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Mining Sector in South Africa: An Individual Perception on Open Strategy

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Abstract

This study aimed to investigate a positive approach to mining innovation and growth, as well as the effectiveness of open strategy as a practical solution to strategic management in South Africa. Through mixed-method research design, both qualitative and quantitative data analysis were performed using NVivo and SPSS software. The sampling frame included 20 interviews with highly knowledgeable participants and 205 online survey responses collected from participants established in medium to large size mining companies, shareholders, government /DMRE (Department of Mineral resources and Energy), MCSA (Mineral Council of South Africa), mines employees. The findings revealed that there was a statistically significant positive correlation between mining employee engagement and perceived advantages of open strategy ($p<0.01$), stakeholders' and workers' perspectives on open strategy, and how it may create transparency among them. Perceptions of open strategy have a significant association with the mining industry's ability for economic growth and job creation, as well as its relevance in ensuring organizational continuity. Many mines are 'spreadsheet' wealth driven. Most of which started with a plan and then been drawn into operational minutiae for the drive of self-sustaining operations-driven cash flow and losing sight of the strategic imperatives, with no or little reference to employee insights let alone anyone outside the organization. The open strategy calls on and seeks outside influence. Conclusively, this study gave relevant evidence that the mining industry should adopt an open strategy to increase worker participation, success, and economic growth while reducing false assumptions.

Keywords: *Employee Engagement, Economic Growth, Mining Industry, Open Strategy, Strategic Planning.*

Introduction

South Africa's mining industry is prominent in the world, highlighting the country's potential as one of the world's wealthiest in terms of natural resources [1]. However, persisting issues in balancing the interests of diverse mining stakeholders must be addressed. To solve these difficulties, a shift towards an open strategy is required [2]. This collaborative and less defensive strategy involve engaging with external organizations such as local communities, government agencies, and investors [3]. The necessity of adaptation and innovation in a competitive business environment is emphasized, with open strategy viewed as a critical component in driving continual development and success in the face of globalization and changing economic processes [4]. The conventional idea of this approach is changing, and open strategy is being promoted as a winning option despite reservations about intellectual property protection [20]. The current study focused on the South African mining industry, which spends time designing strategies that need many

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activities and people resources but fail to put them into action. The research is significant on three levels: it provides an important opportunity to advance understanding of open strategy in the mining sector, open strategy as an integral part of organizational management, and the knowledge gap, as there is limited substantial research in mining and open strategy in South Africa [1, 2]. The study's goal was to learn how open strategy may assist both old and new mining companies, and to promote business management as part of an innovative and competitive strategy.

Materials and Methods

In this study, the researcher used a mixed method strategy. A survey was used to collect quantitative data, and comprehensive interviews were used to acquire qualitative data using a sequential technique. As a result, the drawbacks of one approach were compensated by the counter-balancing strengths of the other, and the procedures of qualitative and quantitative domains, which are interrelated, assisted in maximizing the knowledge yield of the study outputs. In addition, an exploratory pilot study of 20 participants was done to determine the suitability of the study conceptual framework. Other than the extensive interviews, a questionnaire survey was administered via google surveys in which 205 participants were involved. The quantitative findings of the study were measured using SPSS statistical methods. Frequency analysis was done to identify the experiencing duration and positions in the mining industry and Pearson Correlations Analysis was used to explore significant relationships between variables to validate the study purpose. Additionally, Cronbach alpha was explored to check reliability of the questionnaires used.

Results

The results of the study demonstrated that the survey questionnaires had a high degree of reliability, meaning that the survey items consistently assessed the expected constructs or dimensions. The obtained result of 0.93 indicates that the survey instrument is very reliable, as a Cronbach's Alpha value of more than 0.7 is commonly regarded as acceptable for research purposes. The frequency analysis revealed that respondents have all worked in the mining industry in various capacities. Middle-level employees make up 46.6% of the workforce, followed by supervisors and senior personnel. The general distribution is 98.6%. Furthermore, correlation analysis investigated the relationship between employee engagement in the mining industry and perceived advantages of open strategy procedures. The mining industry had demonstrated a significant association with an open strategy, showing the potential for good influence. It has been discovered that the open strategy increases employee participation, fosters transparency among staff and stakeholders, and achieves success while avoiding failure. Participants' experiences also revealed a substantial favorable link between the open approach and the industry's economic success and job creation. The necessity of strategic planning was also emphasized, with a substantial association between its perceived importance for mining business performance and its successful integration into day-to-day operations. The relevance and reach of the open strategy in the mining sector are further emphasized.

Discussion

Mining Works Program is a dedicated strategic planning program that addresses implementation concerns in the mining sector, addressing the obstacles given by competing agendas and varied employee participation [5]. Also, mining strategic planning requires skilled leadership to negotiate complicated concerns such as regulatory barriers, cost projections, and market volatility [10]. Strategic planning is essential in the fast-paced mining business, as inadequate planning frequently leads to

industrial failures notwithstanding external causes [6]. Through strategic planning, education, and enhanced communication, the mining sector is taking a holistic approach to creating trust, transparency [7], and employee well-being [11]. The execution of strategies in mining businesses can vary greatly, with some emphasizing end outcomes above governance and others lacking transparency owing to intellectual property or a lack of a strategy [8]. To accomplish success in mining firms, strategic planning involves a dedicated strategy, employee engagement, and good communication [12], despite hurdles such as a lack of transparency and environmental issues [1]. The application of an open strategy is a key component in management, enhancing the efficiency and effectiveness of mining operations [13]. The collaborative aspect of open strategy connects stakeholders around the same aim of making the mining business successful [14], using multiple viewpoints, and producing a more inclusive vision of the organization's goals [9]. To improve efficiency and knowledge sharing, south African mining sector should be using an open approach for strategic planning [19], fostering common responsibility and collaboration [2], [15]. Bottom-up productivity planning promotes an inclusive process by assuring openness and responsibility [16], as well as encouraging trust and collaboration at all levels [17]. Transforming the organizational structure and environment, creating trust and commitment through a commitment-driven approach [18], maintaining transparency, minimizing micromanagement, and encouraging a participative culture are all part of the plan [3]. Despite a few limitations from some stakeholders, the concept, which involves employees and stakeholders, is gaining power in the mining industry owing to potential advantages [7].

Conclusion

The study was focused on exploring Open strategy as an innovative approach in the mining industry, focusing on how they affect stakeholder openness, organizational performance, job creation, and employee involvement. It would prepare academic and business practitioners for future conversations and conclusions by providing insights into the obstacles and advantages of implementing Open Strategy specifically, in South African.

In conclusion, the findings repeatedly confirm the potential benefits of an open strategy in the mining sector for improving worker participation, success, economic growth, and reduction of incorrect assumptions. Future researchers should observe the trends of open strategy in different kinds of workplaces rather than sticking to the mining industries, which would provide enough grounds for the effectiveness of the strategy in business.

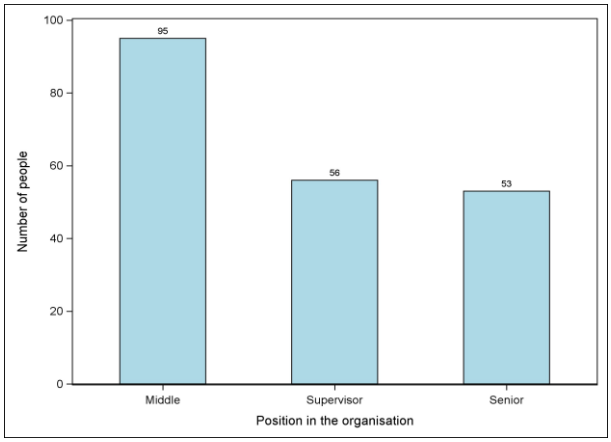

Figure 1. Position held in company.

Participants are asked to share job titles. Figure 1 highlighted the job title of the participants showing the participants involved in survey include CEO, Directors, Engineers, senior project management, project manager, and other lower-level employees of mining organizations.

Demographic Characteristics

The responders have varying degrees of expertise in relevant professions or the mining business. 29.3% have 5–10 years, 46.8% have 10–20 years, and 22.0% have 20 years or more of experience. Roughly 2.9% have 0–5 years of experience. With 1.4% of the data missing, the overall percentage is 98.6%. Among the 205 respondents, this distribution offers a variety of viewpoints on the subject.

Table 1. Year of Experience

Year of Experience		Frequency	Percent
	0-5	6	2.9
	6-10	58	27.9
	11-20	96	46.2
	>20	45	21.6
Total		205	100.0

There were 205 valid examples included in the reliability analysis, which evaluates the consistency of responses across several questions. Due to listwise deletion, three examples were eliminated; they were probably the result of certain variables having incomplete data.

There was a high value of.933 for the Cronbach's Alpha, a measure of internal consistency. The results of the analysis show that the 24 survey questions analyzed had a high degree of reliability, indicating that the survey items were consistently assessing the intended constructs or dimensions.

The acquired value of.933 shows a strong reliability of the survey instrument because a Cronbach's Alpha value over 0.7 is often regarded as appropriate for research purposes.

Table 2. Reliability Statistics

Cronbach's Alpha	N of Items
.933	24

Table 3. Instrument Characteristics

Questionnaire	Number of Respondents	No of Statements	Cronbach's Alpha	Method of Data Collection
Customer Satisfaction	20	24	0.933	Personal interaction and E-mail response

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Conflict of Interest

There is no apparent conflict of interest declared in the study.

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