

Unveiling the Potential of Open Strategy: An Exposé of Strategic Planning in the South African Mining Sector

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Abstract

The South African mining industry, despite being the world's fifth-largest mineral reserve, is facing various challenges that prevent it from contributing to the economy to its fullest potential. These challenges include inflationary pressure, extreme nationalism, political instability, civil unrest, poor infrastructure, and inefficient regulatory practices, which have discouraged foreign investments. Although the government has developed legal frameworks to address uncertain circumstances, the lack of follow-up and transparency are key drawbacks contributing to the persistence of these issues. The aim of this study was to investigate the potential of open strategy as a strategic management method in the South African mining industry can foster innovation and growth while showcasing how open strategy can benefit both established and emerging mining entities. The study highlights the importance of adopting a mutually beneficial approach, which can unlock the full potential of the mining industry and lead to more innovative and competitive business strategies. The study used a mixed methodology, which means both quantitative and qualitative data were collected. The research included interviews with 20 highly knowledgeable participants and a survey that received 205 responses. To identify the right individuals to participate in the research, the snowball research technique was used. It helped in creating a relevant chain sampling and selecting individuals based on their knowledge, relationships, and expertise regarding the research subject. According to the study's results, there is a favorable attitude toward open strategy, which is reinforced by the growing demand for inclusive communication as an effective means of engaging stakeholders. The results also revealed that the South African mining sector lacks formalized strategies and employee engagement methods. The research determined the value of the current strategic processes in South Africa's mining sector and generated an approach to how open strategy can be a successful process for mining companies.

Keywords: Open Strategy, South Africa Mining Industry, Strategic Approaches.

Introduction

Mining Industry in South Africa is referred to as the world's fifth-largest mineral endowment [6]. South Africa swiftly transformed from an agricultural to industrial domain in the late 19th century, and since then mining industry has been the nucleus of economic development considering its status as one of the resource-laden countries in the world

[1]. It has also played an active role in attracting foreign investments and founding top-notch global enterprises. However, the dynamics shifted in the 1970s, when the mining industry suffered greatly because of political destabilization and civil unrest. The economy of South Africa later was adversely affected by the Global Financial Crisis in 2008 which led to a recession in GDP growth by -2% in 2009. Persistent trade deficits, higher household

debts, financial, and residential bubbles pushed the mining industry into the crisis as it relied on global economic growth to plump up the prices and demands for steady development during uncertain times. The period from 2008-2011 paved the way for the emergence of issues such as labour disputes, underachieving assets, nationalization, lack of trust between stakeholders, and deplorable policy approaches toward the mining industry. Statistics from January 2013 revealed that the lack of compensation after the Marikana tragedy [13] caused a precipitous abatement in physical production volumes. It also caused intensive labour unrest and strike action leading to a significant fall in production from March 13 and onwards [2].

Researchers and analysts have highlighted high inflation and unstable political structure as the reasons for the decline in the mining sector. From the top ten world business menaces, mining was categorized into resource nationalism and inflationary pressure on prices [5].

The mining sector is lagging far behind in global competition for funding and skilled workforce. Foreign investment in new mining projects is restricted whereas the marginal deposits are stuck midway due to consequences associated with political and socio-economic uncertainties. These may include inconsistent regulations, concerns threatening resource nationalism, unsatisfactory performance of state-managed infrastructure, and strained relations with stakeholders and the community.

The absence of efficacy, sustenance, and stability is the cause of hindered long-term investment. The political leadership's setback in restricting the conversion of internal political disputes into wide-scale civil unrest has created an environment of distrust amongst global investors. This concern has been deeply amplified and enrooted by far-reaching media coverage spotlighting ransacks, malicious damages, and incompetency to regulate law and order [7]. The apparent lack of suitable

regulatory structure, police, and security forces accompanied by delayed responses from the government and extreme dependence on community-based sentinels are the reasons that account for the unpreparedness of institutes to strikes that often convert into civil unrest [11]. Channelling community support is a persisting challenge in areas where large operations are around clusters of various communities, it is owing to the inability of the government to identify stakeholders and simultaneously develop strategies incorporating them [3].

The only way to bring stabilization and prosperity to the mining industry at both national and international levels requires for establishment of programs integrating key stakeholders, including state ministries, local government, conventional leaders, civil society organizations, workforce, and community representatives.

The government of South Africa has implemented diverse strategies [4] oriented to address the challenges within the mining industry. Mining charters [9] were devised to focus on areas including employment opportunities, equity, titles, procurement, and community expansion. The target of this charter was to alleviate the inequities and foster inclusiveness. It also developed the Mineral Petroleum Resources Development Act (MPRDA) [10] to promote sustainable socio-economic development by following environmental standards, management, and mineral rights [8]. Government, at national level also introduced Mining and Petroleum Resources Royalty Act which emphasizes on income taxes and royalties to capture windfall benefits. A beneficiation strategy [14] was also undertaken to add value to the mineral resources before export. The primary objective of this strategy was to spur economic growth, create employment opportunities, and promote the economy by attracting foreign investments in related industries including manufacturing and processing units.

However, despite the practice of these strategies, the South African mining industry still stands amid challenges varying from uncertainty, lower investments, policy discrepancy, inefficient and lacking infrastructure, and workforce hindrances to declining ore grades [3]. Subsequently, there is a dire need for the development of a strategic approach that involves active collaboration between all the key stakeholders, including government, mining companies, labour unions, communities, and external stakeholders.

Research orientates to entail a detailed insight into the hurdles and opportunities open strategy holds for the mining sector in South Africa as mentioned in Figure 1. The study will be supplementary information for policymakers and government concerning the requirements and considerations set forth by the internal stakeholders including civil authority and the workforce. The research will guide on the benefits of an open strategy for the mining industry in terms of economic development, environment regulation, management, and attracting foreign investments.

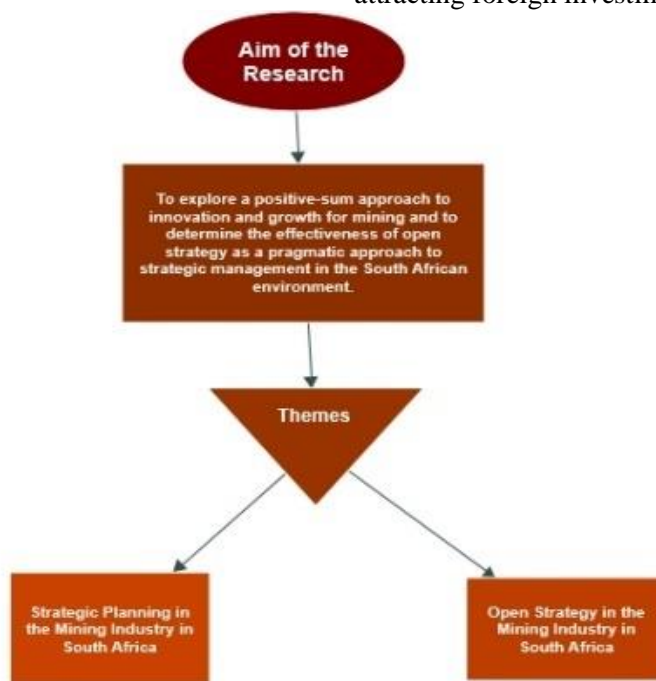


Figure 1. Aim of the Research

Limitations of this Study

1. Strategic planning is affected by the unpredictable nature of industry-related challenges, for instance, supply chain disruption, communication hurdles, environmental regulations, and a necessity for periodic policy reviews and adjustments [1].
2. Various challenges are also highlighted as the orientation of leadership, understanding the concept of individual roles in achieving strategic objectives, and balancing idealist strategies [22] with operational needs.

3. External changes including legal guidelines and regulatory framework, market transitions, political stability, and environmental standards contribute to tiers of complexity [9].

Materials and Methods

The research adopted a mixed-method analysis [4] approach to investigate the subject. Both qualitative and quantitative analyses were performed for the validity of research outcomes. Detailed literature review as the qualitative segment setting baseline framework for designing and orchestrating quantitative analysis. The survey integrated a series of

questions that focused on the identification of knowledge saturation, trends, and roadblocks in the adoption of open strategy for the South African mining industry. The research included interviews with 20 highly knowledgeable participants and a focus group (n=205) was designed elusively consisting of people who work, once worked, were associated, or are associated with the mining industry of South Africa. Various parameters were collected alongside age and the position held by the responders. The quantitative outcomes of the research are measured using SPSS statistical techniques [15]. To validate the research objective Pearson Correlations was performed to check significant relationships among variables.

Results

The objective of extensive data research is to identify trends and connections in open strategy [16] procedures in the mining sector. The knowledge of their effects on stakeholder openness, organizational effectiveness, job generation, and employee participation is the main goal.

This report offers detailed insights into the consequences and difficulties of adopting an Open Strategy in the mining industry by closely examining survey results and investigating the connections between many variables.

Demographic Characteristics

Frequencies Analysis

Table 1. Years of Experience in the Mining Industry or Related Industry

	Frequency	Percent	Valid Percent
Supervisor	56	26.9	27.5
Middle	95	45.7	46.6
Senior	52	25	25.5
All	1	0.5	0.5
Total	205	100	

The responders have varying degrees of expertise in relevant professions or the mining business. Table 2 indicates that 28.3% 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%.

Table 2. Positions in the Mining Industry

	Frequency	Percent	Valid Percent
0-5 years	6	2.9	2.9
5-10 years	58	27.9	28.3
10-20 years	96	46.2	46.8

20 years and more	45	21.6	22.0
Total	205	100.0	

Among the 205 respondents, this distribution offers a variety of viewpoints on the subject as shown in above given Table 1. The responders have worked in the mining sector in a variety of roles. 46.6% of the distribution are middle-level employees, followed by supervisors (27.5%) and senior employees (25.5%). A negligible portion (0.5%) is designated as ‘All.’

Validity of the Questionnaire

Pilot Testing

To measure the reliability of the research questionnaire pilot testing was performed on initial 20 research participants. The validated and reliability was tested through performing statistical testing in SPSS. The Cronbach alpha test was applied for pilot testing purpose. The below table indicates the results.

Table 3. Reliability Statistics

Cronbach's Alpha	N of Items
.956	24

Table 3 indicates the results of pilot testing, and the Cronbach alpha value is 0.956. The value showed that participants fully understand the questions. Further the questionnaire has

excellent internal consistency indicating it is fit for research data collection and analysis.

Scale Testing

Table 4. Reliability Statistics

Cronbach's Alpha	N of Items
.933	24

There were 205 valid examples included in the reliability analysis in above given Table 4, 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 Cronbach's Alpha [17], a measure of internal consistency. The results of the analysis show that the 24 survey questions analysed 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 the strong reliability of the survey instrument because a Cronbach's Alpha value over 0.7 is often regarded as appropriate for research purposes.

Correlations

H0: Open strategy cannot have a positive influence on organizations.

H1: Open strategy can have a positive influence on organizations.

Table 5. Correlations for Hypothesis 1

	Open Strategy processes can lead to greater employee involvement in the mining industry	Positive changes in employee involvement with the implementation of an Open Strategy process
Open Strategy processes can lead to greater employee involvement in the mining industry		.636**
Positive changes in employee involvement with the implementation of an Open Strategy process	.636**	

The correlation analysis intended to investigate the connection between employee participation in the mining sector and the perceived benefits of open strategy procedures.

The degree of agreement with the claim that "Open Strategy processes can lead to greater employee involvement" and the reported improvements in employee involvement as a result of implementing an open strategy process showed a statistically significant positive correlation ($r = 0.636$, $p < 0.01$), according to the results mentioned in Table 5.

The alternative hypothesis (H1) that open strategy may positively impact businesses,

particularly in terms of increasing employee participation in the mining sector, is supported by this considerable correlation. A rather significant positive correlation between the variables is shown by the computed correlation coefficient of 0.636.

H0: Staff must not be involved in strategy to understand it and have a genuine ownership to execute it effectively.

H2: Staff must be involved in strategy to understand it and have a genuine ownership to execute it effectively.

Table 6. Correlations for Hypothesis 2

	Open Strategy creates an openness amongst staff and the stakeholders	Open Strategy ultimately drive success and avoids failure
Open Strategy creates an openness amongst staff and the stakeholders		.750**
Open Strategy ultimately drive success and avoid failure	.750**	

The purpose of the correlation analysis was to investigate the link between stakeholders' and employees' views of open strategy and how it may foster transparency among them as well as how it can lead to success and prevent failure.

The findings given in Table 6 show a statistically significant positive correlation ($r = 0.750, p < 0.01$) between the confidence that an "open strategy would ultimately drive success and avoid failure" and the idea that "open strategy would create an openness among staff and stakeholders."

The alternative hypothesis (H2) that staff engagement in strategy, as suggested by open strategy procedures, is connected with enhanced openness, and leads to organizational performance while minimizing failure risks, is supported by this substantial positive correlation. A strong positive correlation between the variables is shown by the computed correlation coefficient of 0.750.

H0: There is no relation between open strategy and growth.

H3: There is a relation between open strategy and growth.

Table 7. Correlations for Hypothesis 3

	Open Strategy contributes to economic growth and job creation in the mining industry	Open Strategy relevance for building organizational continuity
Open Strategy contributes to economic growth and job creation in the mining industry		.720**
Open Strategy relevance for building organizational continuity	.720**	

The correlation analysis serves the purpose of exploring the relationship of open strategy with mining industry's capacity for fostering organizational community, creating job opportunities, and potential for economic growth. The responses for "Open strategy contribute to economic development and creates employment opportunities in mining industries" and "Open Strategy is relevant for building organizational continuity" displayed a positive correlation ($r = 0.720, p < 0.01$).

The hypothesis (H3) is supported by the substantially positive relation observed between variables i.e. the open strategy and employment opportunities coupled with the economic progress of the mining industry mentioned in Table 7.

H0: The absence of clients, investors, suppliers, and partners in the strategic approach cannot produce incorrect assumptions.

H4: The absence of clients, investors, suppliers, and partners in the strategic approach can produce incorrect assumptions.

Table 8. Correlations for hypothesis 4

	Strategic planning importance for the success of mining companies	Strategic planning is effectively integrated into the day-to-day operations of your organization
Strategic planning importance for the success of mining companies		.833**
Strategic planning effectively integrated into the day-to-day operations of your organization	.833**	

The correlation analysis weighed the opinions concerning the significance of integrating strategic planning into mining businesses' performance and how well it is integrated into day-to-day operations. The findings of Table 8 show a highly significant positive correlation ($r = 0.833$, $p < 0.01$) between the perception that "Strategic planning is effectively integrated into the day-to-day operations of your organization" and the belief that "Strategic planning is important for the success of mining companies."

The null hypothesis (H_0), which states that false assumptions do not arise when clients, partners, or suppliers are not participating in the

strategy process, is supported by this significant positive connection. A strong positive correlation between the variables is shown by the computed correlation coefficient of 0.833, suggesting that people who value strategic planning are more likely to view its successful integration into day-to-day operations.

Correlations

H_0 There is not much relevance and scope for the application of open strategy in mining.

H_5 : There is much-needed relevance and scope for the application of open strategy in mining.

Table 9. Correlations for hypothesis 5

	Full involvement in the strategic planning process of your company	Full implementation of strategic planning in your organization
Full involvement in the strategic planning process of your company		.687**
Full implementation of strategic planning in your organization	.687**	

The purpose of the correlation analysis was to investigate the link between worker perceptions of the organization's complete

strategic planning execution and their desire to participate completely in the process. The findings show a strong positive correlation ($r =$

0.687, $p < 0.01$) between the perception that "Strategic planning is fully implemented in your organization" and the preparedness to actively engage in the process as mentioned in Table 9. The alternative hypothesis (H5), according to which there is much-needed relevance and scope for the adoption of open strategy in mining, is supported by this strong positive correlation.

The correlation value of 0.687 that was found suggests a significant positive link, indicating that people who are willing to fully participate in strategic planning are more likely to believe that their business has fully implemented it.



Figure 2: Strategic Planning in the South African Mining Industry

Integration of employees has been identified as the point of disagreement, while some favoured the dynamic incorporative strategies, others emphasized the challenges emerging from a pronounced focus on production. The concept of open strategy [16] is characterized by flexibility and resilience, which amongst respondents served as a better alternative to rigid plans. Lack of committed strategies, ineffective implementation, and discrepant priorities are major challenges subduing strategic planning [20]. The survey responses have shown mixed sentiments on the frequency of strategic plan reviews, stakeholder involvement, and the perceived importance of strategic planning for economic growth and job creation in the mining sector. This diversity underscores the complex landscape of strategic planning in mining, revealing a spectrum of

Discussion

Absence of Committed Strategies

The mining industry is facing challenges when it comes to adopting committed written strategies. The exploration of this issue has revealed that many respondents rely on programs like the "Mining Works Programme"^[18] without utilizing them for regular performance monitoring. Additionally, the frequency of strategy reviews ranges from regular biennial reviews to more dynamic approaches without any specific timeframe as mentioned in Figure 2.

approaches and perspectives within the industry.

Companies Typically Focus on Production

The diversity of responses from industry professionals implied a strategic approach [19] as a complex and multifaceted process. The central theme of strategic planning focuses on production; however, it further extends to the operational, financial, and regulatory dimensions. Operational strategy [21] incorporates competent practices observed from daily to long-term horizons in multinational corporations. Financial concerns [23] involve fiscal regulations and sustainable development. In addition, skill development and succession planning including employee training programs, environmental standard compliance, and health and safety are also vital

components of strategic planning. Development, in the present era particularly emphasizes on consolidation of corporate social responsibility [24] and ESG (Environmental, Social, and Governance) reporting. The strategic planning [22] thus provides a delicate equilibrium between meeting the production goals and circumnavigating the intricate network of financial, operational, socio/political, and ethical considerations in the mining industry.

Barriers Implementing Strategic Planning

A wide range of interconnected issues reported by industry professionals pose critical challenges [25] for the implementation of Strategic Planning in mining industries [26]. Exaggerated optimistic predictions coupled with conventional cost-effective expectancies to attract foreign investors is one of the key recurring hurdles. It leads to intensification of operational pressures by accentuating production to overcome the loss when faced with breakdowns or wasted time. Several other challenges include the absence of strategic approaches as a prerequisite during decision-making [27], and reliance on spreadsheet-centered information. The development of effective, communicating strategic plans for operational challenges [22] emerges as a crucial interference for the successful implementation of policies.

Regulatory barriers, civil-employee relations, everchanging legal frameworks, and market volatility are supplementary obstacles. The erratic industrial challenges including supply chain interruptions impact strategic planning same as the effect of poor communication, and environmental issues. Leadership configuration [28], individual's distinct roles in achieving strategic objectives, and the steadiness between ideal strategies and operational requirements are cited as barriers to effective practice of strategy. Successful strategic planning in the dynamic landscape of

the mining industry depends on factors like effective communication, adaptive leadership, and addressing external influences.

Failures in the Mining Industry

Professionals trace faulty strategic planning [29] in the mining industry as the cause of failures posing shared challenges concerning commodities and companies. Exigency is frequently highlighted to overshadow the considerations that lead organizations to fall from one crisis to another. There is a dire need for the development of an open strategy [16], including a multi-perspective solution as a remedy to this widespread symptom. Some examples of failures include cashflow challenges stemming from inadequate organizational settings and mining procedures.

Diversification [30] is reported as an efficient strategy for mitigating market fluctuations. Failures are further linked to inept management, misaligned administrative selection, ineffective incorporation of technology, and capital shortage [31]. The importance of concrete reality and communication within the organizational hierarchy is underscored. External factors including insufficient resource scrutiny, environmental restraints [32], and undervaluing expenses are identified as contributors to failures. The influence of governmental red tape [33] is accredited, thereby creating challenges for the mining sector.

Actions Facilitating Employee Involvement

According to industry experts, encouraging increased employee participation [22] in the mining sector necessitates a multimodal strategy. Consultation with people closest to production facilities is a common approach, which recognizes the vital insights that junior employees may offer. Collaborative decision-making places [28] a strong emphasis on meaningful employee participation, which includes community representation in the

candidate selection process. However, it is advisable to participate in strategic planning with caution and responsibility, particularly when it comes to matters of health, safety, and financial viability [23].

Adopting an employee share ownership trust and designating 5% for staff members is another suggested approach. Through staff involvement in basic mining planning and general operation, this effort seeks to develop a cohesive family structure enterprise. It is important to have faith in the process, managers, and staff. Relating remuneration to production at all levels and implementing shareholding programs are suggested as ways to align employee interests with the success of the operation [21]. Information sharing, openness, honesty, and trust, along with leadership and management, are seen as crucial factors for greater involvement. De-regulating the industry, enhancing transparency, reducing political risk, and investing in mining education are proposed strategies for industry-wide improvement. Improving communication, recognizing employees, encouraging interaction, and prioritizing employee well-being are additional measures to foster greater involvement.

An inclusive management system [34] that involves all employees in achieving subset goals collectively contribute to strategic goals. Employee share participation schemes and profit-sharing are recommended to incentivize a focus on the commercial success of the enterprise. Improved communication, disciplined implementation, and senior, mid, and junior management collaboration are underscored to share the standing of the mine with employees and align efforts toward planned success. Proper consultation in the review of regulations and performance-based remuneration are mentioned as integral components of strategies to enhance employee involvement in the mining industry.

Transparency in the Strategy-Making

The degree of transparency [36] in the strategy-making and implementation process varies among respondents. Some organizations, particularly those facing security concerns due to militant staff, express limited transparency in their strategic processes. In contrast, others advocate for transparency, similar to multinational mining companies, suggesting the display of key principles on notice boards in public view, with detailed information on a need-to-know basis.

Certain organizations focus solely on final results, with little interest in the day-to-day managerial governance needed to implement strategies [27]. Transparency levels also vary regarding rehabilitation processes, legal rights, and employee communication. Some companies pride themselves on being the most transparent and open, involving employees in the strategic process [37]. However, others admit to poor communication, off-the-cuff decisions, and a lack of adherence to plans.

In instances where there is limited transparency [35], reasons range from considering strategic details as intellectual property to a lack of a formulated plan. While some businesses boast about being transparent, admit their inadequacies, and highlight the need for progress. The degree to which plans are implemented and followed through on differs as well. While some organizations keep their stakeholders informed about expectations and developments regularly, others report a lack of transparency because of not having a strategy in place.

Successful Mining Companies Through Strategic Planning

The replies from the survey and interviews offer a variety of viewpoints about the situation of strategic planning in the mining sector. A common element is that many businesses lack a dedicated, documented strategy; instead, they depend on other initiatives or take a more flexible stance. The difficulty of involving

employees is emphasized, and there are examples of tactics being neglected in favour of production objectives. There are differences in the level of transparency [35] in the strategic planning and execution process, depending on factors like workforce composition [34] and security considerations. The difficulties mentioned by the respondents include overly optimistic forecasts, a lack of involvement from operational staff [21], and the effects of outside variables like changes in the law and market fluctuations. Notwithstanding these difficulties, there are instances of mining firms that have attained notable expansion through strategic planning [38] and emphasizes the need for capable leadership and a methodical approach. Effective strategic planning in the mining sector depends on better employee participation [26], communication, and taking legal [7] and environmental issues into account.

Open Strategy

The respondents had differing degrees of familiarity with the idea of an open strategy as shown in Figure 3. Some indicate that they understand and agree with the open strategy principles [16], while others state that they are conversant with similar ideas such as supply-chain management and key stakeholder interaction. Some seem to acknowledge the use of open strategy in the mining sector; however, they distinguish between applying it to suppliers, consumers, and external partners. In general, opinions on the notion are divided into three categories: restricted, conditional, and agreement. The range of answers points to a comprehension of open strategy and its applicability in many businesses and situations.



Figure 1. Word Cloud Generated from Participants' Responses.

Benefits of Implementing an Open Strategy Process in the Mining Industry

According to the insights gained from several responders, the mining industry might potentially profit greatly from the implementation of an open strategy approach. The consensus highlights the benefits of inclusive and transparent decision-making.

There is a belief that needless secrecy may be eradicated by being open to alternative solutions and sharing information. An open strategy [39] approach is thought to promote

employee buy-in and ownership, which in turn creates a sense of pride and accountability in terms of sustainable decision-making.

Incorporating suppliers and customers into the planning process is also seen to be a good way to cut expenses, minimize downtime, and get important knowledge.

Expanded engagement of diverse stakeholders, encompassing personnel at varying levels, is thought to promote expansion, enhance efficacy, and provide favourable results [40].

Open strategy's [41] collaborative character unites stakeholders to work towards the shared objectives of achieving success for the mining business, utilizing a range of viewpoints, and developing a more inclusive understanding of the organization's goals.

Overall, the potential benefits [38] extend to enhanced decision-making, increased efficiency, and a collective sense of commitment and ownership among stakeholders.

Encouraging Open Strategy for the Mining Industry

Encouraging and supporting open strategy in the mining industry to facilitate a broader collection of knowledge and experience requires a significant shift in the traditional closed communication loop within the sector as shown in Figure 4. Suggestions include initiating open collaborative meetings between miners, facilitated by organizations like the Mineral Council of South Africa, to share knowledge and experience. At a mine level, fostering corporate safety [42] and a production bonus system, rather than a scheme, can mitigate negative competition and incentivize collaboration.

Introducing incentives for all staff to contribute to the strategic planning process [34] and holding regular team meetings can enhance employee involvement. An open approach will be supported by being honest with suppliers, including them in the operational process, and providing a list of all requirements inside the mine. It's critical to have a secure and trustworthy workplace where staff members may voice their ideas without fear of retribution.

Collaboration can be encouraged by teaching upper management the advantages of an open strategy [16], resolving concerns, and placing a strong emphasis on team development.

Important components include information exchange within the organization, appropriate strategy distribution, and training on mining health and safety. To promote an open strategy in the mining sector, a mix of incentives, openness, communication, and cultural changes are necessary [38].

Open Strategy: A Novel Approach to Strategic Planning

In the mining industry, implementing an open strategy would indeed be regarded as an innovative approach to strategic planning as highlighted in Figure 4. This strategy deviates from the industry's customary tight communication loop and competitive mentality. Open strategy [16] is a beneficial and creative approach, especially for new entrants looking to prevent costly mistakes, because of its potential benefits, which include collaborative decision-making, greater efficiency, and improved information sharing.

Open strategy [41] is crucial for promoting cooperation, inclusion, and shared accountability, even while it recognizes the difficulties in lessening competition and centralizing some parts of planning. In the mining industry, which has historically taken a more authoritarian and internally oriented approach, the success of this innovative strategy depends on the cultural alignment and commitment of all players. In general, open strategy gives strategic planning in the mining.

sector a more collaborative, inclusive [34], and transparent aspect [35].



Figure 4. Open Strategy in the South African Mining Industry

Open strategy: A Means of Navigating Organizational Disruptions

Open strategy, which promotes efficient communication, teamwork, and proactive planning, can be a useful tool for organizations to manage disturbances. Organizations may overcome the misconceptions and misunderstandings that frequently lead to interruptions by maintaining open lines of communication.

Within the company, encouraging ethical reporting can aid in spotting any dangers and threats and enable prompt action. Disruptions can be minimized in the open approach involving important suppliers and customers. Suppliers develop into important collaborators that support operational stability by offering training, expertise, and spare parts. As stakeholders in the strategic planning process, customers guarantee sales, which is critical to the organization's sustainability.

Reduced political and union influence and keeping all relevant parties responsible for their activities can help make operations run more smoothly and with fewer interruptions.

Engaging frontline employees and other stakeholders in the process of developing strategies facilitates a more thorough

comprehension of the organization's obstacles and a joint endeavor to manage disruptions.

Additionally, an open strategy encourages adaptability and agility in handling change. When there is a wide range of external parties interested in the organization's success, obstacles may be found and resolved together.

Transparency and open communication may also help handle unexpected interruptions and communicate during times of crisis. All things considered, an open strategy promotes a comprehensive and cooperative approach that strengthens an organization's capacity to successfully manage disturbances.

Challenges for Open Strategy in the Mining Industry

In the mining sector, there are several obstacles and difficulties [43] when implementing open strategies. Because they value privacy, executives could object, which might impede open communication. Another obstacle is labor distrust, which can be caused by past communication problems or a lack of awareness of the needs of the business. Effective change management [44] is necessary when moving away from traditional communication methods, and leadership opposition from closed-culture backgrounds

may obstruct development. Stakeholders' [45] inadequate understanding of the motivations underlying profit-making presents another difficulty. The process is made more difficult by problems including executive mistrust, outside influence, and reluctance to change.

Navigating government bureaucracy and striking a balance between intellectual property protection and openness are challenging tasks. It is crucial to consider the overestimation of employee expertise and the need to close educational gaps. A thorough change management strategy that prioritizes effective communication and trust-building at all organizational levels is necessary for successful implementation.

Effectiveness of Open Strategy

Several crucial steps may be made to improve the applicability and efficacy of open strategy in organizations. A more inclusive process is ensured by beginning the productivity planning process with a bottom-up strategy that values and incorporates input from all levels [34]. Accountability and progress tracking are encouraged by enlisting outside experts to create and execute programs that concentrate on important performance areas connected to an open incentive structure.

A key function of leadership is to emphasize collaboration with suppliers [47] and OEMs (Original Equipment Manufacturers), and place faith in capable staff members. It is possible to train colleagues who lack education [48] through education programs and building cross-functional teams that are knowledgeable about different mining difficulties can improve overall performance.

An open strategy's success [41] is influenced by leaders' focused determination, frequent communication, and transparency. The strategy's relevance is further increased by involving input from all organizational levels and external stakeholders, educating all stakeholders, and making outcomes publicly available. Implementing open strategies

successfully depends on ongoing training, cultural changes, and an appreciation of the importance of group knowledge [49].

Changes in Organizational Environment & Open Strategy

To successfully implement an open strategy, significant changes to the organizational environment are necessary. Firstly, there must be a serious and positive mindset from the leadership, especially the Chairperson or Investor, demonstrating commitment to the program. Obtaining buy-in from leadership and creating a dedicated position with adequate resources are important steps. The organizational structure should be adaptive, removing ineffective individuals and ensuring that everyone is invested in the interests of the mine. An open approach may thrive in a setting that values openness, trust, and a rejection of micromanagement.

Creating a trusting relationship between different management tiers is crucial, and a relatively flat organizational structure with minimal silos can enhance efficiency. Importantly, the organization should promote an environment where employees are allowed to criticize, experiment, and contribute to decision-making. This cultural shift may involve moving from an autocratic to a more participative style of management, potentially facilitated by the next generation of top management.

Organizational cultures that are more transparent and participatory are facilitated by decreasing corruption, updating regulations, and improving training and communication.

Adoption of Open Strategy & Stakeholders

Changes connected to open strategy are often well-received by employees and other [45] stakeholders. Adopting an open approach has more benefits for stakeholders [46] and workers than drawbacks. Employee willingness is also impacted by their innate enthusiasm for the mining industry, which is frequently

inherited from previous generations. An open approach encourages a sense of pride and involvement by allowing people to feel appreciated in their areas of responsibility.

Furthermore, suppliers find it simpler to work with and invest in a mine that has an open strategy, fostering a partnership that is more cooperative and advantageous to both parties. The emergence of a more robust middle class suggests that people are generally open to these kinds of reforms. An open method is more successful when experts and seasoned miners are included in the decision-making process [27].

Nonetheless, obstacles from cultural and political disparities, as well as doubts from specific parties involved, could arise. Sometimes, top managers who see a challenge to their positions or a more conservative business culture are the sources of opposition. Despite these obstacles, most stakeholders, and workers [34] indicate a favourable attitude toward open strategy-related adjustments by expressing a desire to be included and have their ideas recognized.

Facilitating Open Strategy in the Mining Industry

The business of mining presents a complex challenge when implementing an open approach, with issues ranging from employee opposition to change to the possibility of sensitive information being revealed. A key component of guaranteeing the success of open strategy is the requirement for a fundamental change in the thinking of middle management. Financial factors [23] come into play and require a designated budget to prevent the efficacy of the program from being compromised. The dynamics of power and decision-making in organizations highlight the need to cultivate an environment of openness and trust.

Complicating matters further are outside variables such as political opposition [33] and difficulties in involving a variety of

stakeholders [45], such as communities and labor unions. It becomes a tricky task to strike a balance between the advantages of diverse ideas [30] and employee empowerment and the demands of discretion [35] and methodical decision-making. Addressing these issues calls for an all-encompassing strategy that includes open communication, education, and a dedication to cultural change in the mining industry.

Conclusion

The correlation analysis's findings support the hypothesis that open approaches might have an impact on the mining industry by demonstrating several significant, positive correlations.

First, it was discovered that there was a significant positive correlation ($r = 0.636$, $p < 0.01$) between open strategy procedures and higher staff involvement, demonstrating the advantages of open strategy for employee engagement.

Additionally, a strong positive correlation ($r = 0.750$, $p < 0.01$) was shown between open strategy, encouraging transparency among employees and stakeholders, and achieving success without failing, indicating that open strategy may positively affect organizational outcomes.

The participants' experiences also showed a significant positive association ($r = 0.720$, $p < 0.01$) between the open approach and its contribution to the economic growth and job creation of the mining sector. The important role of strategic planning was further demonstrated by the finding of a strong positive correlation ($r = 0.833$, $p < 0.01$) between the successful integration of strategic planning into daily operations and the perceived relevance of strategic planning for mining enterprises' performance.

The significance and applicability of open strategy in the mining sector were further highlighted by the discovery of a robust positive correlation ($r = 0.687$, $p < 0.01$)

between participants' readiness to participate fully in the process and their opinions of the organization's overall strategic planning implementation.

In summary, the findings repeatedly highlight the potential advantages of an open approach for the mining industry in terms of boosting worker performance, engagement, and economic growth as well as reducing incorrect assumptions.

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Acknowledgments

Thanks to all participants who shared their ideas and experiences. This work was only possible due to the joint effort and devotion of everyone involved.

Conflict of Interest

The study has been conducted with utmost transparency and integrity, and no conflict of interest has been found.

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