SUMMARY REPORT OF THE STUDY

ON

PERCEPTIONS REGARDING SHARED VALUE WITHIN THE SOUTH AFRICAN MINING INDUSTRY

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1. INTRODUCTION AND PROBLEM STATEMENT

Mining is an important economic industry in over 100 countries around the world, with South Africa ranking among the top 50 “mining countries” in the world (International Council on Minerals and Metals, 2014; Sarupria, Mining has helped to shape South Africa to a greater extent than any other industry and accounts for a significant proportion of the country's gross domestic product (GDP), foreign exchange earnings and employment. Despite mining being recognised as a sunset industry plagued by rising costs, technical difficulties, political hostility and its legacy of diseases and negative environmental impact, South African mining is foundational to the development of all other industries and socio-economic priorities of government and communities.

Despite the important contribution the industry makes, Deloitte (2019) states that the true socio-economic contribution of mines is being questioned. The pressure arises from the premise that mining has often resulted in major impacts, both environmental and social, that have not been fully recognised or dealt with (Chamber of Mines of South Africa 2016). Moreover, the government after 20 years of democracy, through the National Development Plan (2012:24-27) seeks to transform South Africa's economy and ensure a fair and sustainable distribution of wealth among South Africans as a government agenda, this is irrespective of the Mining Charter III of 2018 and the Broad-Based Black Economic Empowerment (BBBEE) scorecard of 2003 long attempting to drive priorities of socioeconomic development, industrialisation and transformation.

It is clear that the mining industry faces many challenges due to a variety of factors and input from various stakeholders, and therefore, it is vital for the industry to integrate socioeconomic and environmental issues into a sustainable long-term strategy and competitive strategies in

order to create value for all stakeholders, thus Shared Value (SV). SV creation is a core business practice that focuses on identifying and expanding the connections between societal and economic progress, including environmental opportunities (Porter & Kramer 2006. For purpose of this study, SV is defined as a contemporary approach to business that focuses on profit with the purpose by creating economic value and social value for society rather than profit alone.

2. OBJECTIVES OF THE STUDY

The primary objective of this study is to investigate perceptions of SV within the mining industry of South Africa. To achieve the primary objective of the study, it is also important to gather the current SV perceptions of stakeholders in the South African mining industry. Accordingly, the study investigated the perceptions of SV as well as its antecedents and outcomes within the mining industry in South Africa. In addition, this study sought to fill the research gap and to contribute to the existing body of knowledge regarding the mining industry and the creation of SV.

3. RESEARCH METHODOLOGY

The extensive literature view was conducted on the overview of the South African mining industry, theories related to SV and theoretical perspectives on SV as well as hypothesised model of shared value perceptions within the mining industry. This study employed a quantitative research methodology. An explanatory hypothesis-generating approach was employed, and to this end, an empirical investigation was conducted by means of a survey under COVID-19 pandemic conditions. The measuring instrument used was a questionnaire which was based on the insights gained from secondary sources and some items were self-developed. In the non-probability sampling, convenience was used to identify the respondents of the study. A total of 340 respondents participated in the study. The primary data was examined in six phases: exploratory factor analysis (EFA) for validity; Cronbach's alpha for reliability; descriptive statistics for statistical summary; and the nine hypothesised relationships were assessed using Pearson's product correlation and regression analysis. The ANOVA technique was conducted to determine the influence of demographic factors on perceptions regarding the intervening variable, SV.

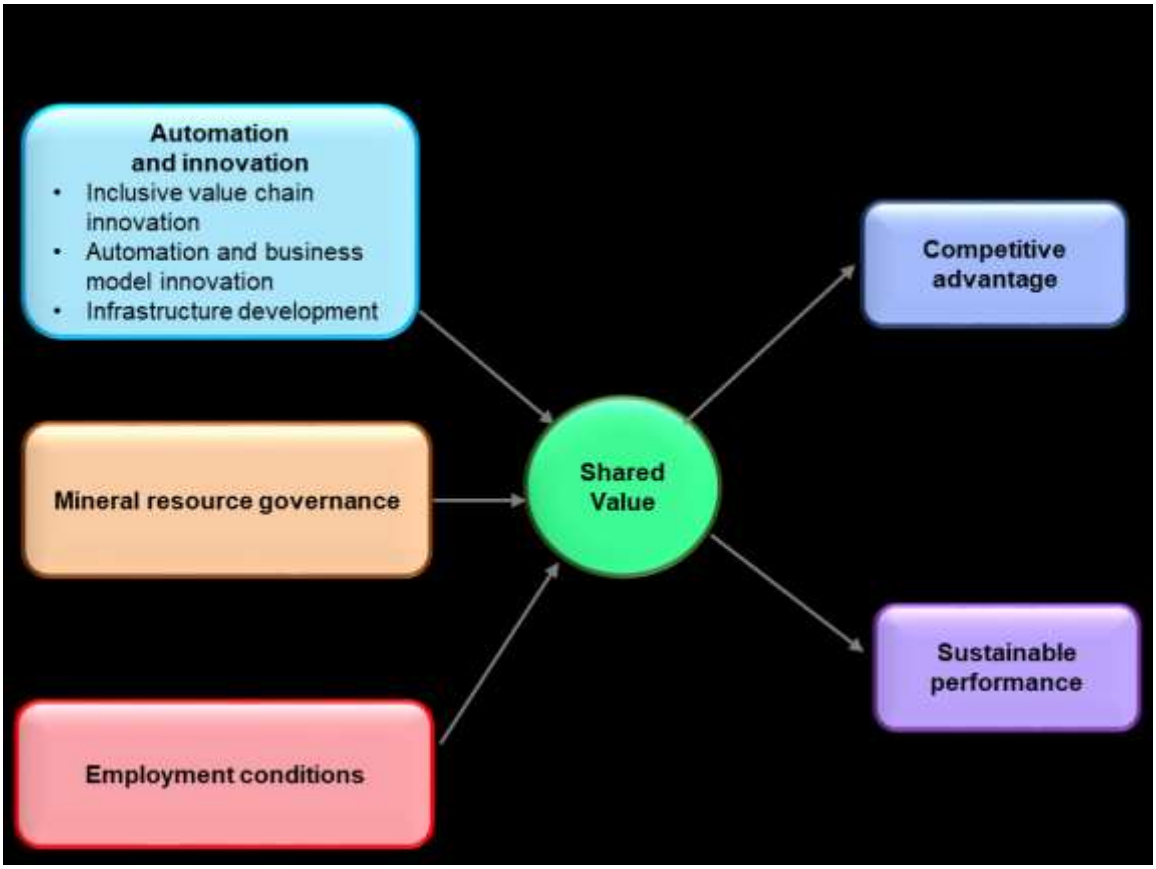
4. SUMMARY OF THE RESULTS OF THE STUDY AND RECOMMENDATIONS.

The empirical results confirmed that automation and innovation (through innovation for value chain inclusivity, automation and business model innovation, infrastructure development) and employment conditions are the antecedents of SV. The study illustrated three approaches of SV: reconceiving the product/service and markets, reimagining value chain productivity and

development of the enabling environment. Furthermore, the study revealed competitive advantage and sustainability performance as the outcomes of SV.

The empirical results confirmed the following hypothesised model (Figure 1) which organisations may for operationalisation of SV specifically in the mining industry of South Africa.

FIGURE 1: REVISED HYPOTHESISED MODEL OF THE IMPACT OF SHARED VALUE WITHIN THE SOUTH AFRICAN MINING INDUSTRY



Source: Researchers' own construct

4. SUMMARY OF THE PRACTICAL RECOMMENDATIONS OF THE STUDY.

The study contributes by providing practical recommendations to managers in the mining industry and policymakers, based on the results, to improve competitiveness and sustainability performance as well as increasing their economic prosperity by resolving social and environmental issues of mutual interest to communities, government and other key stakeholders. Table 1 presents recommendations relating to strategies of SV.

TABLE 1 SUMMARY OF RECOMMENDATIONS FOR SV OPERATIONALISATION

ANTECEDENTS OF SHARED VALUE							
AUTOMATION AND INNOVATION							
REF	INCLUSIVE VALUE CHAIN INNOVATION	REF	AUTOMATION AND BUSINESS MODEL INNOVATION	REF	INFRASTRUCTURE DEVELOPMENT	REF	EMPLOYMENT CONDITIONS
EC1	Promote inclusive value chain develoment through stakeholder engagement	AI3	Integrate technology and human resource modernisation plans	ID2	Ensure collaborative infrastructure development through Public-Private Partnerships:	ID4	Adopt a socially-focused employment strategy – SV Employment Plan
VC2	Integrate the Mining Charter and BEE transformation strategies with Supply Chain Management Policy	AI2	Prioritise research and development		*-Build-Operate-Transfer (BOT)*	EC2	Integrate sustainability planning in training and development
VC4	Adopt an asset-based conceptual model for community capacity building programme - technical, business and financial services support	AI2	Collaborate to influence curricula, learning and teaching to build a future-ready generation of employees		*-Build-Transfer-Operate (BTO)*	EC5	Strategically collaborate with employees and trade unions to nurture employee engagement and involvement
VC4	Innovate through collaborations for joint learning and continuous improvement	AI5	Accelerate the establishment of a Mining Centre of Excellence (HUB)		*-Community-Driven Development (CDD) Partnership.*	RL5	Adopt the shared productive ownership structure
VC3	Adopt a smart multimodal transport solution and shared use transport infrastructure model	AI1/ 4/5	Adopt a new digitally-enabled business model – 'Intelligent Digital Mines'		*-Concession PPP*	RL5	Collaborate with government, civil society and communities for the establishment of a centralised royalty system/agency
		EI2/ EI4/ 5	Pursue new business opportunities in energy, water, technology and waste management	ID3	Ensure collaborative infrastructure development through shared infrastructure initiatives	EC3	Implement innovative performance management and reward systems
			-Independent Power Production (IPP), renewable energy and Water reclamation	ID1	Invest in sustainable community development projectsCatalyse the development of the Special	EC5	Instill a positive culture and working environment
			-Alternative minerals	ID5	Catalyse the development of the Special Economic Zones	VC1 /EC 3/E C5	Implement sustainable prospecting and exploration projects
			-Technological equipment			EI5	Develop the policy for innovative mine waste reduction and valorisation
		AI4	Diversify investments through mineral beneficiation and industrialisation				

SHARED VALUE							
REF	RECONCEIVING PRODUCT/SERVICE AND MARKET	REF	REDEFINING PRODUCTIVITY IN VALUE CHAIN	REF	ENABLING LOCAL CLUSTER DEVELOPMENT	REF	HYBRID STRATEGY
SV1	New market for drinking/irrigation water	SV6	Policy on investment on infrastructure connectivity	SV11	Recognising conditions and advantages of the geographic location		
SV2	Venture into supply of energy (IPPs/PPPs)	SV8	Eliminate negative environmental activities across the value chain	SV12	Collaboration with suppliers, competitors and equipment manufacturers		
SV3	Complementary products such as GIS technological equipment and chemicals	SV7	Inclusive business deals for low income suppliers	SV13	Invest in cross-industry collaborations, including the NGOs and government	SV1-15	Combination of all or seleted strategies based on the resources and nature of societal problem to be solved
SV4	Investing in industrialisation or mineral beneficiation	SV9	Local suppliers and enterprise development	SV14	Actively engage in broad-based regional economic and specialised core competence		
SV5	Developing community oriented (intermediate) products	SV10	Enhance value chain governance: participation, equity and accountability	SV15	Developing the local employment policy to localise expertise/skills/technology to enhance innovation		

OUTCOMES OF SHARED VALUE			
REF	COMPETITIVE ADVANTAGE	REF	SUSTAINABILITY PERFORMANCE
OP2	Secure flexible and reliable supply chain	SU4	Align organisational strategy and policies with SV, SDGs and SLO
OP4	Facilitate organisational learning and innovation	SU1	Adopt green supply chain
CA1	Adopt low-cost strategy	OP5	Inclusive and progressive local workforce and supplier participation
CA2	Promote SV strategies internal stakeholders and externally	OP1	Align natural resource development with innovation
CA2/5	Adopt disruptive innovative and artificial intelligence technology	SU3	Observe the human rights
CA3	Redefine the socio-economic role of the mine	OP3	Develop internal/local core competencies and expertise/competitive workforce through human capital development.
CA4	Unlock high-potential mining assets (new mineral discovery)	OP3	Increasing productivity performance in the long run by aggressively lowering their operating-cost base
SU2	Business continuity strategy for resilience against natural hazards		
SU5	Directly improve community development through development enabling infrastructure		

5. LIMITATIONS OF THE STUDY

The shortcomings of this study include scarce literature on SV and limited awareness about the subject of SV amongst the managers of the mining organisations. Due to COVID-19, not all respondents could respond timely. Although the population and the sample of the study were drawn from leading mining organisations affiliated with the Mineral Council of South Africa, accounting for 90% of annual total production, it would have been of interest to include perceptions of respondents from small mines. The study gathered perceptions of management in the mining industry, and a similar study qualitative in nature could further enrich the field of study.

6. CONCLUSION OF THE STUDY

This study makes a significant contribution to the discipline of SV within the mining industry of South Africa, as it confirmed the areas that could improve operationalisation of SV within the mining environment of South Africa. *Automation and innovation* (through three pillars, namely, innovation for value chain inclusivity, automation and business model innovation, infrastructure development) and *employment conditions* are the antecedents of SV. The study also revealed *competitive advantage* and *sustainability performance* as the outcomes of SV. Competitive advantage generates greater value for the organisation and its stakeholders because of certain strengths or conditions that make an organisation distinct from its rivals. Sustainability performance on the other hand improves organisational performance while simultaneously ensuring community development and nature conservation.

Finally, as a pioneering SV study in South Africa, this study fills the gap in SV literature. South Africa, like the rest of the continent, has unique needs; SV could be regarded by organisations and policymakers as a gateway to forward-thinking solutions to profitability and the challenges affecting communities, especially in the mining industry.

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The full report of the study is attached. In addition to providing useful policymaking recommendations, the results and recommendations of the study are crucial in the development of a new generation of entrepreneurs and investors, and they can be distributed to stakeholders within and beyond the mining industry.