

**CREATING SHARED VALUE THROUGH INNOVATING BUSINESS MODELS:  
A CASE STUDY OF THE MAPELA WATER PROJECT**

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This thesis is dedicated to the loving memory of Pauline Mthombeni; may you eternally rest in peace.

## List of acronyms

AAP – Anglo American Platinum Limited

BIC – Bushveld Igneous Complex

CSR – Corporate Social Responsibility

DMR – Department of Mineral Resources

DWS – Department of Water and Sanitation

GDP – Gross Domestic Product

HCW- Hall Core Water South Africa Proprietary Limited

HCWM- Hall Core Water Mapela Proprietary Limited

ICMM – International Council on Mining and Metals

IIRC – International Integrated Reporting Council

MLM - Mogalakwena Local Municipality

MMSD – Mining Minerals and Sustainable Development

MTA - Mapela Traditional Authority

MTT- Mapela Task Team

SAHRC – South African Human Rights Commission

SASB - Sustainability Accounting Standards Board

SDGs – Sustainable Development Goals

SEAT – Socio-Economic Assessment Toolbox

SMART - Social Management And Responsibility Toolkit

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## Abstract

Shared value creation is a contemporary concept that aims to address the strained relationship between business and society through business models that expand the competitive advantage of business while addressing societal challenges in the business environment. Being a novel concept, studies on how value is created and shared are limited, especially where the unit of analysis is a specific project. This paper investigates how value is created and shared among stakeholders using a water project case study reported as a shared value initiative. The investigation is considered under the Hourglass Model (Ludeke-Freund, Massa, Bocken, Brent and Musango, 2016) as a guiding framework. This sustainable business model is suggested as a business model that creates shared value. The study uses a qualitative research approach to investigate the inputs into the Hourglass Model (Ludeke-Freund et al., 2016) in the form of capitals, briefly considers the business models of specific stakeholders and then analyses the value created, missed and destroyed for each stakeholder through their value creation mechanisms. In the findings, six different capitals are identified from the participating stakeholders, and the value created, destroyed, and missed is discussed in the context of shared value principles. The findings show that capitals are used as inputs into the Hourglass Model and are consumed, created, and regenerated. There is also the realisation from the findings that different stakeholders required different and varying amounts of the six capitals identified. The interconnectedness of the capitals is shown in the study, and the findings show that the context of the environment within which a project operates contributes to the creation of shared value. As with the six capitals, the findings show that multiple stakeholders create shared value confirming stakeholder theory's guiding principles regarding stakeholder salience, which are relevant for creating shared value. Some stakeholders are identified as being more important to creating shared value in the project than others. Trade-offs are then required for value creation from a finite pool of capitals and stakeholders to consider the capitals and stakeholders' long and short-term impacts. Identifying stakeholders and the capitals allowed the researcher to consider the value created, destroyed and missed in the project. This assessment of shared value generated forms part of the findings on business models' outcomes for shared value, summarised for the project. Based on these areas where the outcomes are missing or destroying value, recommendations are made to address these opportunities, and an area of further research is identified. Drawing on these outcomes, developing clusters as per the value creation avenues of shared value would be the most appropriate avenue for this project. The study adds

to the shared value body of knowledge by operationalising the Hourglass Model (Ludeke-Freund et al., 2016) and illustrating how the Model can be used to consider shared value creation.

# 1. INTRODUCTION

## 1.1 Background

### 1.1.1 The importance of mining to the economy of South Africa

Platinum, coal, gold, and diamonds are the main minerals and metals mined in South Africa. The country has significant deposits of chrome, vanadium, titanium, and many other less significant minerals (Minerals Council South Africa, 2020; Statistics South Africa, 2020a). The nation is well-endowed in these resources, and mining is naturally a primary critical activity to the South African economy (Statistics South Africa, 2020b).

The discovery of an abundance of minerals, metals and precious stones propelled South Africa from being an agriculture-based society to a leading mining economy (Casey, 2019). Diamonds were first discovered in Southern Africa in 1867, with gold discoveries following on closely in 1886, sparking tremendous interest from the industrialised world (Wilson, 2001). Of the recently industrialised countries of the late nineteenth century, global investment markets had a keen interest in the South African mining industry (Wilson, 2001).

### 1.1.2 The history of mining on the Platinum Belt

In addition to the world's largest gold deposit discovered in the Witwatersrand, an even more significant finding was discovering the Earth's largest platinum deposit within the Bushveld Igneous Complex (BIC) (Maier, Barnes and Groves, 2013). The BIC formed from igneous processes involving molten lava and volcanic flows, whereas the Witwatersrand gold deposits were a product of sedimentary deposits (Van den Berg, 2008). The BIC spans 66 000km<sup>2</sup> comprising a North, East and Western limb, covering Gauteng, Northwest, Limpopo, and Mpumalanga (Nelson, 2013). Figure 1 provides a visual depiction of the BIC's extent and the mining operations established in the complex (Nelson, 2013).

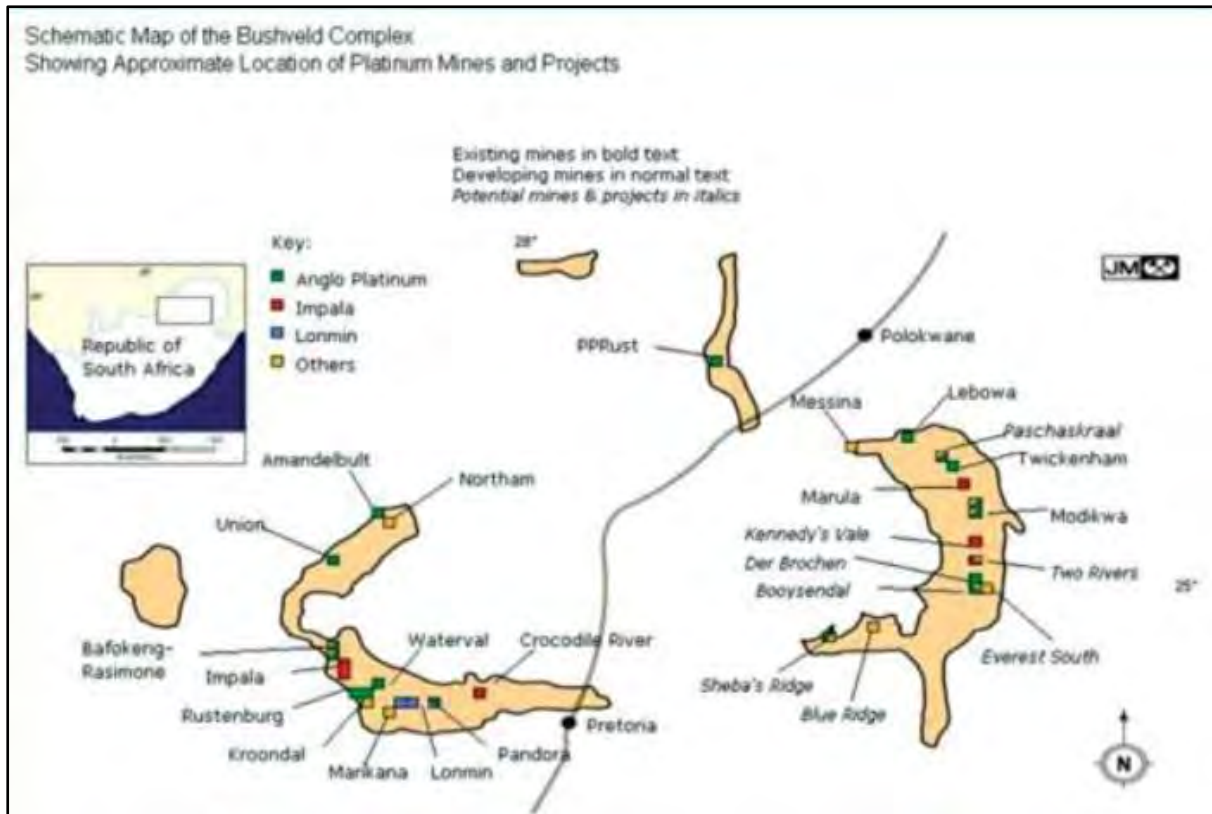


Figure 1 - Mines on the Bushveld Igneous Complex (Source: Nelson, 2013 p.6)

The South African platinum industry is the most significant contributor to the country's mining sector, both in employment and sales-value terms (Capps, 2012). The commercial extraction of platinum began in the 1920s, with the industry mainly remaining subdued save for sporadic speculative occurrences (Edwards and Silk, 1987).

### 1.1.3 Mining communities, Corporate Social Responsibility (CSR) and sustainability

#### 1.1.3.1 CSR in the mining industry

As a conceptual framework, Corporate Social Responsibility (CSR) is useful for discovering the “corporate standing of companies towards stakeholders” (Wheeler, Fabig and Boele, 2002, p. 298). For the mining industry, this relates to balancing the diverse needs of communities and protecting the natural environment while generating profit (Jenkins, 2004). CSR requires a company to be responsive to a range of stakeholders and not only shareholders on issues such as “climate change, human rights and the welfare of employees” (Hamann, 2003, p. 238). The result is that the mining industry is increasingly required to give reasons for their role in society

and record their performance by reporting environmental and social data (Peck and Sinding, 2003). A majority of multinational mining organisations now reveal CSR aspects related to health and safety concerns, ethical behaviour and environmental and social commitments (Jenkins and Yakovleva, 2006).

#### *1.1.3.2 What is sustainability, and why is it important?*

Sustainability is broadly described as “aligning an organisation's products and services with stakeholder expectations, consequently enhancing economic, environmental and social value” (Hurst, 2004, p. 8). Furthermore, sustainability is considered a primary moral and economic imperative of the 21<sup>st</sup> century and is a source of both opportunities and risk for business, recognising the interconnectedness of the environment, business and society (Institute of Directors Southern Africa, 2009).

The founding of the International Council on Mining and Metals (ICMM) in 2001 and the Mining, Minerals and Sustainable Development (MMSD) project in 2002 provided the impetus for the mining industry to enter the sustainability agenda, which includes “concepts such as sustainability and sustainable development” (Han Onn and Woodley, 2014, p. 116). The MMSD Project expressed an essential change in approaching sustainability, with the transition from advocating that individual mines may be sustainable to the sector's contribution to sustainable development (Mudd, 2007).

In the South African mining industry, sustainability can be considered within the historical context described above, evidenced by the time frame in which the country has been and continues to be a significant global contributor to mining in terms of both output and the variety of mineral resources available (Cronje and Chenga, 2009; Mbendi Information Services, 2010). However, the industry has carried the burdensome reputation of socio-economic exploitation through poor remuneration, unsatisfactory working conditions for a majority non-unionised, black African workforce and damage to the environment (Mariri and Chipunza, 2011). These social and environmental challenges inevitably bring about clashes between development and the environment (Ololade and Annegarn, 2013).

### *1.1.3.3 Business models for shared value*

Shared value looks to reframe the function of business as generating monetary value through a process that also creates value for society and other stakeholders by tackling their individual needs and challenges (Porter and Kramer, 2011). Extending classic business model theory and incorporating sustainability and CSR principles, business models for shared value deliver value propositions that are attractive to customers, result in optimal cost and risk structures, and enable substantial value capture (Teece, 2010). This is done with beneficial outcomes stretching beyond a company's immediate internal and external boundaries for the benefit of financial and non-financial stakeholders, as well as the natural environment (Ludeke-Freund et al., 2016). However, a more inclusive perspective on value creation is put forward in this research regarding business models for sustainability through the Hourglass Model (Ludeke-Freund et al., 2016), which will be discussed further.

### *1.1.4 Differences and similarities in the concepts*

The concepts of sustainability and CSR jointly focus on assisting organisations in operating to provide a platform for them to derive profits ethically, emphasising profit generation that is not detrimental to any other stakeholders (Bahu, 2020). CSR is considered as a means to redistribute created value retrospectively (Ludeke-Freund et al., 2016). At the same time, sustainability seeks to proactively establish mechanisms that create value through a triple bottom line approach that leverages on the three pillars of sustainability, namely the environmental, social and economic pillars to create value (Bahu, 2020; Ludeke-Freund et al., 2016) Shared value, on the other hand, is a business model that looks to create value through all stakeholders jointly (Ludeke-Freund et al., 2016) The principle differences in the concepts is summarised in the table below using the characteristics of motivation, drivers, valuation management social benefit and economic benefits as the comparable variables between the concepts

	CSR = REDISTRIBUTION OF CREATED VALUE	CORPORATE SUSTAINABILITY = TRIPLE BOTTOM LINE VALUE CREATION	SHARED VALUE = JOINT VALUE CREATION
<b>Motivation</b>	Securing reputation	Sustainability challenges as business opportunities	New business opportunities
<b>Drivers</b>	Stakeholders	Corporate performance	Business strategy
<b>Valuation</b>	Cost measures of CSR projects	Value added for society and economy	Value added for society and economy
<b>Management</b>	CSR department	Integrated across management functions and into core business	Vertically integrated within companies
<b>Societal benefit</b>	Successful CSR projects	Sustainable development of business and society	Far-reaching, sustainable change
<b>Economic benefit</b>	Legitimacy and reduced business risks	Improved business case drivers	Strategic competitive advantage

Figure 2 - Comparing CSR, sustainability, and shared value (Source: Ludeke-Freund et al., 2016, p.87)

## 1.2 The Role of Mining in Sustainable Development

The role of mining in sustainable community development has been brought into question by numerous sections of society (Mudd, 2007; O'Faircheallaigh, 2013). Local business support, procurement policies tailored to local suppliers and distributors, recruiting locally, and skills development are essential to positively contribute to local communities and establish human and financial resources (Mining Minerals and Sustainability Development, 2002; O'Faircheallaigh, 2013).

The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDG's) embody the plan of action for global social inclusion, global environmental sustainability, and global economic development (United Nations, 2015). The SDG's present the mining industry with an unparalleled opportunity to contribute to the advancement of this plan of action by using its financial, technological human and physical resources (World Economic Forum, 2016).

The mining industry's definition of 'community' usually incorporates people in the immediate impact zone (Kemp, 2009). A sustainable mining community is described as one that meets three fundamental characteristics. Such a society would exhibit evidence of ecological sustainability, economic viability and social equity while at the same time realising a net benefit through the lifecycle of the mining operation that it hosts (Veiga, Scoble and McAllister, 2001). These three aspects are considered in more detail in the following section.

### 1.2.1 Ecological sustainability

The world's water supplies comprise 97% undrinkable seawater, and the remaining 3% of freshwater is primarily frozen in Antarctica and the Arctic glaciers, making it inaccessible to humankind (USGS, 2020). Consequently, humanity must survive on 0.5% of the planet's water (Lambooy, 2011). Faced with recurring droughts, degraded surface water resources and a growing population that demands more water for agriculture to support food provision, Southern Africa faces acute water scarcity issues (Matchaya, Nhamo, Nhlenghwa and Nhemachena, 2019). This scarcity makes water a critical resource.

In mining, water is required for “mineral separation and processing, transporting of ore, tailings management, dust suppression, as well as for human consumption” (Mohapatra and Kirpalani, 2016, p. 3). The locations of mining activities are determined by ore existence; hence it is hardly feasible to relocate mining activities away from water-stressed areas (Fraser and Kunz, 2018). The usage of water is not only at mine sites but also in mining communities surrounding mining operations (Fraser and Kunz, 2018). Consequently, water stewardship becomes an essential consideration for various stakeholders (Alliance for Water Stewardship, 2017). Water stewardship relates to the socially equitable, environmentally sustainable and economically beneficial water usage through an approach that considers inclusive stakeholder processes for all users drawn from shared water sources (Alliance for Water Stewardship, 2017). As a shared resource, whose very nature makes access a fundamental human right, water should be valued from multiple perspectives, as this appreciation and reconciliation of these various viewpoints can create cohesion within organisations and other stakeholders, including community groups (Darling, Jones, Lukic and Read, 2014).

### 1.2.2 Economic viability

The mining production trend in South Africa has varied in recent years, with total mining production being 1,3% lower in 2019 than in 2018 (Statistics South Africa, 2020a). This “1,3% decrease in annual mining production” came on the back of a 2,1% fall in production in 2018 and an increase of 4,6% in 2017 (Statistics South Africa, 2020a, p. 1). As such, the role of mining in the South African economy has also varied over time. From 1970 to 1998, there is evidence of decreasing relevance of mining as a contribution to total output in the marketplace.

The main contributor is the declining importance of gold and uranium mining (Federke and Pirouz, 2002).

In 2011, mining contributed 9.6% to the South African Gross Domestic Product (GDP) (Department of Mineral Resources, 2020). This contribution fell to 8.1% in 2018 and further declined to 8% in 2019 (Department of Mineral Resources, 2020). The latest data indicates that the sector contributes about 7.5% to GDP, 30% to export earnings and over 450 000 to direct jobs (Department of Mineral Resources, 2020).

However, mining companies in South Africa did see some benefit in 2019, as gains in commodity prices (propped up by a weakening currency) began to bring the industry back into profitability, although this was amid increased costs and weak production (PwC South Africa, 2019). The industry's ten-year historical trend is shown in Figure 2, illustrating its revenue growth over the period (PwC South Africa, 2019).

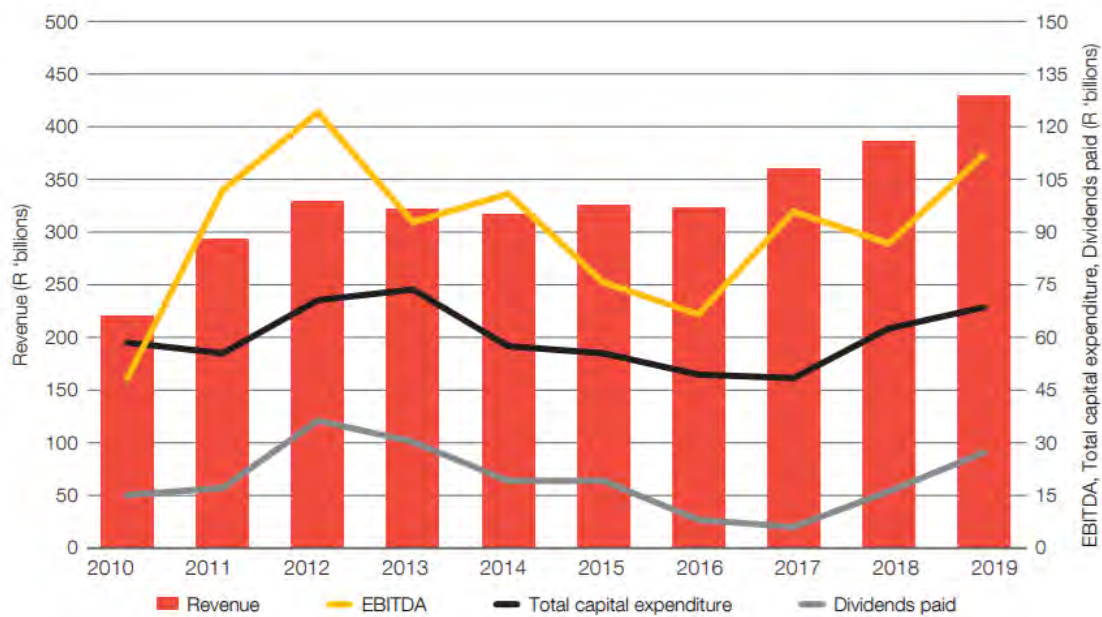


Figure 3 - 10-year historical financial information of the South African mining industry (Source: PwC 2019, p.31)

### 1.2.3 Social equity

#### *1.2.3.1 Environmental and social issues as sources of conflict*

Limited water resources are not a new source of conflict and have been present for centuries in religious, political and economic struggles (Gleick, 1993). In the South African context, recognising the cumulative impact of a century of mining in which profit maximisation was the core focus (paying little attention to social and environmental issues) is the foundation of examining mine-related water conflict (Adler, Classen, Godfrey and Turton, 2007). Resource conflicts can be severe and devastating, culminating in violence and resource degradation, negatively affecting livelihoods and uprooting communities (Castro and Nielsen, 2001). Peru is an example of a country with abundant water resources (Salem, Amonkar, Maennling, Lall, Bonnafous and Thakkar, 2018). Even with this natural endowment, Peru remains one of the countries in Latin America with challenges in water availability owing to its irregular geographical distribution of water sources, wasteful water usage and water pollution (Salem et al., 2018). Socio-environmental issues are identified as the most common contributor to conflict in the Peruvian mining sector, emanating from stakeholders' contradictory insights of what development and optimal land use entail in the country (Salem et al., 2018).

In 2009, the ICMM created a water working group to contemplate water issues that the sector faces and approaches to which the industry could address these issues (ICMM, 2012). Engaging with the community and strengthening links with the local community is central to consistent water reporting guidelines (ICMM, 2012). One of the guidance outcomes relates to the opportunities available to treat additional water to provide potable supply to local communities (ICMM, 2014).

### **1.3 The South African context - a case study in Limpopo**

The Mapela traditional community is situated approximately 30km north of Mokopane, in the province of Limpopo. Comprising 42 villages, the community is adjacent to the Mogalakwena Mine, which is the largest opencast platinum mine in the world and a flagship site for Anglo American Platinum (AAP) (Anglo American plc, 2020). Mining operations began at the mine in 1993 after AAP acquired mining privileges and the associated surface lease agreement spanning numerous farming locations in the area (Open Society Foundation for South Africa, 2017).

The social and environmental effects of mining on the villages of Mapela have been wide-ranging and well documented (Environmental Justice Atlas, 2019; Mudd and Glaister, 2009; South African Human Rights Commission, 2008). Villages in proximity to the mine have suffered the harmful effects of “recurrent rock blasting, dust, and other environmental threats such as the contamination of groundwater” (Open Society Foundation for South Africa, 2017, p. 31). Several inhabitants of Mapela have relinquished cropping or feeding “land to the mine, and, in some instances, whole villages have been moved to accommodate the extension of mining operations” (Open Society Foundation for South Africa, 2017, p. 31).

### 1.3.1 Conflict in Mapela arising from social issues

Large-scale mining investments in surrounding communities may be considered contributing to the generation or destruction of peripheral households' livelihoods and their broader socio-economic context (Mtero, 2017). Generally, Mapela is an area of high unemployment and low incomes as most families survive off social grants with a small number of adults employed at the Mogalakwena Mine, some working as domestic workers in the nearby town of Mokopane and others working for the Mogalakwena Municipality (Phuhlisani NPC, 2018). While many households undertake subsistence farming and generate enough to obtain commercial profit from agriculture, the activity has seen a significant decline since mining operations were intensified in the 2000s (Phuhlisani NPC, 2018).

September 2015 marked the beginning of violent and extensive protests erupting in the local communities (News24, 2015). Community leaders indicated that they had decided to engage in protest action as Mogalakwena Mine was not assisting in advancing community development. Neither were they empowering the local community with prospects to work on the mine and failing to drive social and infrastructure development (News24, 2015). Concerns were also raised regarding a lack of water and an unimproved road network in the area (News24, 2015). A resident of one of the surrounding villages where the mine relocated residents during expansion told reporters they were protesting because the mining company was no longer fulfilling its obligations (News24, 2015).

The protests resulted in an intervention from the then Minister of Mineral Resources, Ngoako Ramathlodi, and the South African Human Rights Commission (Open Society Foundation for South Africa, 2017). A task team was formed to address conflicts in the area (Open Society

Foundation for South Africa, 2017). The task team would revisit agreements between AAP and the community and reach a consensus on any outstanding actions and implementation. Currently, the task team consists of 11 members; 5 executive members and six additional members represent all 42 communities (Hall Core Water, 2017). The Task Team operates under the AAP Social Performance Department's guidance and conducts weekly meetings relating to social and environmental issues affecting the mine and the community (Hall Core Water, 2019).

### 1.3.2 Establishment of the Hall Core Mapela Water (HCWM) project

Limpopo Province has been experiencing water challenges that have culminated in the local government's inability to provide water through provincial municipalities (Mogalakwena Local Municipality, 2020). Mogalakwena makes up one of the six local municipalities that “collectively form the Waterberg District, located in the western region of the Limpopo Province situated in the north-eastern part of South Africa” (Mogalakwena Local Municipality, 2020, p. 1). The Mapela Task Team (MTT), together with AAP, identified an opportunity for the company to support the community in water provision (Hall Core Water, 2017). This project, known as the Hall Core Water Mapela project (HCWM), was subsequently endorsed by numerous stakeholders, namely the Mapela Traditional Authority (MTA), which is the traditional decision-making authority comprising of traditional leaders from the community, the Department of Water and Sanitation (DWS) and the Mogalakwena Local Municipality (MLM), all of whom face the same challenges from water scarcity (Anglo American Platinum Limited, 2018a).

Hall Core Water Mapela Proprietary Limited (HCWM) is a special purpose vehicle created to support the Mapela community developing a sustainable water plan for the water-stressed region (Cliffe Dekker Hofmeyer, 2018; Tau, 2019). The parties to this special purpose vehicle comprise AAP, Hall Core Water Proprietary Limited (HCW) and the Mapela community represented by the MTT and the MTA (Cliffe Dekker Hofmeyer, 2018). HCW is a private entity that executes the drilling, equipping and maintaining boreholes in the area to increase water supply capacity and as a stakeholder in the HCWM project (Cliffe Dekker Hofmeyer, 2018). For a contract duration of ten years from 2018, HCW will undertake the project's

implementation and maintenance, while AAP will pay for the drinkable water supplied to the community (Hall Core Water, 2019).

## 1.4 Research Objectives

### 1.4.1 Problem Statement

Studies that evaluate CSR and sustainable business models are limited, particularly where the analysis unit is a specific project (Michelini and Fiorentino, 2012). One of the weakest CSR practice areas relates to establishing best practice standards, communicating experiences with other development practitioners, and developing knowledge-sharing practices (Skinner and Mersham, 2008).

Concerning shared value, which has its origins in CSR and sustainability as discussed earlier, an increasing number of companies affirm in annual reporting, organisation websites or strategic planning documents that they endorse what Michael Porter and Mark Kramer have called 'strategic CSR' (2006) or 'shared value' (2011) (Brown and Knudsen, 2012). In its 2018 annual report, AAP has noted that they are a business that believes in creating shared value for all South Africans. (Anglo American Platinum Limited, 2018b). The HCWM project is one of these reported shared value initiatives and will be the specific project analysed in business models and shared value.

Consequently, considering this initiative from a shared value perspective, organisations and society can benefit from studies that seek to understand how social and environmental perspectives can be integrated into their core business frameworks to be utilised to understand competition and develop business strategy. The shared value principle becomes even more important when organisations expand their businesses into developing countries where the interconnection between companies and society is magnified (Matten and Crane, 2005). As discussed in the context presented earlier, the rich mineral endowment of South Africa, particularly this region of Limpopo, presents such mining operations as profitable business ventures; however, these locations are synonymous with complex social and environmental issues (Michelini and Fiorentino, 2012). Research such as undertaken in this study to understand what value is created, destroyed or missed, provides a steppingstone into further

inquiries such as “how to measure shared value”. Although some approaches are suggested in the literature (section 2.5), these remain largely unresearched.

#### 1.4.2 Research aims

The research aims to evaluate and analyse how community projects such as the HCWM project can create shared value for specific stakeholders. Using the concept of shared value and its characteristics, together with stakeholder theory and its drivers, the project will be evaluated for value creation from the perspective of key stakeholders, considering the relationships between the capitals, stakeholders and the business model for the project as per the Hourglass Model (Ludeke-Freund et al., 2016). The research aims and sub-objectives are further discussed in Chapter 3.

### **1.5 Intended contribution**

The HCWM project is currently in its second year of the operational phase (Hall Core Water, 2019). The research's intended contribution is to provide field evidence to sustain the project's shared value contribution to all stakeholders. The research can be used as a reference point for future project implementation to create shared value. The study will also seek to consider the Hourglass Model components (Ludeke-Freund et al., 2016) as an avenue for creating shared value, identifying value creation and areas where value is destroyed and missed for key stakeholders.

## 2. LITERATURE REVIEW

### 2.1 Shared value as a value creation concept

#### 2.1.1 What is shared value?

Creating shared value was founded on the principle that corporate charity's significance is related to social and economic benefit (Porter and Kramer, 2002). The concept then developed and progressed from the corporate philanthropic perspective to attaining a competitive advantage in executing CSR strategies (Dembek, Singh and Bhakoo, 2016). Porter and Kramer (2006) observed that corporate charity was not sufficient to achieve a competitive advantage. For this reason, creating a shared value concept can be viewed as a natural progression of CSR as it bridges social and economic progress.

Porter and Kramer (2006) originally put forward the shared value concept in which they acknowledged that there was a comprehensive justification for CSR; however, the authors go further in the 2011 publication to link the competitiveness aspect of business to redistributing value created (Figure 2) (Ludeke-Freund et al., 2016). The basis for this justification lay in four principles, namely, moral motivations, achieving sustainable development, maintaining a good organisational reputation and allowing organisations to obtain a social license to operate (Porter and Kramer, 2006). Although not offering a concise definition in their 2006 paper, the authors give meaning in a later publication, in which they define shared value in the context of policies and procedures that would improve the competitiveness of a company while concurrently enhancing the economic and social parameters within which communities function (Porter and Kramer, 2011).

Maltz and Schein (2012) define shared value as a global organisation's initiative to create value simultaneously for both shareholders and communities over legislative requirements (Maltz and Schein, 2012). This is an appealing definition for the context of this research as it captures the scale of multi-nationality, with global corporations voluntarily acting locally in communities (Maltz and Schein, 2012), which can be evaluated in the subject case study of the HCWM project. Companies generate shared value when they are “armed with the capability to do so, are faced with consistency between the creation of shareholder and social value and when social value can be enhanced beyond the company initiating the shared value venture” (Maltz

and Schein, 2012, p. 55). Capabilities such as supply-chain know-how and research and development can be used as support instruments to enhance social initiatives, thereby optimising shared value (Maltz and Schein, 2012).

## **2.2 What are the shared value outcomes?**

From a shared value perspective, companies have to incorporate a social understanding into the main frameworks they employ to understand their competition and develop a business strategy (Michelini and Fiorentino, 2012). Social harms or weaknesses frequently create internal costs for companies and shared value to address these social issues while pushing the subsequent trend of innovation and growth in the global economy (Porter and Kramer, 2011). Porter and Kramer (2011) describe three distinct business models as ways to create shared value, as discussed in the following sections.

### **2.2.1 Reconceiving products and markets**

The critical consideration in this value creation mechanism is what society needs, benefits and problems could be or are embodied in the company's products (Porter and Kramer, 2011). Porter and Kramer (2011) then suggested that there is an array of unmet needs in society. They proposed that equivalent or larger opportunities are present from providing for needy communities and developing countries. Addressing the needs of disadvantaged markets calls for the redesigned products of varying distribution channels, in which these requirements can initiate major innovations (Moon, Parc, Yim and Park, 2011).

The evidence of shared value through this avenue can be found where economies of scale are created from initiatives that offer essential goods and services such as health and housing (Spitzeck and Chapman, 2012). This avenue of value creation lends itself to multinational firms as an opportunity for profitable growth and radical innovation, as they convert the four billion poor people globally (that are at the lower end of the economic pyramid) into active customers (Prahalad and Hart, 1999). As a result, consumers will adopt innovations in technologies and business models (Prahalad and Hart, 1999). Companies need to rethink their business models around unmet customer challenges or concerns and not rely on traditional product definitions to create shared value through this mechanism. They must then identify customer segments that have been poorly supplied or neglected by the industry and prioritise improving lives, not

merely satisfying customer needs (Institute for Strategy & Competitiveness, 2020a). This approach requires that they begin with no predetermined constraints about product features, channel design, or the business's economic model (Institute for Strategy & Competitiveness, 2020a). By reconceiving products and markets, society's benefits are increased as companies are often better than governments and non-profits at marketing (Porter and Kramer, 2011). This positioning encourages customers to take up “products and services that create social gains, such as healthier diets or environmentally-friendly goods” (Porter and Kramer, 2011, p. 7).

### 2.2.2 Redefining productivity in the value chain

This mechanism is the second method of shared value creation, as Porter and Kramer (2011) put forward. Value chains, as depicted in Figure 5 below, are present in all companies as this is where competitive advantage is attained through the activities “within the value chain and opportunities to create shared value come about because societal problems can generate economic costs in the firm's value chain” (Institute for Strategy & Competitiveness, 2020b, p. 1). The value chain consists of two components, firstly all the activities that convert capital inputs such as social capital and human capital into added value (Magretta, 2002). The second component deals with how the value created is assigned to stakeholders, for example, locating and reaching customers, executing a sale, product distribution or service delivery (Magretta, 2002).

The value chain is unavoidably affected by or affects several societal challenges such as the use of natural resources like water, well-being and safety, employment conditions and equality (Spitzeck and Chapman, 2012). A complete evaluation of value chain productivity in resource use, procurement and logistics can be evidence of shared value creation through this channel (Spitzeck and Chapman, 2012).

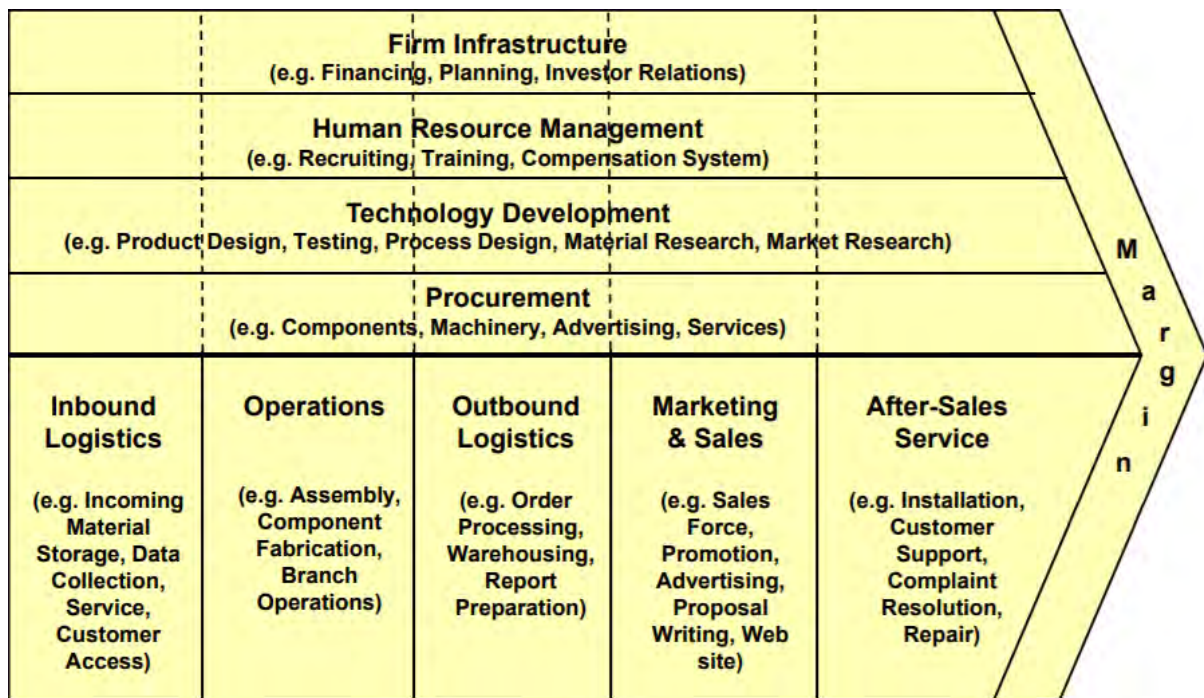


Figure 4 - A company's value chain activities (Source: Porter 2011, p.16)

There are numerous avenues through which the shared value concept is changing the value chain, and the ways of value creation are not independent but are often mutually reinforcing (Porter and Kramer, 2011). Value chains are relevant in the discussion on business models for shared value in that value creation is a sequence in which the inventory of capitals at the end of a period become the capitals available for use by the business model in the subsequent period (Chartered Institute of Management Accountants, International Federation of Accountants and PwC, 2013). The six capitals that provide the inputs into the components of the value chain, such as inbound logistics and operations, are discussed in detail later.

### 2.2.3 Local cluster development

The third mechanism of shared value creation is cooperation and knowledge sharing on sustainability issues in a local development context, which is evidence of building supportive industry clusters (Spitzeck and Chapman, 2012). Innovation and productivity are powerfully influenced by cluster developments which are “geographic concentrations of companies, linked businesses, service providers, suppliers, and logistical infrastructure” (Porter and Kramer, 2011, p. 12). To support cluster development in host communities, companies need to discover

inequalities and inadequacies then focus on those that represent the most considerable constraints to the company's productivity (Alberti and Belfanti, 2019). A cluster initiative is defined as a coordinated attempt to increase the growth and competitiveness of a cluster that takes into account the whole local ecosystem (Alberti and Belfanti, 2019).

#### 2.2.4 Other outcomes of shared value creation

Moon et al. (2011) put forward variations to the three outcomes proposed by Porter and Kramer (2011) above. In terms of reconceiving products and markets, they argue that Porter and Kramer (2011) did not handle society's needs comprehensively and only emphasised markets and products. Therefore, Moon et al. (2011) expanded the outcome of reconceiving products and markets, as Porter and Kramer (2011) presented to *reconceiving comprehensive targets* to take comprehensively consider more opportunities. Similarly, in terms of local cluster development, Moon et al. (2011) argue that the outcome, as suggested by Porter and Kramer (2011), restricts the scope of developing clusters to domestic contexts and fails to consider the international perspective. They, therefore, expand the outcome and rename it to *enabling local or global cluster development*. Lastly, Moon et al. (2011) added the outcome of *defining core competencies*, arguing that a company can articulate its primary competencies and look for unsolved societal needs that could be addressed and discover ways to generate economic value. By matching competencies to various social problems, society would gain numerous and efficient shared value activities (Moon et al., 2011).

The three avenues of value creation suggested by Porter and Kramer (2011) are seen as being mutually reinforcing. Developing the cluster in a geographic location will enable more significant local procurement opportunities and contribute to more compact supply chains (Porter and Kramer, 2011). Consequently, new products and services that address a social need will require new value chain activities such as distribution methods (Porter and Kramer, 2011). These new value chain activities can also be optimised through energy-saving alternatives and technology (Porter and Kramer, 2011).

### **2.3 Who are the beneficiaries of shared value?**

Different stakeholder groups' needs are essential drivers for creating shared value (Dembek, Singh and Bhakoo, 2016). Individuals, social groupings, organisations and the natural environment are interconnected; therefore, the actions taken by one actor can influence different points beyond the directly involved stakeholders (Dembek, Singh and Bhakoo, 2016). In considering the importance of relative stakeholders, Friedman's neoclassical view is brought to the fore with his argument that its purpose is to create and maximise profit for its shareholders (Friedman, 2007).

Porter and Kramer (2011) argue against this view and propose that the unwavering pursuit of shareholder welfare is the direct cause of the mistrust manifesting between business and society globally. Brown and Knudsen (2012) asked that if shared value's objective is to rescue capitalism from its social detractors, under what conditions would it achieve different outcomes for all stakeholders? Brown and Knudsen (2012) noted that restricting the emphasis to key stakeholders intricately involved in the activities may exclude others' needs (Brown and Knudsen, 2012).

### **2.4 Criticisms of the concept of shared value**

Orr and Sarni (2015) gave a unique perspective of the challenges between creating shared value and water stewardship, advocating that the theory of creating shared value should articulate how society gains from more efficient water management and what the responsibility of companies is in that context. Considering shared value from a water stewardship perspective which is the context of this research, water challenges demand more of business than only approximating water volumes and decreasing usage compared to targets (Orr and Sarni, 2015). Effective water stewardship requires insights into how external conditions, such as in communities, define business risks. Without such an understanding, shared value remains firmly entrenched in philosophies of resource efficiency and savings, often accompanied by poor water resource stewardship outcomes (Orr and Sarni, 2015).

The novelty of the "Big Idea", as Porter and Kramer (2011) termed the shared value concept, has therefore been questioned. The idea is seen as unoriginal, with its core underpinnings being

similar to concepts such as CSR and social innovation (Crane, Palazzo, Spence and Matten, 2014). Another sharp criticism raised by Crane et al. (2014) is that shared value disregards the pressures between social and economic goals. For example, in terms of the value creation mechanism of reconceiving new products and markets, is sustainability possible when the core product is unsustainable? British American Tobacco's Sustainability Strategy report highlights its sustainability efforts and details a clear focus on reducing the business's health impact (British American Tobacco, 2019). The report explains their approach to, and performance in, environmental, social and governance issues and how this creates shared value for stakeholders towards 'A Better Tomorrow' (British American Tobacco, 2019). Although real value is arguably created and shared in the British American Tobacco value chain, this use of shared value seems to be misplaced (Elkington, 2014). This argument could also hold true for extractive industries, such as mining, which recover finite natural resources as inputs to their value creation mechanisms by their nature. This disregard to companies' potentially negative impacts is evident in all three of the value creation mechanisms proposed by Porter and Kramer in 2011 (Crane et al., 2014).

#### 2.4.1 Considering the criticisms of shared value

The criticisms from Orr and Sarni (2015) can be considered to be valid when analysed from the perspective of stakeholder theory and environmental disclosure. The underlying argument that establishes stakeholder theory posits that companies need to ensure their survival and resilience by meeting stakeholders' demands to avoid being exposed to negative relationships with stakeholders (Ullman, 1985). Companies that can provide transparent environmental disclosure on water stewardship metrics to multiple stakeholders (such as volumes and usage) will meet different stakeholder groups' demands (Huang and Kung, 2010). In doing so, they will create additional value, improve their corporate image, and in the long run, achieve a higher level of sustainable business development (Huang and Kung, 2010). It, therefore, follows that to create shared value from water stewardship, companies require insights from multiple stakeholders on how external circumstances in communities define business risks.

Regarding the criticism raised by Crane et al. (2014) on the originality of the shared value concept and its similarities to other concepts such as CSR, this has been briefly discussed in section 1.1.4. Although concepts are similar, Ludeke et al. (2016) outline some key differentiators between shared value and other concepts. Shared value is seen as arising out of new business opportunities formally integrated into a company's business strategy to create value for society and the economy. Additionally, the social benefits created are far-reaching

and result in sustainable change evolving into a strategic competitive advantage for the organisation (Ludeke-Freund et al., 2016). Therefore, the criticism of the originality of shared value as a concept can be questioned based on this comparison (Figure 2).

## **2.5 Measuring Shared Value- Approaches to the measurement of shared value**

Numerous global reporting frameworks assist and guide organisations in measuring and reporting sustainability issues to a diverse range of stakeholders, including employees, customers and investors to suppliers, regulators and civil society organisations (Sustainability Accounting Standards Board, 2018). The following sections will briefly describe some of these measurement approaches.

### **2.5.1. The Integrated Reporting Framework (IR)**

The International Integrated Reporting Council's (IIRC) rationale for the adoption of an Integrated Reporting (IR) framework stems from the objective of explaining to the “providers of financial capital how an organisation generates value over time” (IIRC, 2013c, p. 4). One of the IIRC's reasons for initiating the IR Framework was that standard reports did not sufficiently explain how businesses use multiple 'capitals' to create value in the light of organisations relying more on intangible value that resides outside of purely financial reports (Tweedie, Nielsen and Martinov-Bennie, 2018). Figure 4 below illustrates the framework's workings with inputs, outputs and outcomes comprised of the six capitals and business activities and outputs linking the capitals' value at the beginning and the end of the business cycle (IIRC, 2013a).

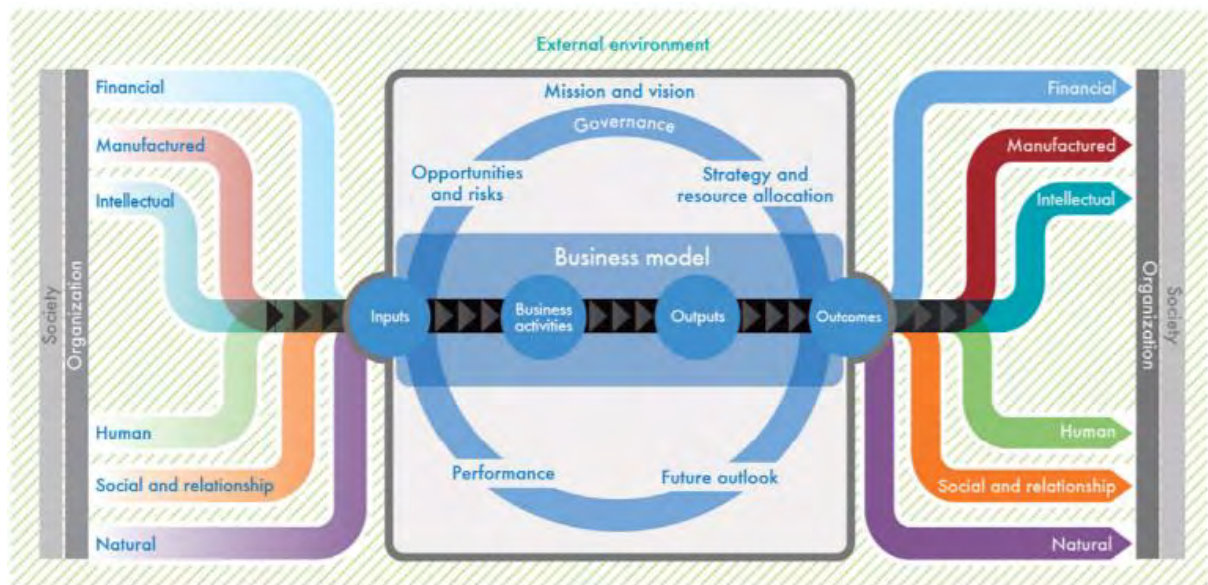


Figure 5 - The IIRC's business model for value creation (Source: IIRC 2013, p. 1)

The Framework (IIRC, 2013a) highlights a distinction between outputs and outcomes while at the same time, acknowledging that both are essential in presenting a complete illustration of a business model. Outputs are representative of the leading products and services that an organisation produces. These outputs can have a range of outcomes, affecting both the internal and external organisations, which would comprise a broader set of stakeholders (IIRC, 2013a).

### 2.5.2 The Sustainable Accounting Standards Board Framework

Sustainability accounting is described in the SASB (Sustainability Accounting Standards Board) Framework as the quantifying, managing, and reporting corporate activities that maintain or enhance the company's capability to generate value over the long term (Sustainability Accounting Standards Board, 2018). The SASB standards aim to assist in standardising disclosure and accounting metrics on the most relevant sustainability issues facing an industry (Frigo and Whittington, 2020). These disclosures are linked to the environmental, social, and governance issues that are likely to have material impacts on organisations' financial position or operations (Frigo and Whittington, 2020). Consequently, the SASB has developed standards to guide 79 industries in 11 sectors (Sustainability Accounting Standards Board, 2020).



Figure 6 - The SASB's approach to standards development (Source: SASB, 2018)

As illustrated in Figure 5 above, to categorise the disclosure topics that are likely to affect all or most organisations in an industry, the SASB (2018) has developed its industry classification system. The SASB uses a methodical process to identify topics and disclosures that have a reasonable possibility of having a material bearing on an organisations current or future financial position or operations, providing a valuable source of data for risk management (Frigo and Whittington, 2020). These standards continue to be a work in progress, and it is still to be seen whether they can also be tied to value creation (Pfitzer, Valerie Bockstette and Stamp, 2013).

### 2.5.3 The shared value measurement process

The measurement of shared value requires a systematic and repetitive process embedded within the business strategy of an organisation and not a periodic effort separate from the business performance (Porter, Hills, Pfitzer, Patscheke and Hawkins, 2012). Porter et al. (2012) suggest a four-step process, as depicted in Figure 6 below, which identifies the social issues that must be targeted. Secondly, once these issues are identified, a business case should be built on research and analysis of how social advancement will directly accelerate business performance. Thirdly, progress must be tracked against the desired target. Lastly, the results must be considered, focusing on confirming the expected link between social and business results and determining whether capitals' usage has generated or destroyed these stores of value (Porter et al., 2012).

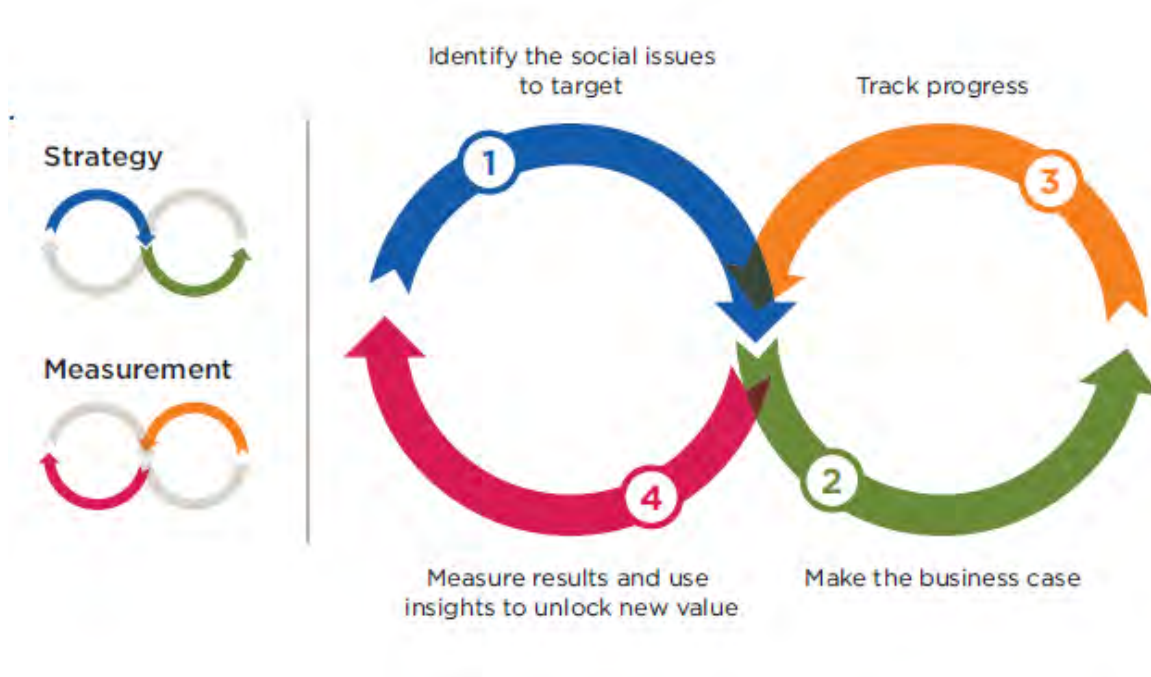


Figure 7 - Integrating shared value strategy and measurement (Source: Porter et al. 2012, p. 4)

An alternative to measuring shared value can be considered through the Hourglass Model as put forward by Ludeke-Freund et al. (2016). The Hourglass Model captures the four steps suggested by Porter et al. (2016).

#### 2.5.4 The Hourglass Model

The Hourglass Model (Ludeke-Freund et al., 2016) depicted below is proposed to help an organisation take a wider outlook on value creation. It can be used to plot “how the existing business model is creating, destroying, and/or missing value opportunities for diverse stakeholders” (Ludeke-Freund et al., 2016, p. 67). “This task goes beyond illustrating the current business model from a shared value standpoint but characterises the preliminary steps in business model design” (Ludeke-Freund et al., 2016, p. 24). By recognising, where total value is created, destroyed, and missed, organisations can better equip themselves to increase shared value creation opportunities.

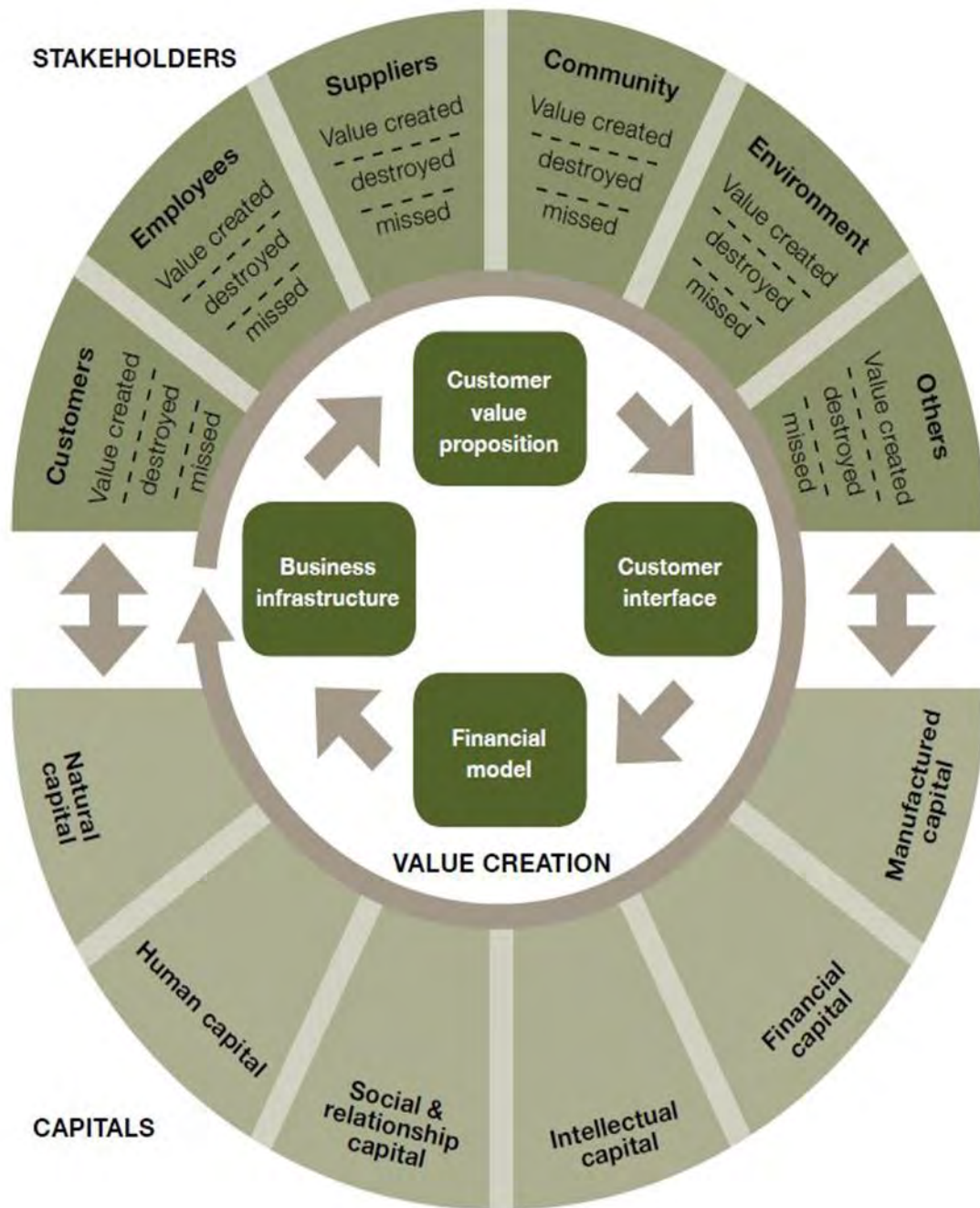


Figure 8 - The Hourglass Model (Source: Ludeke-Freund et al. 2016, p.31)

#### 2.5.4.1 The relevance of the Hourglass Model for the research

The Hourglass Model (Ludeke-Freund et al., 2016) focuses beyond the organisation and finance's traditional perspective, rather accounting for value creation in its entirety, spanning across the business model. The outlook on "total value creation" considers that business models depend on many stakeholders that provide various forms of capital. For example,

financial capital is provided by investors, the environment contributes to natural capital, and intellectual and human capital originates from employees (Ludeke-Freund et al., 2016). In reciprocation, those stakeholders are the role players with and for whom value is created, destroyed, or even missed, meaning essentially that reservoirs of different capitals can be improved or diminished (Ludeke-Freund et al., 2016).

“While creating shared value, a business model can destroy or ignore value opportunities for some stakeholders while prioritising value creation for other stakeholders” (Ludeke-Freund et al., 2016, p. 32). For example, a financially strong organisation may generate economic value for itself and employees if profits are distributed; however, it could still destroy social value for some stakeholders simultaneously through ill-treating employees or suppliers. Considering “total value creation and finding more opportunities for shared value creation, equips the organisation in analysing how the chosen business model creates, destroys or even misses value for each stakeholder along with the different types of capitals” (Ludeke-Freund et al., 2016, p. 32).

Shared value is created when inputs are transformed, not exhausted and accumulate with different stakeholders (Ludeke-Freund et al., 2016). This two-way relationship between the capitals and stakeholders is represented by the two-sided arrows diagrammatically depicted in the model (Ludeke-Freund et al., 2016). Therefore, examining the capitals' sources in the model and understanding the positive and negative value creation for stakeholders can guide sustainability and shared value for business and society.

#### *2.5.4.2 Components of the Hourglass Model*

##### *a) Capitals*

As one of the objectives of this research is to identify, understand and describe the six capitals involved in the HCWM project. Understanding these constructs is required to frame multiple capitals, operationalise shared value and make trade-offs within and between capitals. The Hourglass Model (Ludeke-Freund et al., 2016, p. 31) points to “six fundamental types of capital: financial, manufactured, intellectual, human, social and relationship, and natural. These capitals embody the basis for all business activities; they are paramount for any value creation process (IIRC, 2013b). Additionally, considering numerous stakeholders, there is an expanded

potential for differing definitions and interpretations of the capitals. The definitions below for the capitals have been found in the literature.

- I. *Financial capital*: This is the traditional measurement metric of company performance and can be measured through the stock and flow of financial capital in its financial statements (IIRC and EY, 2013). It incorporates funds acquired through financing or generated by its value chain activities (IIRC and EY, 2013). Financial capital, therefore, represents the store of funds accessible to the company for use in the manufacture of goods or the delivery of services, including debt and equity (EY, 2014). Financial capital measurement focuses on its source's perspective, not its application (IIRC, 2013b). Companies can use financial capital to fund community activities and payments to suppliers and employees, while customers' revenues are reflected in the financial statements (IIRC, 2013b).
- II. *Manufactured capital*: This is, overall, the most tangible of the capitals, mainly comprising of physical infrastructures or technology in the form of equipment and tools and is seen as human-created and production-orientated (IIRC, 2013b). The ownership of the manufactured capital maybe by the company or by third parties such as ports and other public infrastructure (IIRC, 2013b). Manufactured capital is also an input into the company value chain's productive capabilities. Its efficient management can condense resources and foster innovation that results in more flexibility and sustainability (EY, 2014). Manufactured capital is also reflected in the financial statements, and its use can affect other stakeholders, such as the roads in local communities (IIRC, 2013b). Water infrastructure in the context of this research has been identified as being critical to the business.
- III. *Intellectual capital* incorporates intangible aspects related to brand and reputation important to the company (IIRC, 2013b). It encompasses resources such as patents, copyrights, intellectual property and organisational systems, procedures and protocols, which are sources of potential competitive advantage (EY, 2014). Pulic (2004) considered the role of intellectual capital in value creation and suggested that intellectual capital as a resource also has a sociological element. It emphasises the criticality of employees as value originators. It further links the divide between investors, managers and employees, and other stakeholders such as governments (Pulic, 2004).

- IV. *Human capital* is most commonly defined as the capabilities, knowledge, skills and experience of the company's employees in the context of the value chain as well as the capacity to enhance this reservoir of “knowledge, skills, and experience through individual learning” (Dess and Picken, 2000, p. 18). Remuneration of employees is reflected in the financial results and can be measured from financial statements, while suppliers and customers are typically the stakeholders affected by a company's human capital (IIRC, 2013b).
- V. *Social and relationship capital* relates to the pool of resources formed through relationships between and within a company and its wider stakeholders (EY, 2014). The local community is often a critical source of social and relationship capital, particularly where a company is a dominant actor in the community, which is the case in most extractive industry contexts (IIRC, 2013b). Social and relationship capital can be a store of value, particularly in the face of improving the legitimacy of business, which is a driver for creating shared value in the writing of Porter and Kramer (2011). Measurement of this construct is elusive and is one of the capitals in which narrative description is most relevant (Acquaah, Amoako-Gyampah and Nyathi, 2014; IIRC, 2013b). However, proxies for its measurement could include examples such as volunteer work by employees in the community, social licenses to operate for mining operations, and customers' trust and loyalty to the company (IIRC, 2013b).
- VI. *Natural capital* provides resources that are often finite and essential for companies' productive capacity and the broader economic system (Bowe and van der Horst, 2015). Water, solar energy, fossil fuels, and ecosystems' capacity are few examples of a plethora of natural resources companies may have available (Bowe and van der Horst, 2015). The level of reliance on natural resources, the environmental impact of the productive process, and the extent to which the company can operate within limits imposed by the environment collectively impact shared value creation (Bowe and van der Horst, 2015). Companies looking to quantify, manage and strategically consider their environmental and social impacts can face several challenges. The lack of proven evaluation techniques and challenges in the supply chain where they can apply limited influence on their suppliers and customers' behaviour are issues that must be addressed (Bowe and van der Horst, 2015).

*b) The business model*

This component of the Hourglass Model (Ludeke-Freund et al., 2016) sits at the core of the Model and represents the mechanism of organisational value creation. At the heart of the business model is the customer value proposition, which the customer interface enables (Ludeke-Freund et al., 2016). Understanding the value proposition, resources, and capabilities is required to decide how to produce economic value while upholding a focus on an organisation's social vision (Dzharova and Gupta, 2015). However, it is important to note that not all organisations can construct their entire value proposition around social issues (Porter and Kramer, 2006). Organisations use their financial models to add to their financial capital stocks by transforming other capitals (Chartered Institute of Management Accountants, International Federation of Accountants and PwC, 2013). This is done by performing certain activities and not performing other activities to create, deliver, and capture value. The business infrastructure is developed from these activities by using and accumulating resources such as people, technologies, information, and reputation (Ludeke-Freund et al., 2016).

*c) Stakeholders and stakeholder theory – the research's underpinning theory*

The third component in the Hourglass Model (Ludeke-Freund et al., 2016) is the stakeholder element. Two considerations are given to stakeholders in this regard. Firstly who is affected by the business model, and secondly, how are they affected by the business model (Ludeke-Freund et al., 2016). A stakeholder is defined as a person or a group of people that are affected by a company's operations or have the ability to affect the company's operations (Carroll and Buchholtz, 2008). Examples of primary stakeholders extend to government departments, company employees, shareholders and host communities affected or can affect a company's operations and activities (Carroll and Buchholtz, 2008). The stakeholder theory concept proposes that for the effective management of stakeholders, a firm should first ensure its primary stakeholders are catered for and that its secondary stakeholders are handled ethically (Carroll and Buchholtz, 2008). It must also ensure that it makes a profit through the process (Carroll and Buchholtz, 2008).

When comparing this concept to the Porter and Kramer (2011) definition of shared value, considerable similarities can be extracted, mainly where the idea of good stakeholder management should result in value creation (Von-Liel, 2016). Von-Leil (2016) further considers that company profits' positive impact is a critical contributor to both stakeholder theory and creating shared value. Von Leil (2016) addresses two distinguishing aspects of stakeholder management and shared value. The former, Von Leil (2016) asserts, is about the intentional consideration of the company's stakeholders, while shared value, on the other hand, is a deliberate, considered process to create new markets or customers, redefine the supply chain or contribute to cluster development.

Consequently, stakeholder theory, which is the underpinning theory of the research, starts with the assumption that values are at the core of doing business, requiring articulating the shared sense of the value created and what brings core stakeholders together (Freeman, Wicks and Parmar, 2004). Furthermore, stakeholder theory posits clarity about how the business model operates and precisely what kinds of relationships are required and need to be created for stakeholders to deliver on their purpose (Freeman, Wicks and Parmar, 2004).

Multiple capitals are provided by different stakeholders, who provide the capitals for various reasons, with differing expectations of the benefit from the capital inputs (IIRC, 2013b). Stakeholders are, therefore, seen as persons or groups with legitimate interests in the day to day processes or functional aspects of company value creation (Donaldson and Preston, 1995). Their identification is through their interests in the company, regardless of whether they have any similar practical interest in them (Donaldson and Preston, 1995).

Donaldson and Preston (1995) proposed three distinct types of theory as making up the stakeholder theory. First are the descriptive or empirical forms of the theory intended to describe what happens when companies behave in a certain way. Secondly, the normative structure of stakeholder theory considers the moral obligations of how companies *should* act. Lastly, the instrumental approach looks to describe what will happen *if* a company behaves differently (Donaldson and Preston, 1995).

The relevance of stakeholder theory as the underpinning theory of this research lies in the fact that there is a strong correlation between stakeholder satisfaction and the creation of value as stakeholders provide the company with the resources for the business model in exchange for value created, relating to their different interests (Aru and Waldenström, 2014; Post, Preston and Sachs, 2002). Additionally, since value must be understood to be created and delivered,

and considering that value differs from stakeholder to stakeholder, organisations must identify and categorise their stakeholder groups to define their value perception (Aru and Waldenström, 2014). In a stakeholder model, therefore, the theory of value creation dictates that all that capture or generate value, or who in their relationship with the organisation assume risks internally or externally or who bear the burden of the organisations externalities, must be considered stakeholders (Argandona, 2011).

## **2.6 Conclusion**

From the literature review conducted in this chapter, it is evident that the work of Porter and Kramer (2011) provided the foundations of the concept of shared value, with linkages to similar concepts such as CSR but unique in its proposition (Table 2). The outcomes of reconceiving products and markets, redefining productivity in the value chain and local cluster development are the outcomes suggested by Porter and Kramer (2011) and are the outcomes on which subsequent authors have based their arguments (Alberti and Belfanti, 2019; Maltz and Schein, 2012; Moon et al., 2011; Spitzack and Chapman, 2012). In their analysis of the shared value concept, expansions to the concept, particularly shared value outcomes, are offered by Moon et al. (2011). An attempt has been made in this literature review to link the beneficiaries of shared value to stakeholder theory, proposing that views such as the neoclassical views of Friedman (2007) on the salience of the shareholder over the stakeholder are not consistent with shared value as shared value requires the involvement of all stakeholders including the environment as a stakeholder (Brown and Knudsen, 2012; Dembek, Singh and Bhakoo, 2016). The criticisms of shared value from various authors (Crane et al., 2014; Orr and Sarni, 2015) are considered. These criticisms are evaluated to conclude that those criticisms considered in the literature may not necessarily be relevant.

Regarding the chosen framework for the study, the Hourglass Model is chosen over other comparable shared value models (section 2.5.1 to section 2.5.3) with the rationale and relevance of the Hourglass Model discussed (section 2.5.4.1). The evaluation of alternative models carries the theme of the complexity of shared value measurement, which is under-researched and the subject of possible future research.

## **3. RESEARCH METHODS AND METHODOLOGY**

### **3.1 Research aim and objectives**

The purpose of the research was to evaluate and analyse how community projects such as the HCWM project can create shared value for specific stakeholders. The concept of shared value and its characteristics, together with stakeholder theory and its drivers, were evaluated and investigated related to the HCWM project. This evaluation was done by exploring the relationships between the capitals, stakeholders and the business model for the project as per the Hourglass Model (Ludeke-Freund et al., 2016). The underlying objectives of the research were to:

- To identify, understand and describe the six capitals involved in the Hall Core Mapela Water project.
- To define, explain and discuss the value creation mechanisms of the HCWM project using the Hourglass Model as a framework.
- To investigate and understand the shared value created for key stakeholders (specifically AAP and the Mapela Community).
- Make recommendations to improve and enhance shared value creation for AAP and the Mapela Community.

### **3.2 Ontology and epistemology**

A research paradigm can be defined as a general perception of phenomena and represents designs of views and practices that guide inquiry within a discipline (Bezuidenhout and Cronje, 2014). They provide lenses, frames and processes through which an investigation is undertaken (Bezuidenhout and Cronje, 2014). The research was conducted with a post-positivist worldview (Ryan, 2006). This research paradigm is appropriate as it emphasises a developing understanding of a study through investigation (Vos, Fouche and Delpont, 2017).

### 3.3 Research Method

#### 3.3.1 Qualitative research

The research method chosen for the study was qualitative. The main concern of qualitative research studies is to uncover knowledge by understanding how people feel and think in setting parameters that they find themselves in (Aspers and Corte, 2019). Qualitative research involves using methods that are process orientated, holistic, emic, inductive and subjective to comprehend, construe, describe and develop a theory on a phenomenon (Strauss and Corbin, 1990). The research that was conducted in this study was in the specific context of a single case study. Qualitative data was appropriate for this study as it can redress the imbalance of providing contextual information (Guba and Lincoln, 1994). As we study the relationship between stakeholders, human interaction and behaviour, this cannot be interpreted without reference to the meanings and purposes attached by these stakeholders to their activities (Strauss and Corbin, 1990). Qualitative data is, therefore, useful for discovering emic views (Strauss and Corbin, 1990). The emic methodology emphasises the research participants' perspective and investigates the research context by illustrating the participants' method of communication, behaviour, and interaction in the scene (Scarduzio, 2017). In the data analysis, the researcher used the emic approach, which begins with the ideas, themes, and behaviours emerging from the contextual setting and the participants and then proceeds to connect these findings to pertinent theory (Scarduzio, 2017).

#### 3.3.2 Exploratory research

The research conducted falls into the realm of exploratory research. Exploratory research generates insights into the nature of an issue in a way that could create questions for future research (Strydom, 2013). An exploratory study seeks to understand what is occurring, discover fresh insights, and ask questions and assess phenomena from a novel perspective (Robson, 2002). The overall purpose of exploratory research usually refers to studying a new area where unstructured data is collected, allowing one to explore a new topic, elicit a response to new concerns or uncover fresh ground by researching topics where little information is available (Robson, 2002). Exploratory research can also be used as a pilot study to more extensive research studies to tackle problems with minimal or no research (Goundar, 2012).

## 3.4 Data Collection

### 3.4.1 Population

A population or universe represents all of the people or texts with specific characteristics a researcher would like to study (Allen, 2017). In the context of this study, the population consisted of all stakeholders that could be affected or who could affect the HCWM project. The population's definition is derived from the definition of a stakeholder in stakeholder theory which is the underpinning theory for the research (Carroll and Buchholtz, 2008).

### 3.4.2 Sampling

A sample represents a subset of the population that the researcher has identified as the source of data based on the population's characteristics concerning the research question (Pascoe, 2014). The sampling process enables the researcher to make the organisation of data collection more manageable, focusing on fewer units of analysis and allowing for the optimisation of time and cost constraints (Saunders, Lewis and Thornhill, 2012). The stakeholders interviewed for this study comprised three organisations, namely the MTT, AAP and HCW. The sample from these interviews was made up of two focus group discussions with the MTT, numbering four members in each focus group. In total, eight community members were part of the focus groups from the MTT. Two semi-structured interviews were conducted with AAP representatives, and one semi-structured interview was conducted with HCW. In total, 11 individuals were interviewed for the data collection process.

Non-probability sampling was used as the research study's sampling technique and is often associated with case study research design and qualitative research (Taherdoost, 2016). Having described this research as exploratory, non-probability sampling (Saunders, Lewis and Thornhill, 2012) is the best method for exploratory stages for a subject such as shared value in which not many research projects have been done as it allows for the subjective selection of information-rich participants.

The type of non-probability sampling that was used in this investigation was purposive or judgemental sampling (Saunders, Lewis and Thornhill, 2012). This technique is particularly appropriate where the sample is small and when the focus is on key predetermined themes, looking for in-depth responses and focussing on the illustration that the study seeks to portray (Saunders, Lewis and Thornhill, 2012). The predetermined themes were extracted from the interview guideline suggested by a value mapping tool for sustainable business modelling, as presented in Appendix A (Bocken, Short, Rana and Evans, 2013).

### 3.4.3 Procedure for Data Collection

The interview guideline that was used for both the focus groups and the semi-structured interviews consisted of nine questions for discussion. Both the semi-structured interview and focus groups interviews were done through conference telephone calls that were audio recorded. The social distancing requirements necessitated the conference call approach during the COVID 19 pandemic, which made a face-to-face interview impossible. The focus group and semi-structured interviews were pre-arranged with the participants, and the guiding questions circulated to all invited delegates beforehand.

### 3.4.4 The research instruments

The instruments used to collect data for this research were the focus group interview method, semi-structured interviews, and company documentation analysis from AAP and HCW. The research interview guide is provided in Appendix A. The interview questions were derived from a value mapping tool for business modelling that explores the use of value mapping for broader sustainable business thinking, specifically tailored to be adopted in a workshop/focus group setting (Bocken, Rana and Short, 2015; Bocken et al., 2013). Two versions of the interview guide were shared, with one version carefully crafted to simplify technical aspects that were being addressed for all participants to have a good understanding of the questions being posed. In Appendix A, the alternative non-technical questions are in red font. Using prepared questions allowed the researcher to collect the data systematically and to be able to analyse the data based on the themes highlighted in each question.

#### *3.4.4.1 Focus Group Interviews*

A focus group is a discussion in a group setting on a specific topic organised for research purposes (Gill, Stewart, Treasure and Chadwick, 2008). The main distinction “between one to one interviews and focus group discussions is that the latter is far more suitable for creating novel ideas formed with a social context” (Gill et al., 2008, p. 293). Therefore, this research instrument was suitable for extracting data from the community as represented by the MTT, who share the same social context as part of the community of Mapela, who the ultimate beneficiaries of the project are. In focus group research, the participants are typically a similar group of individuals who are asked to consider a string of questions asked by the researcher (Sim and Waterfield, 2019). Although the focus groups were conducted as two focus groups, the findings are reported as the community's feedback in the results chapter that follows.

#### *3.4.4.2 Data Saturation in focus groups*

“Data saturation is achieved when there is sufficient information to replicate a study when the ability to obtain additional new information has been attained, and when further coding is no longer feasible” (Fusch and Ness, 2015, p. 1408). Focus groups are recommended by Fusch and Ness (2015) as a data collection method that could achieve data saturation. The recommended size for focus groups is between 6 and 12 participants, which would allow participants to share and express their thought while at the same time being large enough to create a diverse group (Fusch and Ness, 2015)

#### *3.4.4.3 Focus Group Methodology*

To identify the participants for the focus group interviews, a list of the members that comprise the executive team of the MTT was obtained through the assistance of the AAP Social Performance Department. The members were then invited through the Chairman of the MTT to voluntarily participate in the focus group discussions via conference call due to Covid 19 travel and social distancing protocols.

#### *3.4.4.4 Semi-structured interviews*

The semi-structured interviews were conducted with a participant in a leadership role from HCW, a representative from AAP based at Mogalakwena Mine and a representative from AAP based in the Corporate Office. All three participants had been intricately involved in the project planning, implementation and are currently engaged in the project's day-to-day operations. Semi-structured interviews are appropriate for collecting data used for descriptive,

exploratory and explanatory research and are best suited where individuals are the unit of analysis (Babbie, 2013).

Additionally, the interviews were used to probe more specific answers and questions. The researcher explained the question if the initial responses indicated that the respondents might have misunderstood the question. The follow-up also allowed the researcher to request certain supporting documents (section 3.4.4.3) to review as part of the respondents' answers. This flexibility is an advantage of using this particular type of research instrument (White, 2005). The other benefits of this research instrument are that it allows for spontaneity during the interview process, and the researcher has control over the question order and can ensure that all questions are answered (White, 2005).

In the reporting of the findings, the respondents in the one-on-one semi-structured interviews were labelled as:

- Respondent 1: an AAP representative (Corporate Office),
- Respondent 2: a HCW representative, and
- Respondent 3: an AAP representative (Mogalakwena Mine)

#### *3.4.4.5 Document analysis*

Documents were also used to collect data. The primary documents related to HCW and AAP's business models are found on their respective websites and Annual Integrated Reports. Documents reviewed included the HCWM project charter, AAP Annual Integrated Reports, demographic studies of the Mapela area and the service level and water supply agreement governing the project. Other documents analysed included AAP Executive Committee reports relating to the HCWM project and technical documents from HCW regarding their telemetry systems.

## **3.5 Data analysis and interpretation**

### 3.5.1 Thematic analysis

Thematic analysis is a qualitative technique used to analyse and report patterns of data present within the data being analysed (Braun, Clarke and Terry, 2014). The recorded interviews were transcribed using the Otter mobile application, and then corrections were done manually where the mobile application could not accurately transcribe the data. The transcribed interviews were listened to again by the researcher to ensure that no data was omitted. The emergent themes were added to the predetermined themes extracted from the interview guide. The main themes explored by the interview guideline are stakeholder groups, value created, value destroyed, value missed and new value opportunities, which are aligned to the components of the Hourglass Model (Bocken et al., 2013; Ludeke-Freund et al., 2016). The emergent themes that were identified in the research included business as a stakeholder in the HCWM project (section 4.4), stakeholder importance in the HCWM project (section 4.4) and scalability of the HCWM project (section 4.6.3.2).

Microsoft Excel and Word were used to structure the data to produce a flexible Word document of interview data, separated into logical chapters and subchapters (Ose, 2016). This method was suitable as its main purpose is “not to quantify qualitative data but to structure large amounts of unstructured data” (Ose, 2016, p. 147). The data was then organised around key themes and examined to see how far they fit or failed to fit the expected characteristics of shared value (Kohlbacher, 2006).

The actual process of coding used a combination of deductive and emergent coding. Deductive reasoning is a theory or concept testing process that starts with a recognised idea or generalisation and seeks to determine if the concept applies to specific instances (Hyde, 2000). In this investigation, the concept of shared value was tested through the themes related to shared value such as stakeholder groups, value created, value missed, and value destroyed and considering the three avenues of value creation for Porter and Kramer (2011). The predetermined codes were derived from the interview guide's themes, which were linked and addressed the research questions. The emergent codes were concepts, actions and meanings that evolved from the data during the course of the interviews (Stuckey, 2015).

The data was analysed for interpretive and explanatory purposes, drawing from the study's conceptual framework and theoretical objectives (Ellinger, Watkins and Marsick, 2005). Patterns are generally interpreted in case study research as an arrangement of events, incidents, behavioural actions or the results of interventions that are evident in the raw data (Almutairi, Gardner and McCarthy, 2014). Regardless of the design of the case study, whether exploratory, explanatory descriptive, multiple or single, data analysis based on pattern matching is appropriate if its usage is in line with the purpose of the study and the research questions to be addressed (Almutairi, Gardner and McCarthy, 2014).

### **3.6 Quality considerations**

#### **3.6.1 Trustworthiness**

Qualitative data analysis's trustworthiness is frequently shown by using terms such as authenticity, conformability, dependability, transferability, and credibility (Yin, 1994). Key quality considerations for this research are outlined below.

##### *3.6.1.1 Credibility*

In framing the qualitative study's quality, credibility was considered by evaluating whether there was consistency between the research participants' views and the researcher's reconstructions and representation of them (Anney, 2015). Member checks were used to ensure credibility, which means that the analysed and interpreted data were returned to the study subjects for them to assess the interpretation made by the researcher. Participants were free to suggest changes if they were unhappy with the analysis and believed they had been misreported (Anney, 2015).

##### *3.6.1.2 Dependability*

Dependability is concerned with the “consistency, stability and repeatability of the participant's responses and well as the researcher's capability to gather and record information accurately” (Brink, 1993, p. 35). Additionally, dependability was also be considered in terms of ensuring the research process was logical, well documented and audited (Vos, Fouche and Delpont, 2017). This can be proven through the audit trail involving an analysis of the inquiry process and product to validate the data, showing how the data were collected, recorded and analysed (Vos, Fouche and Delpont, 2017). For the researcher to “conduct a thorough audit trail, the following

documents were kept for cross-checking the inquiry process: raw data (in the form of recordings), interview notes and documents provided by research participants” (Guba and Lincoln, 1982, p. 6).

### **3.7 Ethics**

The Rhodes Business School and Rhodes University ethics approval process was adhered to before conducting this research. As the study involved data collection from various stakeholders and the use of company documents, approval and consent were required. A gatekeeper was identified as required by the ethics approval process, and consent was also obtained from all participants. The Gatekeeper approval template is attached as Appendix B. Participation was voluntary, and all records of interviews are stored as required by the Rhodes University Ethical Standards Committee (Rhodes University, 2020). Consent was also obtained from all participants before proceeding with the interview questions by reading through the consent form and asking the participants to confirm their consent to proceed with the interviews. The consent form that was read out is attached as per Appendix C.

## 4. FINDINGS AND DISCUSSION

### 4.1 Introduction

This chapter considers the findings that were extracted from the data collected from both focus groups that represented the Mapela Community and the three semi-structured interviews with the AAP and HCW representatives as per the methodology described in detail in the preceding chapter. Document analysis was also undertaken from documentation provided by HCW and documents available on the websites of HCW and AAP.

Findings are presented and discussed in this chapter, aligned with the key research objectives discussed in Section 3.1. Although the focus groups were conducted as two separate focus groups, the findings are reported as the consolidated feedback from the community in the results section that follows. The respondents in the one-on-one semi-structured interviews were labelled as Respondent 1 (AAP representative from the Corporate Office), Respondent 2 (HCW representative) and Respondent 3 (AAP representative from the Mogalakwena Mine) in the reporting of the findings.

### 4.2 The six capitals and shared value - Evidence of the six capitals in the HCWM project

#### **Findings**

##### 4.2.1 Natural Capital

Respondents 1 and 3 identified water as a natural capital that contributed to the HCWM project by stating that *"we get water, we clean it up, and we make sure that communities get potable clean water"*. The natural capital of water in the project was enabled by other capitals, namely financial capital, a point highlighted by Respondent 2. The finite nature of this capital has resulted in complaints from the community to AAP and HCW regarding some of the underground water drying up and aquifers not having sufficient water to be pumped from the boreholes. As stated by Respondent 1, *"there have been complaints that the underground water is drying up and the aquifers don't have sufficient water"*. In some communities, there was a need to pipe water from other boreholes due to the challenge posed by there not being an abundance of groundwater as a natural capital.

Recognising this as a finite capital on which the project is built, Respondent 1 noted that they would continue monitoring the stocks of this capital through their own underground water studies and also look to potentially increase the stock of this capital through sourcing water from larger catchment areas with the assistance of the Department of Water and Sanitation. In addition to water as natural capital, another form of natural capital identified was solar power that was used as energy to operate the water infrastructure such as pumps and substations. As a result, the HCWM project does not draw electricity from the Mogalakwena Municipality energy grid.

#### 4.2.2 Human Capital

Respondent 1 indicated that the AAP stakeholders that are involved in the HCWM project are both from the AAP Corporate Office as well as from Mogalakwena Mine. The human capital involved in the project is mainly from the Social Performance Department of AAP, with minimum to no involvement from the technical orientated functions such as water experts within AAP. Human capital is also provided in the form of the MTT, which is a cross-functional task team that represents the community in the project as analysed in the project charter that was provided (Hall Core Water, 2019). Respondent 2 indicated that HCW also provides a significant proportion of the human capital in the form of its employees that it employs from the community as well as the technically orientated water experts in their organisation. One of the examples given by the community in the focus group discussions related to human capital and the lack of engineering skills. *“So, what is happening is that in some of the villages, you can find that the pipes are leaking because there is no engineer to monitor the project rollout as pipes are being laid,”* said a focus group respondent.

#### 4.2.3 Social and Relationship capital

In the focus group discussions with the community, *"buy-in from the community"* was identified as the most critical contributor that enabled the execution of the project. Collaboration between the stakeholders such as HCW, the community and AAP, as well as other stakeholders such as the MTT and MTA, were seen as relationships that added value to the project as per the community. The participation of some stakeholders was, however, raised as a concern by the community, in particular the Mogalakwena Local Municipality, noting that *"it was very difficult to get cooperation from our local municipality"*.

Respondent 1 considered social and relationship capital and human capital to be overlapping elements and highlighted that from an AAP perspective, these were of particular importance to the project. The following comment supports this: *"one of the intentions is that as an organisation, we contribute towards the social-economic upliftment of our communities and as a social performance department, our main mandate is to secure, maintain and enhance the social license to operate for our communities"*. Respondent 1 also commented that *"when an operation the size of Mogalakwena is stopped even for a day, the losses could run into several million Rands."* This statement links the importance of social and relationship capital to financial capital.

Socially, Respondent 1 added, the project *"brings the different stakeholders together towards a common purpose which is making sure that the communities have access to services."* The community with the mine were able to realise social cohesion. The same respondent ended the social and relationship capital aspect by noting that as a Social Performance Department of AAP, this is one capital that they are *"comfortable with"*. Respondent 3 recognised the contribution of social and relationship capital as the coordination of all the appropriate stakeholders by AAP supported by the statement that *"the social capital comes in when we have to get all stakeholders involved and to run with the project"*. Respondent 2 considered social and relationship capital as an enabler for the natural and financial capitals highlighting that the cooperation between the involved three parties of HCW, AAP and the MTT was seen as vital for the project.

#### 4.2.4 Intellectual capital

Respondent 1 identified the intellectual capital that they provide into the HCWM project as their role in establishing the contractual groundwork for the project stating, *"we bring in lawyers to make sure that this is structured in such a way that it benefits communities"*. From a technical perspective, Respondent 1 acknowledges that HCW is the main contributor to the intellectual capital that was involved in the design of the project and the concept itself, commenting that *"I think it's their speciality, we must leave them to do what they have to do, to do the work and to worry about the water stuff"*. The HCW website speaks to their offering as *"delivering unique technology-based sustainable water solutions"* (Hall Core Water, 2020). From the analysis of the HCW company website, it was noted that HCW had harnessed telemetry for water monitoring, which measures all the critical parameters in the boreholes such as water level, water pressure, abstraction rate and energy (Hall Core Water, 2019). As per Respondent 2, additional intellectual capital is planned to be introduced into the project through the introduction of a monitoring and recording system to optimise the resolution of community complaints. In terms of further increasing the stock of intellectual capital, this is currently curtailed by the fact that there is presently no sharing of the intellectual property relating to groundwater between AAP and HCW. This is supported by Respondent 2, stating that, *"I think if we could combine what we see in our region with what the mine is seeing and they're monitoring, one could get a bigger view on sustainable water usage in the area. So, in terms of the mine and us, we work in silos. Each is a little bit wary of its IP, but that's something that needs to be looked into, is to share groundwater information"*.

#### 4.2.5 Financial Capital

In the focus group discussions, the community did not identify financial capital specifically as a capital that contributed to adding value to the project. However, there was the view that although an initial cash injection had been put into the project, an additional cash injection was required to expand the project to the extensions of the villages. Respondent 1 noted that from an AAP perspective, *"the way the project was set up was to be a partnership between communities where communities would benefit financially from the project"*. The community currently owns 40% of the HCWM project and would eventually own 51% of the initiative as per the service level agreement analysed (Cliffe Dekker Hofmeyer, 2018). Respondent 1 added

that the financial benefits are expected to flow to the Mapela community to look to create sustainable communities who would, in the long run, be in a position to *“run their own affairs and supply water to their own communities.”* Should the community manage the project well, they could be able to maintain the financial capitals in the project. From an AAP perspective, this would be *“ticking that box as well,”* noted Respondent 3.

Respondent 2 agreed with the importance of financial capital and said that financial capital was seen as an enabler to the project by HCW in that it *“brought to life”* other capital inputs such as the natural capital in the form of water. The result is a combined financial capital model where HCW contributes the capital expenditure for establishing the water infrastructure and AAP pays the operational costs, which are for the actual water provided (Cliffe Dekker Hofmeyer, 2018). Respondent 3 was also of the view that more financial capital is required from the South African Government to support the project and not to have the project as an entirely private initiative. The rationale given for this was that *“the more free water was provided to the community, the more people would be attracted to the area”*, raising the financial and other capitals required, which AAP and HCW could not sustain on their own.

#### 4.2.6 Manufactured capital

Respondent 2 said that the current municipal water infrastructure used in the HCWM project and the piping through which water is delivered to the community was already in place. The project built on this existing manufactured capital by extending the pipe network to areas that previously did not have this infrastructure. The ability of the Municipal manufactured capital in its present form to create value was questioned by the community in the focus groups, noting that the infrastructure was old and cooperation from the Municipality was *“less to non-existent.”*

### 4.3 Discussion on the evidence of the six capitals

#### 4.3.1 Trade-offs or Value Creation?

The capitals are vital as they provide inputs into the Hourglass Model (Ludeke-Freund et al., 2016), which also entails the inputs into the value creation mechanisms of AAP and of HCW and the means through which value is created and then shared with other stakeholders. These capitals are then consumed or converted by activities in the value creation mechanisms, which generate a range of outputs which in the Hourglass Model are reflected in value created, destroyed, or missed (Ludeke-Freund et al., 2016).

In the feedback from all respondents, it is evident more capital inputs of each capital are desired in this project. For example, the view is that more financial capital is needed for the project to assist with the growth of people in the area, as well as the desire for more natural capital, manufactured capital, and human capital. The process of consuming, applying, combining, changing and at times destroying inputs of capital through the business model to produce outputs and outcomes has both desired and undesired consequences separately and jointly on the capitals, the organization, investors, society and the environment (IIRC and EY, 2013). This is analysed and discussed under the value creation mechanisms in section 4.5 as the nature of those effects enlightens an evaluation of whether value has been created and to what extent as well as for whom (IIRC and EY, 2013). With the capitals being provided by multiple stakeholders, the underpinning theory of stakeholder theory directs the managing of the interests of all primary stakeholders (Carroll and Buchholtz, 2008). The additional capital inputs that are required to scale the project to accommodate the increased scope would then have to come from all stakeholders, even those that are currently not actively involved, such as the Mogalakwena Local Municipality.

In summary, the primary point of contention is, therefore, the potential trade-offs between the short and longer-term impacts on the capitals (Gibassier, Rodrigue and Arjalies, 2016; IIRC, 2013b). As an example, some may regard the depletion of the natural capital available in the form of water as value-eroding. At the same time, other stakeholders may maintain that the financial return generated from the project with sufficient environmental impact mitigation activities is an optimum trade-off for the loss in natural capital. As stakeholder interests are

essentially tied together, it is difficult to find a way to accommodate all stakeholder interests (Freeman, 2010). Trade-offs then become necessary. This conflict provides an opportunity for shared value creation by reframing the basic business value creation efforts to focus on ensuring more stakeholders are accommodated in value creation over time (Freeman, 2010).

#### 4.3.2 Which capitals were most important in the view of stakeholders?

##### 4.3.2.1 Natural capital

The community did not explicitly identify water as a natural capital as they had more emphasis on the financial and social, and relationship capitals. As per Respondent 2, however, the project has a high reliance on natural capital for value creation, and the extent to which the project can operate is constrained by the limits imposed by the environment as a provider of this natural capital. The importance of natural capital lies in the fact that two positions emerge when considering the sustainability of the project (Norton and Toman, 1997). *Weak sustainability* is the position that arises from the premise of maintaining the well-being of stakeholders from generation to generation, where natural capital and manufactured capital are viewed as substitutes within specific value creation processes (Norton and Toman, 1997). As a result, the stock of natural capital can be depleted (Norton and Toman, 1997).

In contrast, *strong sustainability* states that natural capital and manufactured capital must be viewed as complementary (Brand, 2009). With regards to strong sustainability, there is an obligation on stakeholders to keep each type of capital together over time (Brand, 2009). Therefore, the holistic stock of natural capital ought to be kept for current and future generations in the long run (Brand, 2009). Strong sustainability is required in the HCWM project as water resources need to be managed closely; however, there is a requirement for additional manufactured capital to meet the increase in population in the Mapela area. Both capitals would need to be viewed as complementary and kept intact over time.

##### 4.3.2.2 Human Capital

An increase in human capital with its associated characteristics of human development and the attainment of human potential is viewed as a result of environmental, social and economic development (Hancock, 2001). From a community perspective, this was identified as an area in which more human capital is required for the longevity of the project in the form of knowledge, skills and experience being given to the community in the management of the water

infrastructure. From the point of view of the community in the focus groups, the fact that the project has not employed the number of people that was indicated in the project charter points to value that is being missed in the form of skills, knowledge, and experience transfer. This is an essential capital for the project as the message from the community was strong around the need for more job creation, especially for the youths.

An example of a community-company partnership that created shared value by focusing on human capital inputs can be found when considering Fabindia (Talwar, 2013). The community-owned company operates with handicrafts workers as shareholders and directors through a shared value business model. The partnership has radically impacted sustainable livelihoods in the Indian rural sector while escalating Fabindia to become one of the major private platforms for products created from traditional techniques, skills and hand-based processes (Khaire and Kothandaraman, 2010).

Through the shared value business model, Fabindia introduced an artisan-shareholder system through cluster orientated supply companies that were incorporated as subsidiaries. Value is created for the artisan shareholders through earning dividends, with the holding company providing support in the way of human and financial capital. The result has been a robust sense of ownership in the artisans but has also contributed to maintaining Fabindia's supply chains while addressing social concerns such as poverty (Talwar, 2013). For Indian business, employing a business model that is founded on the shared value concept presents a vast opportunity to make a significant social impact while making monetary gain (Mahindra, 2012). This mechanism of shared value creation is linked to clustering development initiatives as described in the literature review (section 2.2.3), where a cluster initiative is classified as a planned "effort to increase the growth and competitiveness of a cluster that involves the complete local ecosystem" (Alberti and Belfanti, 2019, p. 40).

#### *4.3.2.3 Social and relationship capital*

All research participants in both the focus groups discussion and the semi-structured interviews identified human and social, and relationship capitals as critical capitals involved in the project. Consistent with the literature on social and relationship capital, the local community is often the primary source of this capital, mainly where a company is a dominant actor in the community (IIRC, 2013b). In the assessment of social and relationship capital by the stakeholders, no exact measurement was given. However, the requirement of the need to

establish the social license to operate for AAP can be considered a proxy of measure of this capital (IIRC, 2013b).

Social and relationship capital, therefore, becomes a store of value in that it represents the pool of resources that are formed through relationships between stakeholders (IIRC, 2013b). Shared value can be created in partnerships with communities (Porter and Kramer, 2011). An example of such value creation is the partnership between Veolia and Grameen Health Care Services in Bangladesh to fight arsenic contamination of water. The company was founded on the principles of addressing a social issue of the availability of safe drinking water through a business model for shared value (Veolia, 2018).

By leveraging on their collaborative skills between themselves and their communities, the companies developed “a water treatment method based on state-of-the-art water filtration techniques” (Veolia, 2018, p. 1). The project delivers water to disadvantaged villagers in rural Bangladesh (Veolia, 2018). Social benefits accruing from the venture include lower water prices, local entrepreneurial and increased quality of life (Veolia, 2018). Micheline and Fiorentino (2012) described this as a *social joint venture* in their analysis of business models for shared value. A social joint venture is the creation of a joint business between a for-profit and a non-profit organisation (Micheline and Fiorentino, 2012). In their review of this case study, they concluded that the social joint venture is the only method capable of creating shared value allowing both partners to provide tangible and intangible resources (Micheline and Fiorentino, 2012).

#### *4.3.2.4 Intellectual capital*

For intellectual capital, the carrier of this capital is the organisation (IIRC, 2013b). The findings of the research reveal that from a technical perspective, HCW is the main contributor to intellectual capital, as evidenced in the telemetry reporting system analysed in the data collection (Hall Core Water, 2019). The smaller contribution from the AAP side is in the form of legal advice governing the contractual relationships of the project. In the definitions of intellectual capital, three characteristics are found to be shared, namely intangibility, knowledge that creates value and, lastly, the effect of collaborative practice (Cabrita and Vaz, 2006).

It is this last characteristic that is of most importance to the HCWM project since it was observed and noted that there is currently no sharing of intellectual capital between AAP and

HCW as stakeholders. Exchange and the creation of intellectual capital are required where different parties hold the capital (Nahapiet and Ghoshal, 1998). Since intellectual capital usually is formed through a process of joining the knowledge and experience of various parties, it is also then reliant on the exchange between these stakeholders (Nahapiet and Ghoshal, 1998).

#### *4.3.2.5 Financial capital*

The description of financial capital is concerned with the source of the funds rather than the use of the funds, which usually results in the procurement of manufactured capital or other forms of capitals (IIRC, 2013b). The sources of financial capital have been described as being from two stakeholders, namely AAP and HCW. The interrelationships between financial capital and other capitals were evident in the research findings, with financial capital being seen as an enabler for natural capital, contributing to human, social and relationship and intellectual capital through avenues such as community employment, and lastly being a pivotal contributor to the existing and required stock of manufactured capital. It is through these interrelationships that most stakeholders interviewed viewed financial capital as an essential contributor to the success of the HCWM project. Financial capital can therefore act as a medium of exchange that distributes value through the transformation into other types of capital (IIRC, 2013b).

#### *4.3.2.6 Manufactured capital*

Manufactured capital is essential for the sustainable development of the HCWM project because the efficient use of manufactured capital gives flexibility and allows responsiveness to societal needs innovatively and efficiently (IIRC, 2013b). Additionally, manufactured capital can decrease resource usage and put more emphasis on human creativity and, in the process, enhancing both efficiency and sustainable development (IIRC, 2013b). With the current levels of manufactured capital being questioned by key stakeholders, the project is constrained, and this hampers the scalability of the project. Another challenge to the growth in the stock of manufactured capital in the HCWM project is the inactivity of the Mogalakwena Local Municipality who would be a critical source of manufactured capital. Without their participation and contribution of financial capital (that is converted into manufactured capital through the network pipe extension), the project faces significant challenges in further shared value creation.

#### 4.4 Who are the beneficiaries of shared value? - Identification of stakeholders in the HCWM project

##### Findings

In the focus group interviews with the community representatives in the MTT, the key stakeholders identified were: HCW, Mogalakwena Mine, the MTA, and the Mogalakwena Local Municipality. The Department of Minerals Resource (DMR) and the South African Human Rights Commission (SAHRC) were named as less critical stakeholders. The community raised the concern that the business community of Mapela was not an active stakeholder in the HCWM project, an emerging theme identified in the research that is concerned with stakeholder importance.

In the semi-structured interviews with the AAP employees, the respondents identified the community or the beneficiaries as the most important stakeholders, followed by the MTA, the Mogalakwena Local Municipality, the Department of Water and Sanitation (DWS) and HCW. With regards to the business community being a stakeholder, Respondent 1 indicated that some individual businesses are part of the project; however, this could be expanded to some of the maintenance activities that are currently still being carried out by HCW using some members of the community as employees. Respondent 1 added that they did not expect the stakeholders in the project to necessarily change over the life of the project; however, there would be a need to look into the scalability of the project, which would guide which other stakeholders would be required. Scalability was another emerging theme that was identified in the data analysis.

From the views of Respondent 2, the key stakeholders identified were AAP, HWC, the MTT and the MTA, commenting on the dynamics and *“political shuffle between the MTA and the MTT as to who actually calls the shots in terms of the project”*. In the stakeholder discussion, the approach of both HCW and AAP was to consider both parties as community stakeholders, although the reality is that they are both community leaders. Respondent 2 saw the tribal leadership changes as a challenge in terms of realigning with different stakeholders, with public-private partnerships such as this project being disrupted by leadership changes.

With regards to the Mogalakwena Local Municipality, though, Respondent 2 was of the view that they would rather not have the Municipality involved, beyond giving HCW the mandate as the water service provider, as they *“slowed things down”* and they did not view the non-

participation of the Municipality as a particular stumbling block because “*between the tripartite, we are moving fast enough and getting the job done*”. To an extent, Respondent 2 felt the Municipality is threatened by the Project, which doesn't assist with the other stakeholders in the Project Steering Committee working together.

With regards to the business community as stakeholders, which was one of the emerging themes identified in the data analysis, respondent 2 said that the ultimate aim of the project is that the community will be the majority owners of the project through designated groups such as youth, church groups, women and disabled people represented by the Mapela Development Company. This theme was also detailed in the Service Level Agreement governing the project (Cliffe Dekker Hofmeyer, 2018). Although HCW employs some community members in the operations of the project, the experiences with the local business community had led to challenges more than opportunities, said Respondent 2. Respondent 2 does note that in terms of the capitals, what is missing is the relationship with the Government who are not participating in the Project Steering Committee. The respondent sees the lack of interest in participation by the Government as an opportunity to “*step into the shoes of Government to provide the service in a politically and legally acceptable manner.*”

Although Government departments such as the Department of Water and Sanitation are not actively involved in the project, the mandate to provide the services must still come from the department (Department of Water And Sanitation, 2019).

#### **4.5 Value creation mechanisms in the HCWM project business model.**

##### **4.5.1 How is value created in the HCWM project? The value creation mechanisms of HCW and AAP**

The previous section has reported and discussed the findings on the six capitals, identifying, understanding, and describing the six capitals involved in the HCWM project. The next part of the investigation considers the centre portion of the Hourglass Model (Ludeke-Freund et al., 2016) and looks explicitly at the value creation mechanisms in the business models of HCW and AAP and applies these to the HCWM project. The business models considered are that of AAP and HCW as they are the only for-profit stakeholders interviewed in the study, and therefore the only value-creating businesses considered for the scope of the study. This rationale is in line with the shared value concept as shared value is essentially created in a

business context while simultaneously addressing social and environmental tensions (Porter and Kramer, 2011).

In the findings reporting and discussion, the four elements that make up the value creation process of the Hourglass Model (Ludeke-Freund et al., 2016) are considered; namely, the customer value proposition, the customer interface, the financial model and the business infrastructure of both HCW and AAP.

## **Findings**

### *4.5.1.1 Customer Value Proposition*

Stemming from the appreciation that freshwater is rapidly becoming a scarce form of natural capital and that “water-related risk is currently viewed as one of the greatest challenges facing the planet” (Salem et al., 2018, p. 1), the primary customer value proposition of HCW is to provide “unique technology-based sustainable water solutions” which are executed with no capital outlay by the customer on the water infrastructure (Hall Core Water, 2020, p. 1). The customer only carries the operational cost of providing water (Hall Core Water, 2020). This service offering is delivered on a “risk-free approach, where customers are only charged for the amount of water that they consume at a saving to what they would pay at municipal rates for water usage” (Hall Core Water, 2020, p. 1). Overall, HCW locates and abstracts water for customers “as well as oversees the implementation, maintenance and monitoring of the infrastructure and water quality” (Hall Core Water, 2020, p. 1). Relating this to the discussion of the capitals, the value creation mechanisms in the HCW business model primarily draw from intellectual capital, financial capital, and manufactured capital.

In the Integrated Report of 2019, the customer value proposition for AAP is stated as re-imagining mining to release the potential of natural capital and human capital to make a positive contribution to people’s lives and the environment (Anglo American Platinum Limited, 2019). Three strategic priorities are identified to meet the customer value proposition, namely unearthing the “full potential from the company’s operations through people and innovation, capitalising on the core portfolio of the company to deliver industry-leading cash flows and returns and finally to enable the development of the platinum group metals to enhance demand for the company’s products” (Anglo American Platinum Limited, 2019, p. 17). These priorities span from the short term to the long term; however, in the first strategic priority, one of the drivers of the priority is to implement a sustainable mining plan, centred

around being a trusted corporate leader, ensuring thriving communities and maintaining a healthy environment (Anglo American Platinum Limited, 2019). This driver spans the short, medium, and long term as a driver to deliver on the customer value proposition as per figure 8 below (Anglo American Platinum Limited, 2019). Through relating the business model to the capitals, all six capitals are mentioned as being relevant for creating value for the organisation (Anglo American Platinum Limited, 2019).



Figure 9 - AAP Strategic priorities (Source: Anglo American Platinum Limited 2019, p.20)

#### 4.5.1.2 Business Infrastructure

The HCW website provides insight into how business infrastructure is established and used in value creation (Hall Core Water, 2020). According to the website, in the assessment of the possible existence of groundwater during the site analysis stage, established scientific techniques are employed to gauge the potential of groundwater in an area (Hall Core Water, 2020). Through this process, the potential existence of groundwater is confirmed, and subsequently, “the actual flow rates and performance of the boreholes are established through aquifer tests” (Hall Core Water, 2020, p. 1). To prevent surface contamination, the wells are lined with a synthetic polymer. “Where the water strike has been made, a pierced casing is installed to allow the water to enter the well” (Hall Core Water, 2020, p. 1). The surface infrastructure comprises all piping, tanks, and stands needed to keep an adequate water buffer on the surface. This infrastructure is meant to guarantee the continuous availability of flowing water at the various points of connection. The well infrastructure consists of the “submersible

pump, monitoring equipment and all plumbing and electrical components linked to the down-hole equipment” (Hall Core Water, 2020, p. 1).

The business infrastructure for the AAP value creation process is also derived from the six capital inputs that have been discussed above (Anglo American Platinum Limited, 2019). The company reinvests the value that is generated from the six capitals into the financial capital on which the business depends and use this reinvestment to maintain the company’s capacity to create sustainable value through stakeholders (Anglo American Platinum Limited, 2019). The key features of the business infrastructure include a culture of safe and reliable operations, a healthy and productive workforce, effective management of resources with a reduced impact on the environment, modernisation and innovation in process and equipment performance and socio-economic development that creates economically diverse and sustainable communities (Anglo American Platinum Limited, 2019).

#### *4.5.1.3 Customer Interface*

HCW “manages the water-use license application process (and any other relevant permits and licenses that may be required) and maintains all statutory documentation for customers to access water lawfully and within compliance requirements” (Hall Core Water, 2020, p. 1). As per Government “regulatory requirements and as part of the water supply system, all wells are installed with monitoring equipment to monitor both downhole variables as well as on surface deliverables” (Hall Core Water, 2020, p. 1).

The AAP customer interface involves continuous engagement with stakeholders such as the surrounding host communities that provide labour to the operation, trade unions, employees, financiers, media houses, government, non-governmental organisations and supply chain and joint venture partners (Anglo American Platinum Limited, 2019). The organisation rates the quality of relationships with stakeholders as strong, cordial or weak (Anglo American Platinum Limited, 2019). In the Integrated Report of 2019, the relationship that has arisen through the HCWM project between AAP and the community is described as a strong relationship. With regards to the customer interface in relation to customers as stakeholders, this relationship is also seen as strong and is sustained by ensuring the security of supply, traceability and sustainability (Anglo American Platinum Limited, 2019).

#### *4.5.1.4 Financial model*

The HCW financial model is constructed around the Build-Operate-Own and Transfer (BOOT) model, which is predominantly suitable for the provision of bulk water supply (Hall Core Water, 2020; Lianyu and Tiong, 2005). The model has the “benefits of allocating the risk of supplying a new bulk water supply (within budget and timeously) to the private sector, enhancing the efficiency of project delivery, and activating new sources of funding for fast project development” (World Bank, 2014, p. 1). The model has become a progressively suitable mechanism for the provision of bulk water supplies as it increases the capacity of water systems to provide drinkable water to a rising number of customers (Ameyaw, Chan, Owusu-Manu, Edwards and Dartey, 2017). “No initial capital outlay is required from a client with the capital contribution by HCW spreading over 10 to 15 years once groundwater development has been done, all at the risk of HCW” (Hall Core Water, 2020, p. 1).

The AAP financial model is based on financial capital as an input into its value-creating activities and is described as a pillar of value (Anglo American Platinum Limited, 2019). The financial pillar of value is achieved through two components, namely financial returns and cost (Anglo American Platinum Limited, 2019). Since the organisation has a high reliance on modern mechanised mines and effective smelting and refining processes, there is a need to invest financial capital into technology to improve operational efficiencies and to reskill people (Anglo American Platinum Limited, 2019) Although initially, financial capital is depleted with this investment, the financial model relies on the increase in manufactured capital and human capital to further add value to financial capital and other capitals through the customer value proposition, the business infrastructure and the customer interface (Anglo American Platinum Limited, 2019).

#### **4.6 What value is created, missed, and destroyed for the identified stakeholders?**

Having analysed and discussed the value creation business models of AAP and HCW as the value creation mechanisms in the Hourglass Model (Ludeke-Freund et al., 2016), the next stage is to consider the value that is created, destroyed or missed for stakeholders in particular, AAP and the Mapela Community. In terms of the Hourglass Model (Ludeke-Freund et al., 2016), this proposition looks explicitly at the top section of the model (figure 7). The value created, missed, or destroyed emanates directly from the interaction between the capital inputs

at the bottom of the Hourglass Model and the value creation business model of AAP and HCW at the centre of the Hourglass Model (Ludeke-Freund et al., 2016).

#### 4.6.1 Value created for each stakeholder

### **Findings**

#### *4.6.1.1 Value created from the community perspective.*

In the responses from the focus groups, the community sees HCW as the stakeholder that has benefitted the most from the project in that they are the business that is most entrenched in the operations of the project. The community also considers that AAP has also benefitted since the uprisings and violence caused by the scarcity of water in the past are no longer an issue as “*people are moving onto other things*”. The community has confirmed that they have also derived value in that there is water available even though the provision of water is not entirely where it should be, with children now being able to go to school clean and being able to drink clean water. According to the focus group feedback, *some* employment was created in the community from the project, and local SMMEs (Small, Medium and Micro Enterprises) were being empowered.

#### *4.6.1.2 Value created from an AAP perspective*

From the perspective of the AAP interviewees, the most significant value created for AAP in the HCWM project lies in the social license to operate. The statement that supports this is that the “*operations could continue without protests, without people coming to our gates and stopping the mine*”, as noted by Respondent 1. This value of having access to the mine and stable operations could be considered in monetary terms if the economic value of production stoppages is considered. The added value that is created is through the financial benefits that will accrue to the community through the Mapela Community Trust, which can then be used to fund other development initiatives. In the view of Respondent 3, the contribution of AAP related to creating sustainable livelihoods in the community with the examples of people being able to plant vegetable gardens and “*car washes popping up everywhere*”. The community value creation comes from the fact that there is no cost levelled against the community for the provision of the water; it is essentially supplied for free. Respondent 3 added that value for the community had been created through the provision of an essential service such as water for

free and through the empowerment of the local companies that have been part of the project. Ultimately the community will derive value from the ownership of the project at the end of the ten-year term when 51% ownership is by the Mapela community and its designated groups such as people with disabilities and women (Hall Core Water, 2017).

The value that the Municipality generates was also identified by Respondent 1 and Respondent 2 in that they are the mandated authority to deliver this service to the community as per the Water Services Act 108 of 1997 (Government of South Africa, 2020). However, now that AAP and HCW are essentially funding the business model, they are relieved of the financial responsibility of the provision of water to the community with Respondent 3 adding that from the Mogalakwena Local Municipality perspective, *“they [Mogalakwena Local Municipality] can be happy that there’s an entity that’s providing water to the villages”*.

#### *4.6.1.3 Value created from an HCW perspective*

Respondent 2 notes that the employment of locals from each village in the community during construction and the employment post-construction of a security guard and pump operator per pump station was value created for the community. Respondent 2 acknowledges that the expectation of employment from the community was of more employment opportunities; however, the current profile of 53 jobs were the only available opportunities. Respondent 2 saw the value derived from the project for AAP as arising from the social license to operate through looking after their host communities. By looking after the communities with the provision of clean water, exposure to health risk decreases, and this is also a value capture opportunity for AAP in that the medical expenses it is responsible for their employees are lessened. Respondent 2 extended this value to the reducing of health risk exposure in the mine operations that can be related to production, stating, *“that’s something I have always said that this project is definitely improving the health in Mapela and we do not measure it”*.

## 4.6.2 Value destroyed for each Stakeholder

### **Findings**

#### *4.6.2.1 Value destroyed from the community perspective*

Through the focus group discussions, the community stated that there had been little to no impact on the environment as a result of the project, and nothing from an environmental damage perspective was reported to them as the MTT. They, however, spoke about the issue of water quality as a concern for value creation, raising the purification of water as a concern by saying, *“we are just drinking water, and we don't know where it is coming from”*.

The vandalism of the installed water infrastructure was described as value destroyed in the focus group discussion. The reason that destruction was occurring as per the community members was that before the project, when water was delivered by truck, there was financial gain for community members serving as water transporters. However, with the introduction of the boreholes in the village, the requirement for water transport stopped, and community members lost this revenue stream. The change prompted the vandalism of taps and pipes to reopen the water transport requirement forcibly. The other value destroyed identified by the community was the failure to fix pipes timeously by HCW as well as the depth at which the pipes were laid both by HCW and the Municipal legacy pipes, in that the pipes should possibly be laid deeper in the ground to avoid the problem of vandalism.

The community further added that value had been destroyed in terms of the employment expectations of the community not being reached. Initially, the project had indicated the project would employ at least 88 community members. This number has not materialised with a community respondent in the focus group discussions saying, *“we are representing our community, and they are looking up to us to represent them, especially in ensuring employment”*.

Finally, the community added that from an MTT point of view, they would appreciate that when HCW attend to issues in the villages, they should consult the MTT members directly and be accompanied by representatives of the MTT. The inability to communicate in advance with the MTT was seen as a negative contribution to value creation. A community respondent (during the focus group discussion) expressed this by saying, *“I feel that when Hall Core comes to our village, they must contact us first”*.

#### *4.6.2.2 Value destroyed from an AAP perspective*

Respondent 1 identified water quality as a value loss area and mainly addressed the issue of nitrates in the water as a potential loss of value. This challenge was being mitigated through parallel projects undertaken by AAP in consultation with the Minerals Council of South Africa to look at how to address the issue of nitrates, not only in the Mapela area but all AAP operations, including the possibility of eradicating pit latrines.

From the perspective of Respondent 1, the potential for corruption was seen as a risk to value creation, in that in cases where there are power struggles (as is the case with the MTA and the MTT), the potential for corruption in the respondent's opinion is high. The respondent added that AAP tries to mitigate these risks through its business integrity policies and processes.

#### *4.6.2.3 Value destroyed from a HCW perspective*

According to Respondent 2, vandalism was an ongoing issue that had a financial impact on HCW and was driven by business opportunity where the destruction is done specifically for the engagement of a community subcontractor to fix the problem or to force the engagement of a community security service provider. The role of the MTA was initially intended to deal with such issues through the responsible headman as they have a *“strong voice, but this is currently not happening”*. Other *potential* avenues of value destruction identified by Respondent 2 were drought, unrest at AAP operations and the withdrawal of the mandate from the Mogalakwena Local Municipality to HCW as the water service provider.

As was raised by the community, the issue of water quality was also identified as a potential area of value loss for the project by Respondent 2. Although the water quality is monitored monthly to evaluate groundwater impacts and ensure that it is within the South African National Standards, the reality remains that nitrates are produced as a by-product of the mining process that could enter the groundwater. The historical legacy of pit latrines used in the area is another source of nitrates that could potentially find their way into the water. Nitrates can be removed from the water, but it is a costly process, according to Respondent 2.

The final significant risk area for value destruction from Respondent 2 related to the post-contract handing over of the project to The Mapela Development Company because it was imperative to ensure that the *“capacity exists for the upkeep”*. *“Sustainability is going to be major at that point...that’s where all the capitals are going to come into play.”* This risk could

be managed through training and employing the right people, suggested Respondent 2. Leadership should also be considered in the view of Respondent 2 as *“you can't expect the tribal leader to be an MD of a water company”*.

The concerns raised by the community around the depth of pipes was dismissed by Respondent 2 as they indicated that the pipes that were laid by HCW were to approved standards.

#### 4.6.3 Value missed for each Stakeholder

### **Findings**

#### *4.6.3.1 Value missed from the community perspective*

Arising from the shortage of water, the trucking of water into the villages by AAP alleviated the challenges and, at the same time, empowered some members of the community in being service providers for the delivery of water. The community identified value missed in the additional supply of water to villages by water tankers, owned by community members stating that value would be created if *“they give every village a truck to supply water in a block of three months and would result in “some of our children and uncles being employed”*. The community views the scope that was given to HCW as being too small to cover the whole area, which was being further compounding by the growing population through the new extensions. In the meantime, they felt water tankers must service these villages, and the project had to be expanded to schools, giving examples of two villages, Armoede and Rooibokfontein, as villages that currently had no water.

The empowerment of local suppliers was a value creation opportunity missed in the opinion of the community, giving the example of the maintenance side of the project operations, which would assist in skills transfer. Insights on how this could be achieved were given, suggesting that bursaries are given to community youths to study specifically in the skills required to run the project once it is handed over to the community.

#### *4.6.3.2 Value missed from an AAP perspective*

Respondent 1 recognised the challenges that have arisen in the project due to the increased scope. Scalability would come with its challenges as raised by the respondent, where extension of the project is done in one area and not another; this could be a cause of potential conflict

that could result in unrest and affect the mine operations, which would further destroy value. The missed value in the opinion of the respondent also lay in the involvement of local businesses and the skill or capacitating of the community if they are to take over the project in the long run through establishing community-based water drilling companies.

Value missed through measurement was considered relevant by Respondent 3 as nothing substantial had been done to track the impacts and analysis of the efficiencies of the project: with the respondent asking the question, *“Is this project as efficient as we think it is?”* Measurement was also linked to reporting in that the respondent saw a significant gap in the grievance system from the community and how these complaints are tracked and resolved.

#### *4.6.3.3 Value missed from a HCW perspective*

Respondent 2 viewed the expansion in the scope of the project as value that could be missed. HCW are contracted to supply 3.5 million litres per day, which, in the respondent's opinion, is not sufficient. Having considered a demographic study for the area (GEOTERRA, 2019), Mapela is projected to grow at 14% per annum due to the presence of the mine. The project initially looked to provide a population of 70 000 individuals with 50 litres of water per day. If the population is escalated by 14% over the next two years, this reduced the allocation to 38 litres per person per day. *“So essentially, the water is getting less per capita”*, said Respondent 2.

Respondent 2 indicated that from a natural capital point of view, scalability would not present a challenge, but it was in the financial capital where the scalability would be essential from the AAP and HCW perspective. A failure to scale the project would *“diminish our value at this stage in terms of perceptions.”* In conclusion, on this issue, the respondent added that *“at this stage, our nice plan is actually working against us as a community grows underneath that.”*

Respondent 2 further commented on the lack of measurement of these social impacts as value missed as well and an opportunity that he hopes can be retrospectively realised. The same respondent also said that HCW doesn't see itself being involved in the unlocking of value through the water supply, stating that *“we are not showing the guys how to farm better or produce bricks better, or anything that's related to the water”*. An example given was the use of groundwater that is not fit for human consumption that HCW has identified, but this water could be used as industrial water or for agricultural use as the high nitrates in the water would be suited to these applications.

## **4.7 Discussion on the value creation mechanisms in the HCWM project**

### 4.7.1 Value creation occurs within a context

Value creation is derived from a diverse portfolio of interactions, activities, and relationships (IIRC and EY, 2013). In the HCWM project, these interactions are most evident in the societal and natural environment context through the stakeholders where the community is identified as a critical stakeholder. There are notable interactions in the regulatory space as well, arising out of the water service provider mandate provided to HCW to execute on an otherwise Government obligation. Through the examination of the value creation mechanisms of AAP and HCW, it is also seen that interactions for value creation occur between consumers, employees, stakeholders, regulators, and others that operate in the context within which the HCWM project performs its business activities. Understanding the context within which the project operates assists in defining the social need (Pfitzer, Valerie Bockstette and Stamp, 2013). Some organisations recognise the significance of gaining insight into the needs they seek to address, but some seek an in-depth understanding of the social conditions in the context of their business activities and how best to change these conditions (Pfitzer, Valerie Bockstette and Stamp, 2013). No company exists in isolation but in an ecosystem, and as companies pursue shared value strategies, there are inevitable barriers that get in the way (Kramer and Pfitzer, 2016). These barriers have been described in the challenges facing the HCWM project and provide an understanding of the context of the ecosystem to address shared value gains.

The example of Yara International in Tanzania (Kramer and Pfitzer, 2016), a global leader in fertiliser sales, is available as a company that created shared value by reshaping the ecosystem within which it operated—faced with numerous barriers in its ecosystem, many similar to those of the HCWM project such as corruption, inadequate infrastructure, poor farmers without access to credit. Yara International looked to bring together 68 organisations that included multinational companies, civil society groups and the Tanzanian government to tackle these barriers (Kramer and Pfitzer, 2016). The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) was formed with the primary mandate of reshaping the ecosystem within which the organisation operated to create shared value (Wachira, Barnard, Lutseke and Ger, 2020). This approach is synonymous with the building of local clusters approach to shared value as addressed in the literature review (section 2.2.3) and the most comprehensive approach to

creating shared value (Porter and Kramer, 2011). The approach encompasses developing institutions and infrastructure that determine an organizations context of operation and encourages partnerships between businesses, governmental and non-governmental institutions (Porter and Kramer, 2011).

#### 4.7.2 Multiple stakeholders create shared value

The research findings confirm that multiple stakeholders provide capitals to create value for multiple stakeholders (Ludeke-Freund et al., 2016). It is worthwhile reflecting back to the work of Friedman (1962) and the “shareholder value theory”, which declared that the purpose of organisations was to maximise shareholder value and only to pursue social activities if they generated financial capital or profits (Friedman, 1962). In contrast, stakeholder theory sees the objective of organisations as being to supplement value creation for the masses and to maximise value creation for multiple stakeholders (Freeman, 1984). The question now arises, which of the two is most appropriate in the context of the HCWM project?

The answer to this may be found in the work of Jensen, where the author states that business ought to extract the most out of society’s limited resources while reciprocating with more significant value to enable a conducive ecosystem that contributes to further financial value for the business (Jensen, 2001). It is evident in the HCWM project that the natural capital provided by the environment as a stakeholder is a limited yet most crucial input for the success of the project and value creation for all stakeholders. The conflict between shareholder and stakeholder value should be fixed through the emphasis on long term value creation as the long term value of a company cannot be maximised if any stakeholder is omitted or unfairly treated (Jensen, 2001). The value creation components of HCW and AAP reflect this by emphasising the point that value cannot be created without an appropriate customer value proposition which is delivered through the customer interface (Ludeke-Freund et al., 2016). The business interests of these organisations become a lever to enhance environmental and social well-being.

Consequently, the most abundant opportunities for creating shared value are closely associated with an organisations value creation model and in those areas that are most important to the business (Porter and Kramer, 2011). This characteristic is reflected in the value creation business models of both AAP and HCW at the centre of the Hourglass Model (Ludeke-Freund et al., 2016). Both models capture economic value and also maintain or regenerate the six

capitals beyond their organisational boundaries (Schaltegger, Hansen and Lüdeke-Freund, 2016).

#### 4.7.3 Value creation reveals itself in outcomes

An in-depth analysis of business models that create shared value requires considering *who* and *how* stakeholders are affected by a business model as companies may create value for one stakeholder while at the same time destroying it for another (Ludeke-Freund et al., 2016). These connections and interdependencies between the multiple aspects of the Hourglass Model (Ludeke-Freund et al., 2016) are shown and reflected by the double-sided arrows between the capitals and stakeholders, with value continuously being created destroyed and missed (Ludeke-Freund et al., 2016). The table hereafter summarises the value creation outcomes from the perspectives of the interviewed stakeholders:

Stakeholder	Value		
	Created	Destroyed	Missed
<b>AAP</b>	<ul style="list-style-type: none"> <li>- No disruption to operations</li> <li>- Social license to operate</li> <li>- Reduction in health exposure and medical costs</li> </ul>	<ul style="list-style-type: none"> <li>- Poor water quality, exposure to nitrates</li> <li>- Vandalism of water infrastructure</li> <li>- Internal power struggles and corruption</li> </ul>	<ul style="list-style-type: none"> <li>- Scaling of the project due to expanded scope</li> <li>- Measurement of social impact</li> </ul>
<b>HCW</b>	<ul style="list-style-type: none"> <li>- Revenue from operations</li> </ul>	<ul style="list-style-type: none"> <li>- Vandalism of water infrastructure</li> <li>- Post contract Handover</li> <li>- Poor water quality, exposure to nitrates</li> </ul>	<ul style="list-style-type: none"> <li>- Scaling of the project due to expanded scope</li> <li>- Measurement of social impact</li> </ul>
<b>Community</b>	<ul style="list-style-type: none"> <li>- Access to water</li> <li>- Empowerment of local businesses</li> <li>- Financial benefits from the community trust</li> </ul>	<ul style="list-style-type: none"> <li>- Vandalism of water infrastructure</li> <li>- Delays in infrastructure repairs</li> <li>- Poor water quality, exposure to nitrates</li> <li>- Poor communication with HCW</li> </ul>	<ul style="list-style-type: none"> <li>- Opportunity to transport water where there are shortages</li> <li>- Scaling of the project due to expanded scope</li> <li>- More employment required for community members</li> </ul>

*Figure 10 - Summary of value creation in the HCWM project*

It can be seen that while value is created for one stakeholder, value can simultaneously be destroyed for another. The outcomes guide the assessment of value for the HCWM project depending on the views of the stakeholders and their reliance on the stores of value influenced by the value creation process (IIRC and EY, 2013). It must be noted that the creation of value in the short or medium-term has the potential to augment or weaken the possibility for value creation in the future (Chartered Institute of Management Accountants, 2011). For example, the scaling of the HCWM project in the medium to short term may produce value that could enhance overall value creation in the long-term or because of the financial capital required for the scaling; this may have an impact on the value creation processes of AAP and HCW who are the providers of the capital input.

Another example relates to the creation of employment for the local community members in the short- to medium term and its potential to improve or weaken future value for the project.

This value creation, however, appears to be in question in that the community expectation was for more value to have been created through this avenue than what has materialised. There is an acknowledgement from the community and the AAP respondents with regards to the opportunities that have arisen for business activities from local business in the operations of the project. However, as with employment, the expectations of the community and HCW do not seem to be aligned. This kind of value add is synonymous again with the *enabling of local cluster development* described by Porter and Kramer (2011) as a means to shared value. No company ultimately operates as a self-contained unit, and “firms create shared value by building clusters to enhance company productivity while tackling deficiencies or failures in the framework conditions surrounding the cluster” (Kramer and Pfitzer, 2016, p. 12).

## 5. RECOMMENDATIONS

### 5.1 Leveraging on social and relationship capital and cluster development

#### 5.1.1 Extracting more value form social and relationship capital

In the findings of the study, the alignment between the community and HCW did not always necessarily add value as most of the areas of missed value were identified between these two stakeholders. The principal capital that was placed in this missed value relates to the social and relationship capital between the stakeholders in the project (section 4.3.2.3) in the previous chapter). The comments of the community (section 4.6.2.1) reflect a position of frustration with HCW in communicating effectively with the community around employment expectations, timeous resolution of infrastructure failures such as burst pipes and leaking boreholes and the visibility of HCW in the community. This is a frustration that is recognised by HCW as well (section 4.6.1.3). Therefore, a focus on the social and relationship capital could improve the relationship between these stakeholders as well as impacting other capitals in the Hourglass Model (Ludeke-Freund et al., 2016).

Social and relationship capital is critical as it is directly related to all the capitals (Acquaah, Amoako-Gyampah and Nyathi, 2014). Social and relationship capital is associated with natural capital in that it is founded on relationships between people and groups, who also depend on the natural environment (Bhandari and Yasunobu, 2009). Social and relationship capital also enables the growth of intellectual capital by shaping the conditions required for relationship building, knowledge sharing and the exchange of ideas (Nahapiet and Ghoshal, 1998). In the development of human capital, social and relationship capital contributes to educational experiences and social interactions among stakeholders (Acquaah, Amoako-Gyampah and Nyathi, 2014). Social and relationship capital has a bearing on the creation of financial capital by increasing profitability through operational efficiencies (Acquaah, Amoako-Gyampah and Nyathi, 2014). Finally, social and relationship capital assists in the purchase, management and utilisation of manufactured capital through the shared standards, the value approaches objectives, and social relationships with peripheral stakeholders (Acquaah, Amoako-Gyampah and Nyathi, 2014).

Social and relationship capital is an essential contributor to community development and sustainable management of natural resources (Bridger and Luloff, 2001). When stakeholders are prepared and capable of contributing to relationships within and beyond the immediate project, they can add to the wider inventory of social capital in their communities of operation and also contribute to valuable cycles of human capital and economic development through the other capitals as described above (Bridger and Luloff, 2001). The resulting regenerated values in the capitals contribute to the attainment of shared value such as employment in the communities and diminished risks associated with crime and protests.

An example of using social and relationship capital as a source of shared value can be found in Transnet SOC Ltd, which wanted to get a more comprehensive appreciation of the quality of their relationships with stakeholders (Acquaah, Amoako-Gyampah and Nyathi, 2014). The 'Relational Proximity Model' (Acquaah, Amoako-Gyampah and Nyathi, 2014) was used where an independent researcher interviewed each party to a relationship called 'relationship owners'. There was no emphasis on service, particular issues, or aspects of formal agreements in the interviews, but more focus on the relationship between the two parties. This approach encompassed questions about communication, knowledge, the harmony of purpose, power, continuity, trust and reciprocity, and a shared sense of values. An enlightened outcome of the process was viewing stakeholder relationships as an essential source of value creation (Acquaah, Amoako-Gyampah and Nyathi, 2014).

Currently, the HCWM project Steering Committee is not recognised as generating value from the project by all stakeholders that participated in the enquiry, occurring infrequently, and lacking some critical stakeholders such as the Mogalakwena Local Municipality (section 4.4). A shared vision that encompasses a project-wide strategy owned by multi-functional teams such as the HCW operations team, community relations teams such as the MTA and MTT and technical water experts from AAP should be developed. This strategy would "solicit input from all levels on priorities, risk, and stakeholder engagement" (Darling et al., 2014, p. 13). Decisions must be informed from the collection of ongoing field data, which would allow the development of "key performance indicators for tracking water-related duties and outcomes" (Darling et al., 2014, p. 13). This can be further developed into "keeping track of documents and correspondence with stakeholders in a centralised, accessible database that can help measure progress on how the different teams are cooperating, sharing in community engagement and building trust" (Darling et al., 2014, p. 13).

### 5.1.2 Tools for extracting greater social and relationship capital

There are examples of tools used to develop such cross-functional alignment among stakeholders. The Anglo American Socio-Economic Assessment Toolbox (SEAT) is an internal water management strategy that “focuses on establishing a deeper understanding of the socio-economic environment, identifying potential project impacts and developing an appropriate management plan” (Anglo American plc, 2012, p. 1). Although mentioned in the motivation document for the project to the AAP Executive Committee, this tool was never used for this project (Hall Core Water, 2017). Teck Resources, a diversified resources company that operates 13 mines in the Americas, also has social management and responsibility toolkit (SMART) that was developed after recognising that social concerns are a significant risk in project communities and can affect operations if conflicts arise (Darling et al., 2014). The company saw “value in formalising the management of social or community-related issues to understand better and manage those risks and consider possible opportunities” (Teck Resources, 2020, p. 1).

### 5.1.3 Activating cluster development in the ecosystem

Shared value is not about the redistribution of existing value, but it is rather about “making the pie bigger” for all stakeholders (Porter and Kramer, 2011). Two areas of missed value were identified in the study through the emerging themes on the analysis and related to the scalability of the project and the creation of employment in the community, both issues raised by the community as a stakeholder (section 4.6.1.3 and 4.6.3.3). These can be considered as gaps in the framework conditions of the surrounding cluster of business organisations. To address these issues, enabling cluster development, as suggested by Porter and Kramer (2011), could be a solution. In creating a shared value ecosystem, the five elements put forward by Pfitzer and Kramer (2016) and briefly discussed in the literature can be considered (section 4.7).

The first two elements of developing a common agenda and a shared measurement system are captured in the prior recommendations on social management tools (Kramer and Pfitzer, 2016). Building on that, mutually reinforcing activities must be identified within the cluster (Kramer and Pfitzer, 2016). Some suggestions were already offered in the investigation, such as equipping the community with the tools to undertake maintenance operations on the water

infrastructure. Through the social management toolkits, “task forces could be established to look at priority infrastructure projects, identifying whom from within the network has the right profile to participate in driving the projects” (Darling et al., 2014, p. 15). The scaling up of the project and extension of the existing water infrastructure has been identified as a priority consideration and an area of value that could be destroyed or missed if not addressed.

Another aspect of cluster development relates to the co-managing of knowledge and resources (Darling et al., 2014). This aspect is of importance in this project, based on the fact that the project will be eventually handed over to the community as a majority shareholder at the end of the contractual period. “Long-term management strategies to optimise the productivity and accessibility of water can only be defined and supervised by multi-stakeholder partnerships” (Darling et al., 2014, p. 19). “Building a platform to share knowledge with local partners is a recommended action to enable the co-management strategy” (Darling et al., 2014, p. 18). The need to engage extensively with all water users, and establishing collective action platforms cannot be overstated. Such stakeholder engagement requires a concerted effort and commitment. The reluctance to share data between AAP and HCW is an obstacle to the establishment of collaborative forums between stakeholders due to concerns on how data will be used and leveraged (Hamilton, 2019). Together with information sharing, a participatory monitoring program can be designed that has the aim of building awareness, skills, and trust among the diverse stakeholders.

Additionally, there is a need to “capitalise on new technologies through implementing new research into reuse and treatment methods of water” (Darling et al., 2014, p. 18). Anglo American plc has had some success in this co-management at the Emalahleni municipality, where the company funded a \$45 million wastewater treatment plant to recover and treat water that was sold back to the municipality and other local businesses (Anglo American plc, 2015). To facilitate such value creation avenues, the Mogalakwena Local Municipality must become an active stakeholder, which it currently is not on the HCWM project.

## 6. CONCLUSION

### 6.1 How the research questions have been addressed

In answering the problem statement stated in Chapter 1, this research has evaluated an innovative business model in the form of the Hourglass Model (Ludeke-Freund et al., 2016) in an area where studies on a particular project are rare. The study has examined how value has been created, destroyed or missed by considering the value that key stakeholders identify as being generated from capital inputs into the Hourglass Model (Ludeke-Freund et al., 2016), that then, through the value creation business models of AAP and HCW, generate additional stores of value in the form of capitals for different stakeholders in the HCWM project.

The six capitals have been identified and described to give an understanding of their linkages and importance to stakeholders as well as which stakeholders provide or should provide which capitals. Secondly, the value creation business models at the centre of the Hourglass Model (Ludeke-Freund et al., 2016) have been explored for AAP and HCW and reconciled with the shared value creation mechanisms described in the literature. The value creation business models were discussed from the value created and shared by the stakeholders, and evidence of the characteristics identified in the shared value literature on the value creation mechanisms of “reconceiving products and markets, redefining the value chain and local cluster development” was considered (Porter and Kramer, 2011, p. 7). In this particular project, local cluster development emerged as the key shared value mechanism through which the project could leverage further value creation. Lastly, shared value destroyed and missed for key stakeholders was also considered in the context of the Hourglass Model (Ludeke-Freund et al., 2016) and the recommendations put forward are based on those areas where total value creation can be increased and shared with other stakeholders based on the shared value principles.

### 6.2 Further research areas

Further research could consider measuring or estimating the business and social value measurement of the identified value in an attempt to quantify the impacts. This study could be done by anticipating how a degree of change in a social condition, such as the availability of water, can drive profits for stakeholders such as AAP and HCW through growing sales volumes

or a diminishing cost base and connecting those benefits to the capitals required to achieve them. Another possible area of further research could be a critique in applying the model and exploring how it could be adapted for the South African context.

### **6.3 Limitations in the research**

Stakeholder theory (Carroll and Buchholtz, 2008; Freeman, Wicks and Parmar, 2004), in its purest form, speaks to the involvement of all stakeholders. Although not all stakeholders were investigated in the study, the key stakeholders were identified, and the main value creation mechanisms identified. Also, the fact that the Hourglass Model (Ludeke-Freund et al., 2016) has not been used in such an evaluation did not provide the researcher with any comparative study to relate to.

### **6.4 Contribution of the research to the shared value body of knowledge**

The research has contributed to the shared value body of knowledge by operationalising the Hourglass Model (Ludeke-Freund et al., 2016) and confirming that capitals form the basis of creating shared value through the business models of organisations and how stakeholders then share this value. The research has demonstrated that some value will be missed, and some value will be destroyed; however, identifying where these leakages occur provides an opportunity to mitigate the value loss to optimise total value creation for all stakeholders.

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## 8. APPENDICES

### Appendix A

#### Interview Guidelines

### **INTERVIEW QUESTIONS FOR HCWM PROJECT RESEARCH STUDY**

#### Contact details

The following questions form the basis of the interview. Depending on the clarity of the answer, follow-up questions can be asked to obtain further detail of the specific event.

#### **Purpose**

1. What is the primary reason(s) for the existence of HCWM and, its network of stakeholders?  
What do you see as the main purpose of this water project? Why was it done, and what has it done for you?

#### **Capitals**

2. Considering the six capitals: financial, manufactured, intellectual, human, social and relationship, and natural, which do you consider as contributing the most value to the HCWM project?  
At the implementation of the project, what inputs do you see as being the most crucial to make the project a success? Consider this in terms of the money required to dig the boreholes, the people required, the knowledge that was needed and how teamwork was used between everyone involved in the project. What was the least essential and did not help in the project? Explain why you consider this to be so, and how could it have been done differently?

#### **Stakeholder Groups**

3. Which organisations or individuals have influence or involvement in the operations of HCWM, or are influenced/ affected in any way by the actions of HCWM?  
From the time the project started, which companies, people or other organisations did you work with to get the project off the ground, and now that the boreholes are functional, which companies, people or organisations are you interacting with regarding the project and the available water. Are there any companies, people, or organisations that you would still like to engage with that you think are important to this water project? Why?

#### **Value Created**

4. What positive is tangible and intangible value created for each of your stakeholders identified in Question 1?

Considering the companies, organisations, or people you have identified in question 2 as well as yourself, how have they benefitted from the project? What has been made easier through being able to have water in

the village? What has become cheaper or easier to do with water being available from the boreholes? Explain your answer.

### **Value Destroyed**

5. What are the negative outcomes of the operations for any of your stakeholders? (Consider, for example, environmental impacts such as pollution)

Considering the companies, organisations, or people you have identified in question 2 and 3 as well as yourself, what are you not happy about regarding the project? What has been made harder, or what has the project made more expensive to do with water being available from the boreholes? Has anything been damaged because of the activities of the project? Explain your answer.

6. Does the business network mitigate or offset some negative outcomes in full or in part (such as carbon emissions)?

Considering the companies, organisations, or people you have mentioned in question 2,3 and 4, do you think there is anything they can do to fix the things you are not happy about or to make them better? What and why do you think they should do so?

### **Value Missed**

7. How might HCWM be missing an opportunity to capture value, or wasting or squandering value in its existing operations? Are there any assets, capacity or capabilities that are under-utilised in the project under-utilised?

What could the project do to help make more money for the community and the mine? Are there any areas/things where the project is wasting money and not benefitting the community or the mine? How would you solve this, and who do you think could help in solving this?

8. Are there any trade-offs that require attention in the HCWM value chain? (e.g., technology improvement versus cost increase; or environmental impact reduction versus negative societal impact)

Considering your answer from question 8, where do you think that the project is not assisting, where would you focus on improvements and why? What makes that are/thing more important to you?

### **New Value Opportunities**

9. What new positive value might the network create for its stakeholders through the introduction of new capabilities, activities, and relationships? How might new partnerships and collaboration or emerging technologies offer potential solutions to the areas where value is missed or destroyed?

What new skills or activities do you see as important to add to the project to make it work better for the community and the other companies, people, and organisations? Why are these skills necessary for the project? Who else should be part of the project, and why?

Questions adapted from:

Nancy Bocken, Samuel Short, Padmakshi Rana, Steve Evans, (2013) *A value mapping tool for sustainable business modelling*, Corporate Governance, (13)(5), pp.482 – 497

## Appendix B

### Gatekeeper consent

#### ACCESS LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH

Rhodes University Drosty  
Road, Grahamstown, 6139

HOD – Social Performance  
Mogalakwena Mine  
Stelliop Road  
Mokopane  
Limpopo, South Africa.

Date: 19/05/2020

Dear Sir,

#### REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a registered MBA student at Rhodes Business School at Rhodes University. My supervisor is xx

The proposed topic of my research is an evaluation of shared value creation in community projects. The title of my dissertation is **“Creating shared value through innovating business models: A case study of the Mapela Water”** The objectives of the study are:

- (a) Consider and analyse how community projects such as the Hall Core Mapela Water project can be used to create shared value for specific stakeholders.
- (b) To define, explain and discuss the value creation mechanisms of the HCWM business model.
- (c) To investigate and understand the shared value created for key stakeholders (specifically AAP and the Mapela Community)
- (d) Make recommendations to improve and enhance shared value creation for AAP and the Mapela Community.

I am hereby seeking your consent to interview members of the implementation team as well as the Mapela Task team to obtain data for the study.

To assist you in reaching a decision, I have attached to this letter:

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

Final clearance from the Ethics Committee will only be granted on the receipt of gatekeeper consent, and only then will I be able to proceed with the data collection

Should you require any further information, please do not hesitate to contact my supervisor, myself, or the Rhodes University Ethics Coordinator. Our contact details are as follows:

Or my supervisor:

Or the Rhodes University Ethics Coordinator:

Upon completion of the study, I undertake to provide you with feedback on the research findings on shared value enhancement for the mine and Mapela community.

Your permission to conduct this study will be greatly appreciated.

Yours sincerely,

Signature

**Name:**



RHODES UNIVERSITY

**INFORMED CONSENT FORM**

**Rhodes Business School**

<b>Research Project Title:</b>	CREATING SHARED VALUE THROUGH INNOVATING BUSINESS MODELS: A CASE STUDY OF THE MAPELA WATER PROJECT
<b>Principal Investigator(s):</b>	

**Participation Information**

- I understand the purpose of the research study and my involvement in it
- I understand the risks of participating in this research study
- I understand the benefits of participating in this research study
- I understand that I may withdraw from the research study at any stage without any penalty
- I understand that participation in this study is done on a voluntary basis
- I understand that while information gained during the study may be published, I will not be identified and my personal results will remain confidential
- I understand that I will receive no payment for participating in this study
- I give permission for the interview to be recorded with the condition that member checking will take place to ensure accuracy
- I understand that my personal information and the information of my follower will be confidential

### **Information Explanation**

The above information was explained to me by:

The above information was explained to me in: English Afrikaans Other:

and I am in command of this language

**Voluntary Consent**

I \_\_\_\_\_, hereby voluntarily consent to participate in the above-mentioned research.

Signature:

Witness signature:

Date:     /     /

**Investigator Declaration**

I, **xx**, declare that I have explained all the participant information to the participant and have truthfully answered all questions ask me by the participant.

Signature:

Date:     /     /

**End of Dissertation**