned by three respondents to be contributing towards responsiveness. The capabilities of the organisation in terms of having a nurse on staff allowed the employees to be contacted and checked on when they were showing symptoms of COVID-19 while at home during the lockdown period was noted by one respondent. Another respondent noted the repurposing of the vegetable garden during COVID-19 as being reliant on the internal capability of being able to repurpose the existing vegetable farm as well as already having the vegetable farm.

### **P3 Organisational adaptability contributes to organisational resilience.**

Concerning adaptability in developing organisational resilience, the following themes emerged from the data analysis: (1) Flexibility, (2) Understanding the environment.

Two respondents noted flexibility as a key contributor to the adaptability of the business. An example given referred to the process of sourcing grapes whereby the business sources a large portion of the grapes used for the wine making process from other grape farmers. The ability to purchase grapes allowed the business to be able to change the quantity, quality and type of grapes as needed by the wine making process. It was noted that the business is then adaptable to changes in preferred types of wine by consumers. One respondent considered the flexibility that purchasing grapes brings as a source of resilience through periods of drought: “...*buying grapes provides added resilience of being able to select the ideal quality grapes from all over. This gives us flexibility and the ability to withstand droughts better...*”.

Understanding the environment in which the business operates was noted by all respondents in developing resilience. Through the data analysis it was clear that the environment that respondents referred to was encompassing of all stakeholders. For example, some respondents made note of the complex social environment in which business operates due to historical

injustices in South Africa. Other respondents considered the land and soil as crucial to the long-term performance of the business.

The commercial aspect of wine sales was another example given by some respondents whereby understanding the environment of the consumer led to improved adaptability in the business. One respondent gave the example where the business-to-business relationship of exporting wines to Europe and the United Kingdom had shifted to start including sustainability disclosures. “...*the business-to-business relationship where tender and business transaction requirements are starting to include requirements on sustainability and sustainability reporting in order to transact, particularly in Europe and the UK...*”. The respondent noted the understanding of the export environment allowed the business to adapt more easily to the changing requirements.

#### **P4 Organisational learning contributes to organisational resilience.**

Concerning learning in developing organisational resilience, the following themes emerged from the data analysis: (1) Innovation strategy, (2) Staff turnover.

All respondents noted the contribution of the innovation-adoptive strategy towards the resilience of the business. The data analysis demonstrated that all respondents considered the business as often amongst the first to implement various methods specifically under sustainability. “...*The business is very quick to adopt new innovations that are used to promote sustainability that have made the business more resilient. For example, we were well ahead of our competitors to already have a grey and black water treatment plant irrigating the vineyards in 2007 that has greatly assisted the farm in dealing with droughts...*”. The strategy to act quickly on innovations that have been implemented in other businesses and on other farms was noted as a key source of long-term resilience through learning from other businesses.

Some respondents considered reduced staff turnover, that resulted from a focusing on creating social value within the organisation, as a source of resilience. One respondent noted a low staff turnover led to increased retention of organisational learning that had been gained by operating over many years.

## **P5 Efforts to create environmental value contributes to a sustainable business model.**

Concerning environmental value in developing sustainability, the following themes emerged from the data analysis: (1) Company culture, (2) Strategy, (3) Understanding environment and (4) Data and information.

All respondents noted a strong company culture regarding environmental sustainability. The analysis of the data showed a concerted effort within the business to establish and maintain the culture of sustainability. Respondents noted that the business used the employee induction process to demonstrate to new employees the sustainability efforts underway on the farm. Furthermore, new employees are taken to the local landfill site to provide greater understanding and context for the need to operate a business sustainably. It was also noted that a decentralised approach to environmental sustainability was taken whereby each employee was involved in improving the environmental sustainability of the business within their scope of work: *“...sustainability is so entrenched into our daily roles in the business that we have included it in the scorecards for our employees...”*

Strategy was noted by all respondents as a significant contributor to develop the environmental sustainability of the business. All respondents made reference to the strategic shift away from environmental sustainability towards “regenerative” farming. One respondent elaborated on the regenerative process: *“...The soils on the farm were damaged for many years prior to the purchase of the farm. We had to really focus on improving the ecosystem of the land which went beyond preventing further damage and began to focus on a regenerative programme...”* The regenerative strategy was noted to have significant improvements in soil health and water retention leading to greater quality and quantity of grapes. The strategy of environmental sustainability was set out from the beginning of the current ownership, where one respondent

noted there was a very clear directive from the owner that the business when it was purchased in 1993 must make a difference, socially, environmentally and financially.

Understanding the environment in which the business operates in was a theme determined in the data analysis regarding environmental sustainability. One respondent noted that the very nature of the business, being in the agricultural industry, encouraged additional efforts toward developing an environmentally sustainable business as it is the area where the business has the ability to make the greatest change. One respondent noted “...*The ecosystem has a large impact on the business as we are a farming business, as such we place an emphasis on the regeneration of the land and ecosystem...*” The data analysis showed that there was a distinct awareness of the impact the business has on the land through water usage and ecosystem impact.

All the respondents noted data and information as contributing towards environmental sustainability. Each of the respondents made reference to different efforts of the business towards environmental sustainability where data and information contributed. One of the respondents noted goal setting was assisted through information and data where the business undertook to have zero waste produced from the farm. The respondent noted that between 95%-98% of waste is recycled and the remainder is sent to a waste to energy plant. One other respondent noted the use of data in allowing an understanding of the water and emissions on a product level, allowing more accurate goals to be set: “*we initially determined and worked toward a pure reduction target for the business. The problem with this is that the business was growing, so we started focussing on a per product level reduction*”. One of the respondents also noted the contribution of data to environmental sustainability through increased efficiency in the timing around undertaking energy and water intensive processes where demand of electricity and water can be better matched with natural supply, for example through solar panels producing electricity during peak sunlight.

#### **P6: Efforts to create social value contributes to a sustainable business model.**

Concerning social value in developing sustainability, the following themes emerged from the data analysis: (1) Data and information, (2) Understanding environment,

Respondents all made the distinction between the community at large where the farm is situated in and the direct employees of the farm. A strategy and clear goals were set when considering the social impact of the business on the community in which the farm operates. For example, one respondent noted “...we defined a clear goal of achieving zero unemployment in our valley..”. The use of data and information was considered by respondents as key to enabling a goal to be set: “...we know exactly how many people in our valley are unable to get work, how many people are employed and how many dependents there are in a family in our valley...”. One respondent noted the business was able to adopt a targeted approach to empowering and educating people based on data and information: “...for those who are simply unable to obtain a job, food parcels were delivered...”.

A theme that emerged during the data analysis as contributing to social sustainability was understanding the environment in which the business operates in. Some respondents made reference to South Africa’s troubled past when considering the environment in which the business operates, “...we need to play our part by paying employees living wages and equipping and upskilling them for a better life...”. Taking the past into account, the respondents all noted that the business made use of extensive internal and external research into determining a fair living wage for the local area, which it paid the entry-level employees. It was also noted that the fair wage determined was significantly higher than the minimum wage required to be paid by law. The data analysis indicated that the business was considered by respondents to understand that the learning and well-being needs of the employees differed in each employees’ circumstance. This understanding was noted to lead to an ‘individual learning spend’ being introduced. One respondent noted the purpose of the learning spend to specifically address the unique needs of each staff member, such as paying for their children’s school fees, or courses “...we pay directly to staff members to use for their own personal development, health or well-being...”.

#### **P7 Efforts to create economic value contributes to a sustainable business model.**

Concerning economic value in developing sustainability, the following themes emerged from the data analysis: (1) Strategy, (2) Integration.

Some of the respondents made reference to the strategy for the winery business unit to be cashflow positive in order to be financially sustainable over a long period. One respondent noted the difficulty of achieving financial responsibility while withstanding the initial expenses of setting up environmental and socially sustainable systems within the business. The respondents all noted that the long-term view that the business takes requires economic value to be added to be able to continue sustainable practices “*...as with any business decision the cost-benefit needs to be taken into account...*”. Some respondents also noted the importance of economic sustainability in providing social sustainability as the business was noted to indirectly employ thousands of employees who rely on the business for their livelihood, placing pressure on the business to financially sustain itself.

The data analysis performed indicate that respondents believe an integration between economic with social and environmental sustainability contributes to economic sustainability. One respondent made reference to the integrated nature of the sustainability journey: “*...we don't look at any of the work that we do in terms of impact work as separate to the core functioning of the farm...*”. The integrated nature of economic sustainability was noted by some respondents by way of example whereby social and environmental sustainability efforts within the business are still operated within a budget and included in the financial modelling of the business, “*...both the additional revenues and cost savings from developing a sustainable business, as well as including the costs of the transition are included in our financial models...*”.

**P8 There exists a cause-and-effect relationship between sustainable business models and organisational resilience.**

Concerning the cause-and-effect relationship between sustainable business models and organisational resilience, the following themes emerged from the data analysis: (1) Sales markets, (2) Brand equity, (3) Staff turnover and (4) efficient use of resources.

Data analysis revealed that all respondents agreed with the unidirectional relationship experienced whereby adopting a sustainable business model has resulted in a more resilient business and could easily provide examples and support of the causal relationship.

When considering the impact on sales the respondents noted a distinct difference between business to customer and business to business sales. Most respondents noted that the effect that sustainability has on sales is marginal. It was noted by these respondents that on a direct-to-consumer basis, the impact that adopting a sustainable business model has on sales is marginal. *“Price as well as quality, which is mostly determined by awards, are the two key drivers of the purchasing decision of consumers”*.

However, the impact on business-to-business is noted to be different. One respondent referred to the business-to-business relationship where tender and business transaction requirements are starting to include requirements on sustainability and sustainability reporting in order to transact, particularly in Europe and the UK. *“...by opening new sales channels and diversifying the market the business is increasing its organisational preparedness and improves its resilience...”*. One respondent noted the implementing sustainable business model allowed access to certain markets that would not be accessed otherwise: *“...the retailers that we sell our wines from, such as Woolworths in South Africa require a lot of reporting to be done on our social and environmental efforts...”*. Furthermore, the respondent noted that the international markets are particularly interested in human rights and how it is promoted within their business. The respondent made the link to resilience improvements by noting that adopting a sustainable mindset and strategy, the farm was able to access markets that are more restrictive *“diversifying our sales markets improves resilience if we were to lose access to a market for example”*.

The data analysis revealed that respondents felt that brand equity was improved through the adoption of sustainable business practices. *“...The sustainability measures undertaken on the farm and in the business has had a massive positive impact on brand equity...”*. The link between sustainability and resilience was considered by one respondent who noted that brand equity has contributed to the resilience of the business through providing a more loyal customer amongst other typical benefits from a strong brand equity.

Social programmes that the business has introduced such as the individual learning spend where employees are given money to spend on their learning and well-being, work done around determining a local area living wage, contributing financially as well as being involved in the

local communities where the employees live, has resulted in a theme of very low staff turnover that was noted by all respondents. “...*We haven’t experienced any staff that have left apart from retiring in over ten years...*” One respondent attributed this to an additional sense of pride and purpose that comes with working in a regenerative environment. Some respondents linked the low staff turnover to organisational resilience through being able to maintain a stronger company culture and have a larger maintenance of institutional knowledge.

All respondents referred to the efficient use of input resources contributing to the cause-effect relationship between sustainable business models and organisational resilience. Respondents noted the water saving and treatment measures undertaken on the farm and the positive effect that this has had on business resilience. One respondent noted that the farm makes use of a natural water treatment plant which allows the treatment of black and grey water for use in irrigation on the farm. The theme of efficient use of resources was linked to improving organisational resilience by some respondents who noted the water treatment plant was built many years before the major 2017 drought was experienced and added significant business resilience as vineyards were able to receive water that would not have been possible without these measures, “...*mitigating the impact on grape quantity and quality to an extent...*”.

Some respondents also considered the soil input towards grape production. Regenerative farming that pays attention to the health and restoration of the soil was highlighted as a key source of resilience in the business through improved yield and quality. “...*higher yields and better-quality grapes experienced on our farms due to our regenerative efforts which naturally offers financial reward...*”. Respondents also noted that the accumulated knowledge built up in the business on regenerative farming is shared to suppliers to show the efficacy of adopting regenerative farming and encourage regenerative farming amongst grape suppliers.

However, the inverse relationship of adopting a strategy focussing on organisational resilience resulting in greater sustainability was not experienced by any of the respondents. One respondent noted that organisational resilience may be achieved at the expense of others, for example “...*drawing excessive water during a drought may achieve organisational resilience but will negatively affect the community...*”.

**P9 There is an interdependent relationship between sustainable business models and organisational resilience.**

The respondents differed in their perceptions of the interdependence between sustainable business models and organisational resilience experienced in the business.

One respondent noted that while the outcomes of adopting a sustainable business model and developing a resilient organisation overlap, their relationship is not that of a dependency. “...*Sustainability has been a source of resilience as our business really grew and became more stable as we put measures in place to help people in the business, in the community and the land...*”. However, resilience was not considered a pre-requisite to achieving a sustainable business model by the respondent. Respondents noted that sustainability was a contributing factor towards organisational resilience, but the relationship is not that of dependency.

In a differing view, other respondents considered that within the agricultural context, organisational resilience was seen as reliant on sustainability. “...*if we continue to damage, damage, damage we won't have a primary product, because we won't be able to produce wine very well...*”. The respondents noted the reliance of the business on the environment in order to function in the future.

No respondents felt that sustainability in the business was reliant on establishing organisational resilience. The data analysis showed that the respondents felt there was no causal linkage determined where resilience contributes to sustainability, thus one way dependence of sustainability relying on resilience could not exist. Respondents noted that sustainability was a contributing factor towards organisational resilience, but the relationship is not that of dependency as other ways to become resilient exist. “...*resilience places an emphasis on the survival of the business financially, which can be supported through sustainability especially in farming that is dependent on the land and workers...*”

## 4.3 Conclusion

In this chapter the findings relating to the research propositions were presented. The data was interpreted through methods described in Chapter 3, in order to develop themes within responses relating to the propositions. Certain themes like strategy and understanding the environment link through a number of propositions. Chapter 5 discusses these findings.

## Chapter 5: Discussion of findings

### 5.1 Introduction

This chapter discusses the research findings presented in Chapter 4 in greater detail, in line with the research objectives presented in Chapter 1 and the research propositions presented in Chapter 2.

The aim of the study was to critically evaluate the relationship between the concepts of sustainable business models and organisational resilience in the South Africa context. In order to do so, three key objectives of the study were determined.

The objectives of the research were as follows:

1. To explore the development of the current sustainable business model being employed by Spier Wine Farm.
2. To explore the development of organisational resilience within Spier Wine Farm.
3. To explore the relationship between the outcomes of the sustainable business model being employed by Spier Wine Farm and organisational resilience within Spier Wine Farm.

All three objectives are discussed individually in this chapter.

The propositions as set out in Chapter 2 are as follows:

- Proposition One (P1): Organisational preparedness contributes to organisational resilience.
- Proposition Two (P2): Organisational responsiveness contributes to organisational resilience.
- Proposition Three (P3): Organisational adaptability contributes to organisational resilience.
- Proposition Four (P4): Organisational learning contributes to organisational resilience.

- Proposition Five (P5): Efforts to create environmental value contributes to a sustainable business model.
- Proposition Six (P6): Efforts to create social value contributes to a sustainable business model.
- Proposition Seven (P7): Efforts to create economic value contributes to a sustainable business model.
- Proposition Eight (P8): There exists a cause-and-effect relationship between sustainable business models and organisational resilience.
- Proposition Nine (P9): There is an interdependent relationship between sustainable business models and organisational resilience.

The table below demonstrates the link between the objectives of the mini-thesis and the propositions developed:

*Table 5.1 Link between objectives and propositions*

Objective	Proposition
To explore the development of organisational resilience within Spier Wine Farm.	<p>Proposition One (P1): Organisational preparedness contributes to organisational resilience.</p> <p>Proposition Two (P2): Organisational responsiveness contributes to organisational resilience.</p> <p>Proposition Three (P3): Organisational adaptability contributes to organisational resilience.</p> <p>Proposition Four (P4): Organisational learning contributes to organisational resilience.</p>

<p>To explore the development of the current sustainable business model being employed by Spier Wine Farm.</p>	<p>Proposition Five (P5): Efforts to create environmental value contributes to a sustainable business model.</p> <p>Proposition Six (P6): Efforts to create social value contributes to a sustainable business model.</p> <p>Proposition Seven (P7): Efforts to create economic value contributes to a sustainable business model.</p>
<p>To explore the relationship between the outcomes of the sustainable business model being employed by Spier Wine Farm and organisational resilience within Spier Wine Farm.</p>	<p>Proposition Eight (P8): There exists a cause-and-effect relationship between sustainable business models and organisational resilience.</p> <p>Proposition Nine (P9): There is an interdependent relationship between sustainable business models and organisational resilience.</p>

Source: (Author's own contribution)

## 5.2 Objective 1: Explore the development of organisational resilience within Spier Wine Farm.

Koronis and Ponis (2009) consider four drivers of resilience: preparedness, responsiveness, adaptability and learning.

### 5.2.1 Preparedness

Planning including risk evaluations and impact predictions, as well as training for scenarios of organisational stress have a positive effect on the ability of an organisation to withstand external pressures (Koronis and Ponis, 2009). Findings within the data indicate multiple instances of preparedness, for example respondents noted: “*..In 2008 we put in a black and grey water treatment plant where water was recycled back into certain areas on the farm. This paid off tremendously when we experienced the Western Cape drought in 2017 that saw the City of Cape Town days away from running out of water...*”. Key themes that emerged were foresight, planning and staff turnover. Most frequently mentioned among respondents were the themes of planning and foresight within the business contributing to organisational preparedness. “*..Being in farming, water scarcity is something we have had to look at with a great amount of foresight and planning...*”.

The themes appearing from the data analysis are in-line with the literature. Koh et al. (2024) refer to business continuity planning as an essential component of developing organisational resilience. The theme of foresight noted by respondents within the business contributing to organisational resilience is in-line with the literature that considers foresight and the ability to introduce this foresight into business model adaptations within a business as a vital component of developing organisational resilience (Granig and Hilgarter, 2020).

### 5.2.2 Responsiveness

A resilient organisation is able respond to a challenge creatively, quickly and as well as efficiently (Crandall, Parnell and Spillan, 2010). The findings indicate multiple instances of

responsiveness within the organisation. Key themes identified in the data leading to the development of responsiveness were data and information and strategy.

The ability to respond is considered one of the key elements of building a resilient business (Granig and Hilgarter, 2020). Granig and Hilgarter (2020) note that an effective response to external disturbance includes detection, recognition and assigning rating of the external disturbance. The major theme of data and information determined during the data analysis is in line with the literature regarding effective responses as the respondents noted the use of data in determining the extent of the disturbance. For example, the respondents noted that “*..If the restrictions require us to reduce our water use by 10%, 20%, or 30% we are able to respond to this by knowing where and how we can source more water.*” Data and information were also used to support a resilience strategy formulation within the business.

### 5.2.3 Adaptability

When considering adaptability, resilient organisations are considered to have a developed capability to change course as a new reality emerges (Youssef and Luthans, 2007; Koronis and Ponis, 2009). The findings indicate multiple instances of adaptability within the organisation. Key themes leading to the development of adaptability were flexibility and understanding the environment.

Understanding the environment in which the business operates was identified as a major theme in developing adaptability for resilience. As an example, it was noted that an awareness of the gradually changing environment of sustainability reporting assisted in opening and maintaining wine export markets to Europe and the United Kingdom. “*..the business-to-business relationship where tender and business transaction requirements are starting to include requirements on sustainability and sustainability reporting in order to transact, particularly in Europe and the UK...*”. This is in line with the literature that notes a fundamental understanding of the operating environment of the business assists in developing adaptive capacity (Verreynne, Ford and Steen, 2023).

Flexibility within the business also emerged as a key theme in the data analysis contributing to adaptability. Respondents noted as an example their flexibility that was developed by the

decision to purchase grapes “...*buying grapes provides added resilience of being able to select the ideal quality grapes from all over. This gives us flexibility and the ability to withstand droughts better...*”. The findings are in line with literature where Ambulkar, Blackhurst and Grawe (2015) note the flexibility of being able to manage and reconfigure resources is seen as essential in developing an adaptive capacity needed for resilience.

#### 5.2.4 Learning

The ability to learn from the experiences of other organisations as well as its own experiences of analysing problems and developing solutions is a large component of developing resilience (Koronis and Ponis, 2009). The findings indicate multiple instances of learning within the organisation. Key themes leading to the development of organisational learning were: adopting an innovative strategy, and staff turnover.

Adopting an innovative strategy was identified as a key theme from the data. The respondents noted that part of the business strategy was to adopt innovation that has been in the industry. For example “...*we were well ahead of our competitors to already have a grey and black water treatment plant irrigating the vineyards in 2007 that has greatly assisted the farm in dealing with droughts...*” This is in line with the literature that makes reference to innovation as a positive influencer of organisational resilience, largely through the increased adaptive capacity that is developed (Mafabi, Munene and Ntayi, 2012).

It was noted by respondents that a low staff turnover in the business led to contributed to a retention of organisational learning that had been gained by operating over many years. This is in contrast with the literature that considered employee retention to have no effect on organisational resilience (Bouterraa and Bouaziz, 2023). While employee skills development and talent succession were noted to positively impact organisational resilience, employee retention had no effect (Bouterraa and Bouaziz, 2023).

## 5.3 Objective 2: Explore the development of the current sustainable business model being employed

Through a triple bottom line view, sustainability involves a focus on three areas of performance: social, environmental and economic (Bocken et al., 2014), rather than economic performance alone.

### 5.3.1 Environmental

The entire supply chain in the production of products is considered in the concept described as the circular economy (De Angelis, Howard and Miemczyk, 2018). The wine industry is strongly affected by environmental sustainability due to its dependence on climate and soil during the grape growing process (Corbo, Lamastra and Capri, 2014). The wine industry through a wider view of the entire wine making process, is not without negative impact on the environment. This is due to the use of energy during the wine production process, water and pesticides for grape growing and the wider carbon footprint of transportation (Ayuda et al., 2020). The wine industry is thus directly dependent on the environment, as well as contributes in positive and negative ways to the environment (Ayuda et al., 2020).

Measuring environmental sustainability can be difficult (Phillis and Andriantiatsaholiniaina, 2001). However, Christ and Burritt (2013) developed environmental indicators that can be used in the wine farm context to establish environmental concerns. Among these indicators are: water use, organic and inorganic waste, synthetic chemicals used, energy use and greenhouse gas emissions and finally ecosystem impacts (such as soil erosion, destruction of local habitats and loss of biodiversity through vineyard monocultures).

The findings indicated multiple instances of efforts contributing to the development of environmental sustainability within the business. The data analysis demonstrated key themes leading to the development of environmental value were: adopting a company culture, strategy, understanding environment, data and information.

The establishment and maintenance of a sustainability-embracing company culture and strategy emerged as a well-supported theme during the data analysis. Programmes aimed to demonstrate the need to adopt a sustainable business mindset are carried out during employee induction, for example employees are taken to the local landfill site. Furthermore, the environmental sustainability is seen as so embedded into the culture that it is included in employee scorecards to promote individual employees taking ownership of their environmental impact. This is in-line with the literature that notes integrating an environmental culture within a company is likely to lead to improved outcomes and adoption of environmental sustainability practices (Ajibike et al., 2021).

Data and information emerged as a major theme contributing to environmental sustainability. Respondents noted the business measuring and monitoring the waste disposal, water consumption and sources, electricity generation and usage on a per product level leading to improved environmental sustainability. “...*the ecosystem has a large impact on the business as we are a farming business, as such we place an emphasis on the regeneration of the land and ecosystem...*” The contribution to sustainability was noted to emerge from the improved efficiencies in the business such as water recycling. This is in line with the literature that notes the use of data to improve efficiencies within business operations to improve sustainability (Ordieres-Meré, Prieto Remón and Rubio, 2020).

### 5.3.2 Social

Social sustainability promotes the consideration of community concerns and social equity in a business (Cirella et al., 2020). Businesses have a role to play in social sustainability within their direct contact through employees as well as the local community (Cirella et al., 2020). The findings indicated multiple instances of efforts contributing to the development of social sustainability within the business. The data analysis demonstrated key themes leading to the development of social value were: understanding environment, and data and information.

The findings show that a major theme was the use of data and information to better understand and the community and employee needs. This was noted to provide a more targeted approach to uplifting and empowering employees, contributing to the business’ social value added. “...*by using this information we can have a targeted approach to empowering and educating*

*people...*” The data and information were noted to be used within the social context in which the business operates. For example, taking the past into account, the respondents all noted that the business made use of extensive internal and external research into determining a fair living wage for the local area, which it paid the entry-level employees.

Having an understanding of the operating environment contributes to social value added, as noted in the data, is in line with the literature. Baumgartner (2014) note that companies face different requirements and needs for sustainable development based on contextual factors that include the general business environment, sector specific and stakeholder specific contexts. Understanding the context in which the business operates is noted to be important to understand the level of strategic importance sustainability is to the company (Baumgartner, 2014).

### 5.3.3 Economic

Economic sustainability is described by Cirella et al. (2020) as traditional economic practice that includes a focus on long-term financial stability and efficient use of resources. Economic value forms include profit, return on investments, financial resilience, long-term variability and business sustainability (Evans et al., 2017). The findings indicated multiple instances of efforts contributing to the development of economic sustainability within the business. The data analysis demonstrated themes leading to the development of economic value were: strategy, and integration.

Integrating economic value into social and environmental value emerged as a central theme in the data analysis. “*...both the additional revenues and cost savings from developing a sustainable business, as well as including the costs of the transition are included in our financial models...*” It was noted that respondents considered the use of a sustainable business model must still contribute to the creation of economic value. “*...as with any business decision the cost-benefit needs to be taken into account...*” This is in line with literature as Evans et al. (2017) notes the relationship between environmental sustainability efforts in a business leading to a reduction of indirect costs and promoting economic sustainability.

## 5.4 Objective 3: Explore the relationship between sustainability and organisational resilience

### 5.4.1 Causal linkage from sustainability to resilience

Ortiz-de-Mandojana and Bansal (2016) demonstrate through a large-scale quantitative study that a sustainability focus within an organisation promotes organisational resilience. The study determines this through using share prices to determine volatility, sales growth as a proxy for organisational growth and survival analysis to determine long term financial resilience. Here, the study by Ortiz-de-Mandojana and Bansal (2016) places sustainability as the primary goal that can lead to organisational resilience.

The findings below, which offer a South African context, are in line with the literature that indicate that there is a likely causal relationship between adopting a sustainable business model and improved organisational resilience. The findings indicated multiple instances of sustainable business models contributing to the development of organizational resilience within the business. The data analysis demonstrated key themes establishing a causal linkage from sustainable business models to organizational resilience: sales markets, brand equity, staff turnover and efficient use of resources.

Business-to-business sales markets were noted to increase due to additional sustainability and sustainability reporting requirements in markets. *“...by opening new sales channels and diversifying the market the business is increasing its organisational preparedness and improves its resilience...”*. This is in line with the literature where Ortiz-de-Mandojana and Bansal (2016) note that social and environmental practices improve access to potential market opportunities and growth opportunities.

The social efforts undertaken by the business to promote a social value add amongst its employees was noted by respondents to result in a theme of low staff turnover rate. Paying a salary that is based on the living wage, not minimum wage; the staff learning programme through individual learning spend; and the sense of greater purpose that comes with contributing to a regenerative business were some of the main reasons given for the low

turnover rate. The business experienced increased resilience through a maintenance of institutional knowledge and strong internal company culture that was noted to have assisted in times of external strain. This is in line with the literature that notes that social and environmentally focused companies accumulate resources such as motivated employees (Chen and Miller, 2011).

An efficient use of resources was established as a key theme contributing to organizational resilience. The business adopted a regenerative farming approach to improve soil health. The direct benefits were noted to include less soil erosion, greater water retention in the soil and increased soil health. “...*Higher yields and better-quality grapes experienced on our farms due to our regenerative efforts which naturally offers financial reward...*”. The stabilised high quality and improved yield reduces fluctuation in the yield and quality, smoothing out the income over the years reducing the impact of variable production years. In 2007 the business established a grey and black water treatment plant that filtered water from the hotel and restaurant for use in irrigating the vineyards to add environmental value and protect the natural water sources. This effort, ten years before the 2017 drought, was noted to provide exceptional resilience. “...*Stellenbosch experienced a drought in 2017 where the town was days away from running out of drinking water...*” The recycled water was noted to mitigate some of the impact to the vineyards in terms of grape quality and grape yields. Evans et al. (2017) notes the relationship between environmental sustainability efforts in a business leading to a reduction of indirect costs and promoting economic sustainability. Ortiz-de-Mandojana and Bansal (2016) notes that the short-term benefits such as improved efficiency that accompany adopting a sustainable business model contribute to improved resilience and short-term profitability, noting an example of reduced costs from a reduction in waste. These improvements are noted by Ortiz-de-Mandojana and Bansal (2016) to be ‘one-off’ and have limited long term upside.

#### 5.4.2 Causal linkage from resilience to sustainability

Literature is not in agreement regarding the causal linkage from resilience to sustainability within an organization. Resilience is suggested by Golicic, Flint and Signori (2017) to be used as a tool to achieve business sustainability within a wine producing business. The research by Golicic, Flint and Signori (2017) retains the focus on building a resilient organisation as the primary objective and achieving sustainability as a secondary outcome. Furthermore, the

research by Golicic, Flint and Signori (2017) focuses on the one directional relationship of organisational resilience towards sustainability in the developed world wine industry context. However, Weber (2023b) note that while sustainability can be considered a contributing factor to organizational resilience, it is not agreed that organizational resilience is a contributing factor to sustainability. The findings from the data analysis note that there is no causal linkage experienced whereby introducing organisational resilience leads to sustainability.

No respondent could provide an example where the business adopted a resilience measure that resulted in greater sustainability. While an overlapping positive outcome was experienced in some initiatives where resilience measures such as the water savings system led to increased environmental value, the overarching theme was not one of a causal nature. The reason behind this rationale was that in order to become resilient against droughts, there could be other harmful environmental measures taken on, for example “...drawing excessive water during a drought may achieve organisational resilience, but will negatively affect the community...”.

#### 5.4.3 Interdependence between sustainable business models and organisational resilience

Since there was no causal linkage determined in the case study where resilience contributes to sustainability, the findings of the research determine that one way dependence of sustainability relying on resilience could not exist. Respondents noted that sustainability was a contributing factor towards organisational resilience, but the relationship is not that of dependency as other ways to become resilient exist. In a scoping literature review, Weber (2023b) note that an interdependence exists between sustainability and organizational resilience. This is in contrast to the findings in this research.

### 5.5 Conclusion

This chapter discussed the research findings obtained through the use of qualitative data collection via interviews. The propositions developed from the existing literature informed the findings of the research. As such, the aim and objectives of the research were carried out. The chapter explored the development of the sustainable business model employed at Spier wine

farm, where strategy, clear goals, innovative mindset and a company culture of sustainability were identified as developments in the sustainability journey. The extent to which Spier has implemented a triple bottom line approach to add value was then discussed through experiences based on respondent answers. It is concluded that adopting a sustainable business model has a causal effect of improving an organisation's resilience to external strains. However, the inverse of resilience measures causing sustainability was not found to be causal. Furthermore, it is concluded that a business being sustainable does not rely on the business being resilient. In the same view, it was not determined to be a pre-requisite that a business needs to be sustainable to be resilient.

## Chapter 6: Conclusion

### 6.1 Introduction

In this chapter, an overview of the research is provided. A summary of the findings is presented, followed by recommendations based on the findings. Delimitations made by the author during the research as well as limitations of the research are then presented. Finally, the contributions made by the research and recommendations for further research are discussed.

### 6.2 Overview of the research

The principle aim of the research conducted was to critically evaluate the relationship between the concepts of sustainable business models and organisational resilience in the South African context. Propositions were established based on the literature review, that are based on the key concepts and variables discussed.

The chapters in the mini-thesis that are outlined below.

*Chapter one* provides an introduction to the concepts of sustainability and business models in the context of South Africa and wine businesses. An overview of the South African wine industry and its role in developing sustainability in South Africa is provided. A background to Spier Wine Farm, which is used as the case in the research, is then discussed. Furthermore, the relevance and applicability of the case to other organisations is noted. Lastly, the aim and objectives of the research are laid out, to critically evaluate whether the relationship between sustainable business models and organisational resilience is paradoxical.

*Chapter two* offers a review of the literature relating to key concepts explored in the mini-thesis informed by the aim of the research. Resilience theory is presented as the underpinning theory used for the mini-thesis. Concepts including sustainability and the triple bottom line, traditional and sustainable business models, as well as organisational resilience are discussed. From the literature, a conceptual framework was developed by considering the relationship two

established conceptual frameworks of organisational resilience and sustainable business models. From the conceptual framework, propositions were established.

*Chapter three* presents the research paradigm and the research design used for the mini-thesis. The paradigm through which the research was conducted was post-positivist considering multiple perspectives as opposed to a single reality. The considerations behind pursuing a single case study approach were discussed. A qualitative methodology was followed to understand the subjective experiences and understandings of participants. As an established theory determined during the literature review was being tested, it was noted that a deductive approach was followed, testing a theory. The data collection technique of semi-structured interviews was discussed as well as the data analysis procedures undertaken during the analysis of the collected data. Quality criterion of credibility, transferability, dependability and confirmability were discussed. Finally, ethical considerations were noted as the study involved human participants.

*Chapter four* presented the research findings. Key themes were identified in the data relating to each proposition. These themes that emerged during the data analysis were then explored. Coding and thematic analysis was undertaken on Excel to establish themes in the data.

*Chapter five* linked the objectives of the research to the findings of the data analysis. The three research objectives were linked to the findings:

1. To explore the development of the current sustainable business model being employed by Spier Wine Farm.
2. To explore the development of organisational resilience within Spier Wine Farm.
3. To explore the relationship between the outcomes of the sustainable business model being employed by Spier Wine Farm and organisational resilience within Spier Wine Farm.

It was noted that in a South African context there is a likely causal relationship between adopting a sustainable business model and improved organisational resilience. It was also noted that the findings disagreed with the literature that considered organisational resilience and sustainable business models as interdependent.

## 6.3 Summary of the findings

The principle aim of the research conducted was to critically evaluate the relationship between the concepts of sustainable business models and organisational resilience in the South Africa context. The objectives and the associated findings with each objective are set out below.

### 6.3.1 First objective

The first objective was to explore the development of the current sustainable business model being employed. Based on the literature, three elements of sustainable business models were considered: environmental sustainability, social sustainability and economic sustainability.

The data analysis demonstrated key themes leading to the development of environmental value were adopting a company culture, strategy, understanding environment, data and information. The data analysis demonstrated key themes leading to the development of social value were understanding environment, and data and information. Organisational strategy, and integration of economic value into processes that build social and environmental value in the organisation were key themes leading to creating and sustaining economic value.

### 6.3.2 Second objective

The second objective was to explore the development of the current sustainable business model being employed. Preparedness, responsiveness adaptiveness and organisational learning was identified in the literature as major contributors to organisational resilience. Regarding preparedness, key themes that emerged from the data and discussed were foresight, planning and staff turnover. In considering responsiveness, the major theme of data and information determined during the data analysis is in line with the literature regarding effective responses as the respondents noted the use of data in determining the extent of the disturbance. Flexibility and understanding the environment were established during data analysis and comparison with literature to be contributory to adaptability. Key themes leading to the development of responsiveness were adopting an innovative strategy and reduced staff turnover.

### 6.3.3 Third objective

The third objective was to explore the relationship between sustainability organisational resilience. The findings indicate that a likely causal linkage exists between establishing a sustainable business model and improved organisational resilience, in the South African context. Themes that emerged as contributing to this relationship were: access to more sales markets, improved brand equity, reduced staff turnover and more efficient use of resources.

The causal relationship from organisational resilience contributing to sustainable business models was considered likely not to exist. While an overlapping positive outcome was experienced in some initiatives where resilience measures such as the water savings system led to increased environmental value, the overarching theme was not one of a causal nature.

An interdependence between sustainable business models and organisational resilience was found to likely not exist as a causal relationship between organisational resilience and sustainable business models was not found. This finding was noted to be in contrast to existing literature. The findings noted that sustainability was considered a contributing factor towards organisational resilience, but the relationship is not that of dependency as other ways to become resilient exist.

## 6.4 Recommendation

In line with the findings of the research, adopting a sustainable business model is likely to lead to improved organisational resilience. It is thus recommended that the benefits of developing a resilient organisation are taken into account when considering the adoption of a sustainable business model. As noted in the case study, environmental and social sustainability initiatives need to be evaluated in a cost-benefit analysis. The major recommendation is to include the benefits of a resilient organisation in the cost-benefit analysis.

## 6.5 Delimitations

The research made use of a single representative case study of Spier Wine Farm in Stellenbosch, South Africa in 2024. The case study was based on a farming enterprise and is likely more affected by environmental sustainability through its dependency on the environment.

## 6.6 Limitations

As a case study methodology was used, the findings cannot be generalised to all businesses. The representative case chosen was a farming enterprise that may have particularly unique circumstances that affect the relationship between organisational resilience and sustainability, through the reliance on the environment and a large labour force to conduct business. The size of the business and access to capital was not taken into account, which can have an impact on the economy of scales and ability to implement a sustainable business model. The collection of data through semi-structured interviews under a qualitative research methodology allow for the participants' perceptions of events which may alter over time or with new experiences.

## 6.7 Contribution of the Research

There is limited research exploring the directional relationship between sustainable business models and organisational resilience. As far as can be ascertained, the consideration of a sustainable business model and its relationship with organisational resilience in the South African context has not been researched. It has been identified that a small amount of quantitative research exists on the directional relationship between sustainable business models leading to improved organisational resilience that does not explore the underlying themes and contributing factors as can be done through case study research. This research aims to contribute to the filling the gap identified and will add to the body of knowledge that explores the relationship between sustainable business models and organisational resilience.

## 6.8 Recommendations for further Research

As the study made use of a single case study, further research may undertake a multiple case study approach across multiple industries and regions within South Africa to strengthen the robustness of the relationship determined between sustainable business models and organisational resilience. Furthermore, the research may be expanded to include other African countries or emerging market countries to test if adopting a sustainable business model contributes to organisational resilience under different circumstances. The relationship or people's perception of a relationship between sustainable business models and organisational resilience could be tested over time to understand if the relationship has changed or the perception altered based on certain events like a drought.

## 6.9 Conclusion

In this chapter an overview of each chapter in the research was presented. Furthermore, a summary of the findings was discussed for each of the three research objectives. A recommendation for the inclusion of the additional benefit of organisational resilience in the decision to adopt a sustainable business model was presented. Delimitations imposed by the researcher and limitations based on methodology and applicability were discussed. Finally, the contributions of the research were highlighted with recommendations for possible further research based on the findings of this research.

## References

- Abdelkafi, N. and Täuscher, K., 2015. Business Models for Sustainability From a System Dynamics Perspective. *Organization & Environment*, [online] 29(1), pp.74–96. <https://doi.org/10.1177/1086026615592930>.
- Ajibike, W.A., Adeleke, A.Q., Mohamad, F., Bamgbade, J.A., Nawi, M.N.M. and Moshood, T.D., 2021. An evaluation of environmental sustainability performance via attitudes, social responsibility, and culture: A mediated analysis. *Environmental Challenges*, [online] 4, p.100161. <https://doi.org/https://doi.org/10.1016/j.envc.2021.100161>.
- Ajmal, M.M., Khan, M., Hussain, M. and Helo, P., 2018. Conceptualizing and incorporating social sustainability in the business world. *International Journal of Sustainable Development & World Ecology*, [online] 25(4), pp.327–339. <https://doi.org/10.1080/13504509.2017.1408714>.
- Ambulkar, S., Blackhurst, J. and Grawe, S., 2015. Firm’s resilience to supply chain disruptions: Scale development and empirical examination. *Journal of Operations Management*, [online] 33–34(1), pp.111–122. <https://doi.org/https://doi.org/10.1016/j.jom.2014.11.002>.
- De Angelis, R., Howard, M. and Miemczyk, J., 2018. Supply chain management and the circular economy: towards the circular supply chain. *Production Planning & control*, [online] 29(6), pp.425–437. <https://doi.org/10.1080/09537287.2018.1449244>.
- Atkinson, G., 2000. Measuring Corporate Sustainability. *Journal of Environmental Planning and Management*, [online] 43(2), pp.235–252. <https://doi.org/10.1080/09640560010694>.
- Ayuda, M.-I., Esteban, E., Martín-Retortillo, M. and Pinilla, V., 2020. The Blue Water Footprint of the Spanish Wine Industry: 1935–2015. *Water*, [online] 12(7). <https://doi.org/10.3390/w12071872>.
- Baumgartner, R.J., 2014. Managing Corporate Sustainability and CSR: A Conceptual Framework Combining Values, Strategies and Instruments Contributing to Sustainable Development. *Corporate Social Responsibility and Environmental Management*, [online] 21(5), pp.258–271. <https://doi.org/https://doi.org/10.1002/csr.1336>.
- Baxter, J. and Eyles, J., 1997. Evaluating Qualitative Research in Social Geography: Establishing ‘Rigour’ in Interview Analysis. *Source: Transactions of the Institute of British Geographers*, 22(4), pp.505–525.

Benedetto, G. and Corinto, G.L., 2015. The Role of Women in the Sustainability of the Wine Industry: Two Case Studies in Italy. In: A. Vastola, ed. *The Sustainability of Agro-Food and Natural Resource Systems in the Mediterranean Basin*. [online] Cham: Springer International Publishing. pp.173–187. [https://doi.org/10.1007/978-3-319-16357-4\\_12](https://doi.org/10.1007/978-3-319-16357-4_12).

Benn, S., Edwards, M. and Williams, T., 2018. *Organizational Change for Corporate Sustainability: Fourth Edition*.

Bhamra, R., Dani, S. and Burnard, K., 2011. Resilience: the concept, a literature review and future directions. *International Journal of Production Research*, 49(18), pp.5375–5393.

Bjartmarz, T.K. and Bocken, N.M.P., 2024. Sustainable business models and organizational boundaries—A literature review. *Business Strategy and the Environment*, [online] 33(7), pp.6716–6736. <https://doi.org/https://doi.org/10.1002/bse.3837>.

Bocken, N., Boons, F. and Baldassarre, B., 2019. Sustainable business model experimentation by understanding ecologies of business models. *Journal of Cleaner Production*, [online] 208, pp.1498–1512. <https://doi.org/https://doi.org/10.1016/j.jclepro.2018.10.159>.

Bocken, N.M.P., Short, S.W., Rana, P. and Evans, S., 2013. A literature and practice review to develop sustainable business model archetypes. [online] <https://doi.org/10.1016/j.jclepro.2013.11.039>.

Bocken, N.M.P., Short, S.W., Rana, P. and Evans, S., 2014. A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, pp.42–56. <https://doi.org/10.1016/J.JCLEPRO.2013.11.039>.

Bos, J., 2020. Research Ethics Step by Step. In: J. Bos, ed. *Research Ethics for Students in the Social Sciences*. [online] Cham: Springer International Publishing. pp.227–273. [https://doi.org/10.1007/978-3-030-48415-6\\_10](https://doi.org/10.1007/978-3-030-48415-6_10).

Bouteraa, A. and Bouaziz, F., 2023. Do talent management practices improve organizational resilience? An empirical study within Tunisian companies. *African Journal of Economic and Management Studies*, [online] 14(2), pp.271–288. <https://doi.org/10.1108/AJEMS-07-2022-0301>.

Boyatzis, R.E., 1998. *Transforming Qualitative Information: Thematic Analysis and Code Development*. Thousand Oaks: Sage Publications.

Braungart, M., McDonough, W. and Bollinger, A., 2007. Cradle-to-cradle design: creating healthy emissions – a strategy for eco-effective product and system design. *Journal of*

*cleaner production*, [online] 15(13), pp.1337–1348.  
<https://doi.org/10.1016/j.jclepro.2006.08.003>.

Van Breda, A.D., 2018. A critical review of resilience theory and its relevance for social work. *Social Work*, [online] 54(1), pp.1–18. <https://doi.org/10.15270/54-1-611>.

Brundtland Report, 1987. *Our common future*. Oxford University Press, Oxford, GB.

Burnard, K. and Bhamra, R., 2011. Organisational resilience: development of a conceptual framework for organisational responses. *International Journal of Production Research*, [online] 49(18), pp.5581–5599. <https://doi.org/10.1080/00207543.2011.563827>.

Cairns, J., 2004. Will the real sustainability concept please stand up? *Ethics in science and environmental politics ESEP*, 4(1), pp.49–52.

Cameron, K.S., Dutton, J.E. and Quinn, R.E., 2003. *Positive organizational scholarship: foundations of a new discipline*. San Francisco, Calif: Berrett-Koehler.

Carley, M. and Christie, I., 2000. *Managing sustainable development*. Second ed. London: Earthscan.

Carroll, A.B., 1991. The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, [online] 34(4), pp.39–48. [https://doi.org/https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/https://doi.org/10.1016/0007-6813(91)90005-G).

Cato, M.S., 2012. Green economics: putting the planet and politics back into economics. *Cambridge journal of economics*, [online] 36(5), pp.1033–1049. <https://doi.org/10.1093/cje/bes022>.

Chen, M.-J. and Miller, D., 2011. The Relational Perspective as a Business Mindset: Managerial Implications for East and West. *Academy of Management Perspectives*, [online] 25(3), pp.6–18. Available at: <<http://www.jstor.org/stable/23045047>>.

Christ, K.L. and Burritt, R.L., 2013. Critical environmental concerns in wine production: an integrative review. *Journal of Cleaner Production*, [online] 53, pp.232–242. <https://doi.org/https://doi.org/10.1016/j.jclepro.2013.04.007>.

Christensen, C., Bartman, T. and Van Bever, D., 2016. The hard truth about business model innovation. *MIT Sloan Management Review*, 58(1).

Cirella, G.T., Goncharuk, A.G., Io Storto, C. and Russo, A., 2020. Exploring Social Sustainability and Economic Practices: Multi-Journal Compendium. *Sustainability*, [online] 12(5). <https://doi.org/10.3390/su12051718>.

Colantonio, A., 2007. *Social sustainability: a review and critique of traditional versus emerging themes and assessment methods*. Oxford.

- Conz, E. and Magnani, G., 2020. A dynamic perspective on the resilience of firms: A systematic literature review and a framework for future research. *European Management Journal*, [online] 38(3), pp.400–412.  
<https://doi.org/https://doi.org/10.1016/j.emj.2019.12.004>.
- Corbo, C., Lamastra, L. and Capri, E., 2014. From Environmental to Sustainability Programs: A Review of Sustainability Initiatives in the Italian Wine Sector. *Sustainability*, [online] 6(4), pp.2133–2159. <https://doi.org/10.3390/su6042133>.
- Costanza, R., 1999. *Ecological Economics: The Science and Management of Sustainability*. 1st ed. New York: Columbia University Press.
- Crandall, W., Parnell, J.A. (John A. and Spillan, J.E., 2010. *Crisis management : leading in the new strategy landscape*. Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. and Creswell, J.D., 2018. *Research design: qualitative, quantitative, and mixed methods approaches*. Fifth ed. Thousand Oaks, California: SAGE Publications, Inc.
- Crichton, M.T., Ramsay, C.G. and Kelly, T., 2009. Enhancing Organizational Resilience Through Emergency Planning: Learnings from Cross-Sectoral Lessons. *Journal of Contingencies and Crisis Management*, [online] 17(1), pp.24–37.  
<https://doi.org/https://doi.org/10.1111/j.1468-5973.2009.00556.x>.
- Dempsey, N., Bramley, G., Power, S. and Brown, C., 2011. The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development*, [online] 19(5), pp.289–300. <https://doi.org/https://doi.org/10.1002/sd.417>.
- Dorsey, A. and Collier, R., 2018. *Origins of Sociological Theory*. Essex: ED-Tech Press.
- Dubois, A. and Gadde, L.E., 2002. Systematic combining: an abductive approach to case research. *Journal of Business Research*, 55(7), pp.553–560. [https://doi.org/10.1016/S0148-2963\(00\)00195-8](https://doi.org/10.1016/S0148-2963(00)00195-8).
- Duchek, S., 2020. Organizational resilience: a capability-based conceptualization. *Business Research*, [online] 13(1), pp.215–246. <https://doi.org/10.1007/s40685-019-0085-7>.
- Duit, A., 2016. Resilience thinking: Lessons for public administration. *Public administration*, 94(2), pp.364–380.
- Eizenberg, E. and Jabareen, Y., 2017. Social Sustainability: A New Conceptual Framework. *Sustainability*, [online] 9(1). <https://doi.org/10.3390/su9010068>.
- Elkington, J., 1997. *CANNIBALS WITH FORKS The Triple Bottom Line of 21st Century Business*. Oxford: Capstone Publishing Limited.

- Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E.A. and Barlow, C.Y., 2017. Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models. *Business Strategy and the Environment*, [online] 26(5), pp.597–608. <https://doi.org/10.1002/BSE.1939>.
- Fatoki, O., 2018. Environmental Sustainability Practices of Immigrant-Owned Small and Medium Enterprises in South Africa. *European Review Of Applied Sociology*, [online] 11(17), pp.27–43. <https://doi.org/doi:10.1515/eras-2018-0009>.
- Ferrer, J.R., García-Cortijo, M.C., Pinilla, V. and Castillo-Valero, J.S., 2022. The business model and sustainability in the Spanish wine sector. *Journal of Cleaner Production*, [online] 330, p.129810. <https://doi.org/https://doi.org/10.1016/j.jclepro.2021.129810>.
- Fiksel, J., Goodman, I. and Hecht, A., 2014. Resilience: navigating toward a sustainable future. *Solutions*, 5(5), pp.38–47.
- Fiore, M., Silvestri, R., Contò, F. and Pellegrini, G., 2017. Understanding the relationship between green approach and marketing innovations tools in the wine sector. *Journal of Cleaner Production*, [online] 142, pp.4085–4091. <https://doi.org/https://doi.org/10.1016/j.jclepro.2016.10.026>.
- Flammer, C. and Bansal, P., 2017. Does a long-term orientation create value? Evidence from a regression discontinuity. *Strategic Management Journal*, [online] 38(9), pp.1827–1847. <https://doi.org/https://doi.org/10.1002/smj.2629>.
- Florencio, M., Oliveira, L. and Oliveira, H.C., 2023. Management Control Systems and the Integration of the Sustainable Development Goals into Business Models. *Sustainability*, 15(3). <https://doi.org/10.3390/su15032246>.
- Flores, S.S., 2018. What is sustainability in the wine world? A cross-country analysis of wine sustainability frameworks. *Journal of Cleaner Production*, [online] 172, pp.2301–2312. <https://doi.org/https://doi.org/10.1016/j.jclepro.2017.11.181>.
- Folke, C., Carpenter, S.R., Walker, B., Scheffer, M., Chapin, T. and Rockström, J., 2010. Integrating Resilience, Adaptability and Transformability. *Ecology and Society*, [online] 15(4). Available at: <<http://www.jstor.org/stable/26268226>>.
- Gabzdylova, B., Raffensperger, J.F. and Castka, P., 2009. Sustainability in the New Zealand wine industry: drivers, stakeholders and practices. *Journal of Cleaner Production*, [online] 17(11), pp.992–998. <https://doi.org/https://doi.org/10.1016/j.jclepro.2009.02.015>.
- Galletta, A. and Cross, W.E., 2013. *Mastering the Semi-Structured Interview and Beyond : From Research Design to Analysis and Publication*. [online] New York, UNITED STATES:

New York University Press. Available at: <<http://ebookcentral.proquest.com/lib/rhodes-ebooks/detail.action?docID=1187368>>.

Geissdoerfer, M., Bocken, N.M.P. and Hultink, E.J., 2016. Design thinking to enhance the sustainable business modelling process – A workshop based on a value mapping process. *Journal of Cleaner Production*, 135, pp.1218–1232.

<https://doi.org/10.1016/J.JCLEPRO.2016.07.020>.

Geissdoerfer, M., Vladimirova, D. and Evans, S., 2018. Sustainable business model innovation: A review. *Journal of Cleaner Production*, 198, pp.401–416.

<https://doi.org/10.1016/J.JCLEPRO.2018.06.240>.

Gentles, S.J., Charles, C., Ploeg, J. and Ann McKibbin, K., 2015. Sampling in qualitative research: Insights from an overview of the methods literature. *Qualitative report*, [online] 20(11), pp.1772–1789. <https://doi.org/10.46743/2160-3715/2015.2373>.

Goerner, S.J., Lietaer, B. and Ulanowicz, R.E., 2009. Quantifying economic sustainability: Implications for free-enterprise theory, policy and practice. *Ecological Economics*, [online] 69(1), pp.76–81. <https://doi.org/https://doi.org/10.1016/j.ecolecon.2009.07.018>.

Goethals, G.R., Sorenson, G.J. and Burns, J.M., 2004. *Encyclopedia of leadership*. [online] Thousand Oaks, Calif: Sage Publications. <https://doi.org/10.4135/9781412952392>.

Gölgeci, I., Arslan, A., Dikova, D. and Gligor, D.M., 2020. Resilient agility in volatile economies: institutional and organizational antecedents. *Journal of Organizational Change Management*, [online] 33(1), pp.100–113. <https://doi.org/10.1108/JOCM-02-2019-0033>.

Golicic, S.L., Flint, D.J. and Signori, P., 2017. Building business sustainability through resilience in the wine industry. *International Journal of Wine Business Research*, [online] 29(1), pp.74–97. <https://doi.org/10.1108/IJWBR-02-2016-0005>.

Gopaldas, A., 2016. A front-to-back guide to writing a qualitative research article. *Qualitative Market Research: An International Journal*, 19(1), pp.115–121.

Gorissen, L., Vrancken, K. and Manshoven, S., 2016. Transition Thinking and Business Model Innovation–Towards a Transformative Business Model and New Role for the Reuse Centers of Limburg, Belgium. *Sustainability*, [online] 8(2).

<https://doi.org/10.3390/su8020112>.

Granig, P. and Hilgarter, K., 2020. Organisational resilience: a qualitative study about how organisations handle trends and their effects on business models from experts' views.

*International Journal of Innovation Science*, [online] 12(5), pp.525–544.

<https://doi.org/10.1108/IJIS-06-2020-0086>.

- Guba, E.G. and Lincoln, Y.S., 1994. *Competing paradigms in qualitative research*. *Handbook of qualitative research*, California, Sage Publications.
- Gunderson, L.H., 2000. Ecological resilience—in theory and application. *Annual review of ecology and systematics*, 31(1), pp.425–439.
- Gunderson, L.H. and Holling, C.S., 2002. *Panarchy: understanding transformations in human and natural systems*. Washington, D.C: Island Press.
- Hamel, G. and Välikangas, L., 2003. The quest for resilience. *Harvard Business Review*, 81(9).
- Hardin, G., 1968. The Tragedy of the Commons. *Science*, [online] 162(3859), pp.1243–1248. <https://doi.org/10.1126/science.162.3859.1243>.
- Harvey, L., 2015. Beyond member-checking: A dialogic approach to the research interview. *International Journal of Research & Method in Education*, 38(1), pp.23–38.
- Heinz, S. and O’Connell, J., 2013. Air transport in Africa: Toward sustainable business models for African airlines. *Journal of Transport Geography*, 31, pp.72–83. <https://doi.org/10.1016/j.jtrangeo.2013.05.004>.
- Henderson, K.A., 2011. Post-Positivism and the Pragmatics of Leisure Research. *Leisure Sciences*, [online] 33(4), pp.341–346. <https://doi.org/10.1080/01490400.2011.583166>.
- Hoemmen, G., Altman, I. and Rendleman, M., 2015. Impact of sustainable viticulture programs on American Viticultural areas: Lodi AVA. *Journal of Wine Research*, [online] 26(3), pp.169–180. <https://doi.org/10.1080/09571264.2015.1052047>.
- Holling, C.S., 1973. Resilience and stability of ecological systems. *Annual review of ecology and systematics*, 4(1), pp.1–23.
- Hollweck, T., 2015. Robert K. Yin. (2014). Case Study Research Design and Methods (5th ed.). *Canadian journal of program evaluation*, [online] 30(1), pp.108–110. <https://doi.org/10.3138/cjpe.30.1.108>.
- Huq, F.A. and Stevenson, M., 2020. Implementing Socially Sustainable Practices in Challenging Institutional Contexts: Building Theory from Seven Developing Country Supplier Cases. *Journal of Business Ethics*, [online] 161(2), pp.415–442. <https://doi.org/10.1007/s10551-018-3951-x>.
- Hyde, K.F., 2000. Recognising deductive processes in qualitative research. *Qualitative market research: An international journal*, 3(2), pp.82–90.
- International Organisation of Vine and Wine Intergovernmental Organisation, 2019. *2019 Statistical Report on World Vitiviniculture*.

- Jabareen, Y.R., 2006. Sustainable Urban Forms: Their Typologies, Models, and Concepts. *Journal of Planning Education and Research*, [online] 26(1), pp.38–52. <https://doi.org/10.1177/0739456X05285119>.
- Joyce, A. and Paquin, R.L., 2016. The triple layered business model canvas: A tool to design more sustainable business models. *Journal of cleaner production*, 135, pp.1474–1486.
- Kallio, H., Pietilä, A.-M., Johnson, M. and Kangasniemi, M., 2016. Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing*, [online] 72(12), pp.2954–2965. <https://doi.org/10.1111/jan.13031>.
- Kassier, L., 2024. Interconnected or Disconnected? A Review of Sustainability, Resilience, and Sustainable Business Model Constructs in the Academic Business Literature. *JOURNAL OF THE KNOWLEDGE ECONOMY*. <https://doi.org/10.1007/s13132-023-01712-z>.
- Koh, S.C.L., Suresh, K., Ralph, P. and Saccone, M., 2024. Quantifying organisational resilience: an integrated resource efficiency view. *International Journal of Production Research*, [online] 62(16), pp.5737–5756. <https://doi.org/10.1080/00207543.2023.2296018>.
- Koronis, E. and Ponis, S., 2009. Better than before: the resilient organization in crisis mode. *The International Journal of Logistics Management*, 20(1), pp.124–143. <https://doi.org/10.1108/JBS-10-2016-0124>.
- Krefting, L., 1991. Rigor in qualitative research: the assessment of trustworthiness. *The American journal of occupational therapy*, 45(3), pp.214–222.
- Labuschagne, C. and Brent, A.C., 2005. Sustainable Project Life Cycle Management: the need to integrate life cycles in the manufacturing sector. *International Journal of Project Management*, [online] 23(2), pp.159–168. <https://doi.org/https://doi.org/10.1016/j.ijproman.2004.06.003>.
- Lengnick-Hall, C.A., Beck, T.E. and Lengnick-Hall, M.L., 2011. Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, [online] 21(3), pp.243–255. <https://doi.org/https://doi.org/10.1016/j.hrmr.2010.07.001>.
- Lincoln, Y.S. and Guba, E.G., 1985. *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Locke, E.A., 2007. The Case for Inductive Theory Building. *Journal of management*, [online] 33(6), pp.867–890. <https://doi.org/10.1177/0149206307307636>.

Lozano, R., 2008. Envisioning sustainability three-dimensionally. *Journal of Cleaner Production*, [online] 16(17), pp.1838–1846.  
<https://doi.org/https://doi.org/10.1016/j.jclepro.2008.02.008>.

Lozano, R. and Huisingh, D., 2011. Inter-linking issues and dimensions in sustainability reporting. *Journal of Cleaner Production*, [online] 19(2), pp.99–107.  
<https://doi.org/https://doi.org/10.1016/j.jclepro.2010.01.004>.

Luthans, F., Vogelgesang, G.R. and Lester, P.B., 2006. Developing the Psychological Capital of Resiliency. *Human Resource Development Review*, [online] 5(1), pp.25–44.  
<https://doi.org/10.1177/1534484305285335>.

Mafabi, S., Munene, J. and Ntayi, J., 2012. Knowledge management and organisational resilience. *Journal of Strategy and Management*, [online] 5(1), pp.57–80.  
<https://doi.org/10.1108/17554251211200455>.

Maher, C., Hadfield, M., Hutchings, M. and de Eyto, A., 2018. Ensuring Rigor in Qualitative Data Analysis: A Design Research Approach to Coding Combining NVivo With Traditional Material Methods. *International Journal of Qualitative Methods*, 17(1).  
<https://doi.org/10.1177/1609406918786362>.

Malterud, K., Siersma, V.D. and Guassora, A.D., 2016. Sample Size in Qualitative Interview Studies: Guided by Information Power. *Qualitative health research*, [online] 26(13), pp.1753–1760. <https://doi.org/10.1177/1049732315617444>.

Massa, L., Tucci, C.L. and Afuah, A., 2017. A Critical Assessment of Business Model Research. *Academy of Management Annals*, 11(1), pp.73–104.  
<https://doi.org/10.5465/annals.2014.0072>.

Meerow, S., Newell, J.P. and Stults, M., 2016. Defining urban resilience: A review. *Landscape and Urban Planning*, [online] 147, pp.38–49.  
<https://doi.org/https://doi.org/10.1016/j.landurbplan.2015.11.011>.

Mohajan, H.K., 2018. Qualitative research methodology in social sciences and related subjects. *Journal of economic development, environment and people*, 7(1), pp.23–48.

Nkamnebe, A.D., 2011. Sustainability marketing in the emerging markets: imperatives, challenges, and agenda setting. *International Journal of Emerging Markets*, [online] 6(3), pp.217–232. <https://doi.org/10.1108/17468801111144058>.

Norman, W. and MacDonald, C., 2004. Getting to the bottom of ‘‘Triple Bottom Line’’. *Business Ethics Quarterly*, 14(2), pp.243–262. <https://doi.org/10.5840/beq200414211>.

Olsson, P., Galaz, V. and Boonstra, W.J., 2014. Sustainability Transformations: A Resilience Perspective. *Ecology and Society*, [online] 19(4). <https://doi.org/10.5751/ES-06799-190401>.

Orb, A., Eisenhauer, L. and Wynaden, D., 2001. Ethics in qualitative research. *Journal of Nursing Scholarship*, 33(1), pp.93–96. <https://doi.org/10.1111/J.1547-5069.2001.00093.X>.

Ordieres-Meré, J., Prieto Remón, T. and Rubio, J., 2020. Digitalization: An Opportunity for Contributing to Sustainability From Knowledge Creation. *Sustainability*, [online] 12(4). <https://doi.org/10.3390/su12041460>.

Ortiz-de-Mandojana, N. and Bansal, P., 2016. The long-term benefits of organizational resilience through sustainable business practices. *Strategic Management Journal*, [online] 37(8), pp.1615–1631. <https://doi.org/https://doi.org/10.1002/smj.2410>.

Ose, S.O., 2016. Using Excel and Word to Structure Qualitative Data. *Journal of Applied Social Science*, 10(2), pp.147–162. <https://doi.org/10.1177/1936724416664948>.

Osterwalder, A. and Pigneur, Y., 2010. *Business model generation: a handbook for visionaries, game changers, and challengers*. John Wiley & Sons.

Paeffgen, T., 2022. Organisational resilience during COVID-19 times: a bibliometric literature review. *Sustainability*, 15(1), p.367.

Pauli, G.A., 2010. *The Blue Economy: 10 Years, 100 Innovations, 100 Million Jobs*. The Blue Economy Series. Paradigm Publications.

Pearse, N., 2019. An illustration of a deductive pattern matching procedure in qualitative leadership research. *Electronic Journal of Business Research Methods*, 17(3), pp.143–154. <https://doi.org/10.34190/JBRM.17.3.004>.

Philliber, S.G., Schwab, M.R. and Sloss, G.S., 1980. *Social research*. Itasca, Ill: Peacock.

Phillis, Y.A. and Andriantiatsaholiniaina, L.A., 2001. Sustainability: an ill-defined concept and its assessment using fuzzy logic. *ECOLOGICAL ECONOMICS*, 37(3), pp.435–456. [https://doi.org/10.1016/S0921-8009\(00\)00290-1](https://doi.org/10.1016/S0921-8009(00)00290-1).

Pomarici, E. and Vecchio, R., 2014. Millennial generation attitudes to sustainable wine: an exploratory study on Italian consumers. *Journal of Cleaner Production*, [online] 66, pp.537–545. <https://doi.org/https://doi.org/10.1016/j.jclepro.2013.10.058>.

Ponomarov, S.Y. and Holcomb, M.C., 2009. Understanding the concept of supply chain resilience. *The international journal of logistics management*, 20(1), pp.124–143.

Punch, K.F., 2013. Introduction to social research: Quantitative and qualitative approaches.

PWC, 2015. *The South African Wine Industry - Insights Survey*.

Rai, S.S., Rai, S. and Singh, N.K., 2021. Organizational resilience and social-economic sustainability: COVID-19 perspective. *Environment, Development and Sustainability*, [online] 23(8), pp.12006–12023. <https://doi.org/10.1007/s10668-020-01154-6>.

Rashid, A., Asif, F.M.A., Krajnik, P. and Nicolescu, C.M., 2013. Resource conservative manufacturing: An essential change in business and technology paradigm for sustainable manufacturing. *Journal of Cleaner Production*, 57, pp.166–177. <https://doi.org/10.1016/J.JCLEPRO.2013.06.012>.

Rubin, H.J. and Rubin, I.S., 2011. *Qualitative interviewing: The art of hearing data*. sage.

Ryan, A.B., 2006. *Post-Positivist Approaches to Research*. In: *Researching and Writing your thesis: a guide for postgraduate students*. [online] MACE: Maynooth Adult and Community Education. Available at: <<https://mural.maynoothuniversity.ie/874/>> [Accessed 1 July 2024].

Shnayder, L., van Rijnsoever, F.J. and Hekkert, M.P., 2015. Putting your money where your mouth is: why sustainability reporting based on the triple bottom line can be misleading. *PLoS one*, [online] 10(3), pp.e0119036–e0119036. <https://doi.org/10.1371/journal.pone.0119036>.

Sibona, C., Walczak, S. and Baker, E.W., 2020. A Guide for Purposive Sampling on Twitter. *Communications of the Association for Information Systems*, [online] 46, p.22. <https://doi.org/https://doi.org/10.17705/1CAIS.04622>.

Smith, D. and Fischbacher, M., 2009. The changing nature of risk and risk management: The challenge of borders, uncertainty and resilience. *Risk Management*, [online] 11(1), pp.1–12. <https://doi.org/10.1057/rm.2009.1>.

Smith, J.A., Flowers, P. and Larkin, M., 2022. *Interpretative phenomenological analysis: theory, method and research*. 2nd ed. London;Thousand Oaks, California; SAGE.

South African Wine Industry Information and Systems, 2024. *Macro-Economic Impact of the Wine Industry on the South African Economy 2022 Vintage*.

Spier Wine Farm, 2024. *About Us*. [online] Spier Wine Farm. Available at: <<https://www.spier.co.za/about-us>>.

Sridhar, K. and Jones, G., 2013. The three fundamental criticisms of the Triple Bottom Line approach: An empirical study to link sustainability reports in companies based in the Asia-Pacific region and TBL shortcomings. *Asian Journal of Business Ethics*, [online] 2(1), pp.91–111. <https://doi.org/10.1007/s13520-012-0019-3>.

Stanton, E.A., 2012. The tragedy of maldistribution: Climate, sustainability, and equity. *Sustainability*, 4(3), pp.394–411.

Statistics South Africa, 2024. *Quarterly Labour Force Survey (QLFS) Q1:2024*. Pretoria.

De Steur, H., Temmerman, H., Gellynck, X. and Canavari, M., 2020. Drivers, adoption, and evaluation of sustainability practices in Italian wine SMEs. *Business Strategy and the Environment*, [online] 29(2), pp.744–762. <https://doi.org/https://doi.org/10.1002/bse.2436>.

Tatham, E.K., Eisenberg, D.A. and Linkov, I., 2013. Sustainable urban systems: A review of how sustainability indicators inform decisions. *Sustainable cities and military installations*, pp.3–20.

Teece, D.J., 2010. Business models, business strategy and innovation. *Long Range Planning*, 43(2–3), pp.172–194. <https://doi.org/10.1016/J.LRP.2009.07.003>.

Teixeira, E. de O. and Werther, W.B., 2013. Resilience: Continuous renewal of competitive advantages. *Business Horizons*, [online] 56(3), pp.333–342. <https://doi.org/https://doi.org/10.1016/j.bushor.2013.01.009>.

Torres-Baumgarten, G. and Rakotobe-Joel, T., 2023. Sustainability Discourse in Emerging Market multinationals: The Case of South Africa’s Largest Firms. *Journal of African Business*, [online] 24(2), pp.188–213. <https://doi.org/10.1080/15228916.2022.2048513>.

Verreynne, M.-L., Ford, J. and Steen, J., 2023. Strategic factors conferring organizational resilience in SMEs during economic crises: a measurement scale. *International Journal of Entrepreneurial Behavior & Research*, [online] 29(6), pp.1338–1375. <https://doi.org/10.1108/IJEER-07-2022-0681>.

Visser, W., Matten, D., McWilliams, A., Moon, J., Siegel, D. and Crane, A., 2008. *The Oxford Handbook of Corporate Social Responsibility*. Oxford: Oxford University Press.

de Vos, A., Strydom, H., Fouche, C.B. and Delport, C.S.L., 2011. *Research at Grass Roots*. 4th ed. Cape Town: van Schaik Publishers.

Walia, R., 2015. A saga of qualitative research. *Social Crimonol*, 5(2), p.124.

Walker, B., Holling, C.S., Carpenter, S.R. and Kinzig, A., 2004. Resilience, Adaptability and Transformability in Social–Ecological Systems. *Ecology and society*, 9(2).

Weber, M.M., 2023a. The Relationship between Resilience and Sustainability in the Organizational Context—A Systematic Review. *Sustainability*, 15(22), p.15970.

Weber, M.M., 2023b. The Relationship between Resilience and Sustainability in the Organizational Context—A Systematic Review. *Sustainability*, [online] 15(22). <https://doi.org/10.3390/su152215970>.

Woiceshyn, J. and Daellenbach, U., 2018. Evaluating inductive vs deductive research in management studies: Implications for authors, editors, and reviewers. *Qualitative research in organizations and management: An International Journal*, 13(2), pp.183–195.

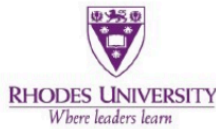
World Commission on Environment and Development, 1987. *Our Common Future*. Oxford: Oxford University Press.

Yin, R.K., 2014. *Case study research: design and methods*. Fifth ed. Los Angeles: SAGE.

Youssef, C.M. and Luthans, F., 2007. Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience. *Journal of Management*, 33(5), pp.774–800.

<https://doi.org/10.1177/0149206307305562>.

## Appendix 1: Ethics Approval Letter



Rhodes University Human Research Ethics Committee  
Main Admin Building, Drosty Road, Makhanda, 6139, South Africa  
PO Box 94, Makhanda, 6140, South Africa  
t: +27 (0) 46 603 7314  
e: ethics-committee@ru.ac.za  
<https://www.ru.ac.za/researchgateway/ethics/>  
NHREC Registration number: RC-241114-045

7 November 2024

Mr Kurt van Staden, ,

Email: kurtvanstaden18@gmail.com

Review Reference: 2023-7536-8229

Dear Mr Kurt van Staden

Re: Sustainable Business Models in the South African Context – A Case Study of Spier Wine Farm

Researcher: Mr Kurt van Staden

Supervisor(s): Prof Owen Skae

This letter confirms that the above research proposal has been reviewed and **APPROVED** by the Rhodes University Human Research Ethics Committee (RU-HREC). Your Approval number is: 2023-7536-8229

Approval has been granted for 1 year. An annual progress report will be required in order to renew approval for an additional period. You will receive an email notifying you when the annual report is due.

Please apply for a protocol amendment should any substantive change(s) be made, for whatever reason, during the research process. This includes changes in investigators. Email your request to ethics-committee@ru.ac.za.

Please submit a brief report to the ethics committee on the completion of the research. The purpose of this report is to indicate whether the research was conducted successfully, if any aspects could not be completed, or if any problems arose that the ethical standards committee should be aware of.

If a thesis or dissertation arising from this research is submitted to the library's electronic theses and dissertations (ETD) repository, please notify the committee of the date of submission and/or any reference or cataloguing number allocated.

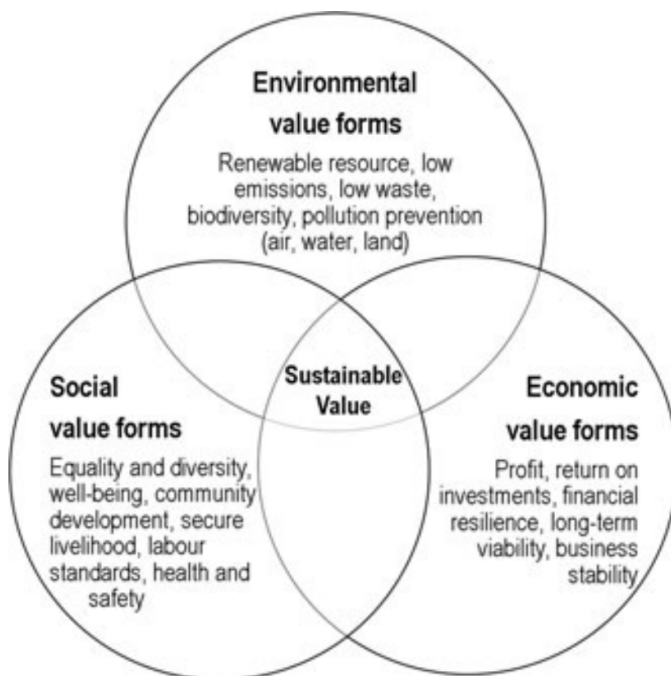
Sincerely,

**Dr Janet Hayward**

## Appendix 2: Guidelines for semi-structured interviews

### Sustainability

*Sustainability involves taking future generations into account when meeting the needs of the current generation (Brundtland Report, 1987). Through a triple bottom line view, sustainability involves a focus on three areas of performance: social, environmental and economic (Bocken et al., 2014), rather than economic performance alone.*



1. Would you consider Spier as a sustainable business? Why?
2. What steps has Spier taken to transition to a sustainable business model? (Perhaps point me to a few examples on the website that I can read more on)
  - a. Social
  - b. Environmental
  - c. Financial

3. What has been the outcome of transitioning to a sustainable business model, what are the positive and negative results. E.g. new sales markets, higher grape yields etc.

### Resilience:

*Cameron, Dutton and Quinn (2003) view organisational resilience as the ability of an organisation to absorb external strain applied to it as well as the ability to endure adversity through the continuation or improvement of its core function.*

1. Would you consider Spier as a resilient business? Why?
2. What efforts has Spier undertaken in order to become more resilient? (efforts to improve preparedness, responsiveness, adaptability and learning from past experiences)
3. What results have you seen to demonstrate that the resilience efforts were successful?
4. Has your efforts been similar or different to the results of your sustainability efforts? Why?
5. Would you say there is an overlap between your resilience strategy and your sustainability strategy?
6. Would it be fair to say that in building a sustainable business, one is actually also building a resilient business?

### Relationship between sustainability and resilience (based on your knowledge at Spier)

1. Is there an overlap in the outcomes/results between building a resilient business and building a sustainable business? (eg. Drought resistance, less labour strikes, better supplier relationships, new business markets for diversification, more stable income streams,

2. In your opinion, has building a sustainable business contributed to the resilience of Spier?
3. In your opinion, has building a resilient business contributed to the sustainability of Spier? More so than the previous question?
4. In your opinion, would you say that transitioning to sustainability relies on being resilient?
5. In your opinion, would you say that becoming resilient relies on transitioning to sustainability?

### Appendix 3: Informed consent form



#### | ACCESS LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH

Rhodes University  
Drostdy Road,  
Grahamstown,  
6139

Social Impact Manager  
Spier Wine Estate  
Baden Powell Drive  
Stellenbosch

15 August 2024

Dear Ms Cornelius

#### REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a registered Master's student in the Department of Rhodes Business School at the Rhodes University. My supervisor is Prof Owen Skae.

The proposed topic of my research is: *Sustainable Business Models in the South African Context – A Case Study of Spier Wine Farm*

The objectives of the study are:

- a) To explore the development of the current sustainable business model being employed by Spier Wine Farm.
- b) To assess the extent to which the current sustainable business model being employed by Spier Wine Farm has been effective in addressing its economic, environmental and social concerns.
- c) To determine whether the sustainable business model being employed by Spier Wine Farm has resulted in greater organisational resilience.

I am hereby seeking your consent to conduct interviews with certain staff members of Spier Wine Farm. To assist you in reaching a decision, I have attached to this letter:

- (a) A copy of an ethical clearance certificate issued by the University
- (b) A copy the research instruments which I intend using in my research

Rhodes University, Research Office, Ethics  
Ethics Coordinator: [ethics-committee@ru.ac.za](mailto:ethics-committee@ru.ac.za)  
t: +27 (0) 46 603 7727 f: +27 (0) 86 616 7707  
Room 220, Main Admin Building, Drostdy Road, Grahamstown, 6139



Should you require any further information, please do not hesitate to contact me or my supervisor. Our contact details are as follows:

Researcher: Kurt van Staden [kurtvanstaden18@gmail.com](mailto:kurtvanstaden18@gmail.com)  
Supervisor: Prof Owen Skae [o.skae@ru.ac.za](mailto:o.skae@ru.ac.za)

Upon completion of the study, I undertake to provide you with feedback.

Your permission to conduct this study will be greatly appreciated.

Yours sincerely,

Kurt van Staden

Rhodes University, Research Office, Ethics  
Ethics Coordinator: [ethics-committee@ru.ac.za](mailto:ethics-committee@ru.ac.za)  
t: +27 (0) 46 603 7727 f: +27 (0) 86 616 7707  
Room 220, Main Admin Building, Drostyd Road, Grahamstown, 6139