# Gordon Institute of Business Science University of Pretoria

## The perceived benefits of workforce inclusion in driving change in the mining industry

Khutjo Lebelo

24252205

24252205@mygibs.co.za

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfillment of the requirements for the degree of Master of Business Administration

**01 November 2022** 

#### **Abstract**

The mining industry is at the heart of South Africa's economic growth. As a result, evolving technology and a changing workforce compel the industry to manage organisational change effectively, as its future depends on it. However, change projects have a high failure rate, which impacts many stakeholders such as investors, governments, companies and their employees, and families.

This research explores how workforce inclusion can benefit any change projects from the current status quo to the desired future state. A qualitative methodology was adopted to explore the views of 13 participants involved in change implementation at three levels: the workforce, the supervisor and middle management.

This study's findings were consistent with the literature on change misdiagnosis, and that leadership is key to change. Therefore, it contributes to the literature and has implications for the mining industry.

#### **Keywords**

Change, Inclusion, resistance

#### **Declaration**

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Khutjo Lebelo	
Name & Surname	Signature

#### **List of Tables**

Table 1: Participants' sampling size and rationale
Table 2: Interview participants' summary
Table 3: Summary of themes_ RQ140
Table 4: Summary of codes_ Strategic intent (1)41
Table 5: Summary of codes_ Strategic intent (2)41
Table 6: Summary of codes_ Strategic intent (3)42
Table 7: Summary of codes _ Representation (1)42
Table 8: Summary of codes_ Representation (2)43
Table 9: Summary of codes_Representation (3)
Table 10: Summary of codes_ Understanding the environment of business (1) 44
Table 11: Summary of codes_ Understanding the environment of business (2) 44
Table 12: Summary of codes_ Understanding the environment of business (3) 44
Table 13: Summary of codes_Understanding environment of business (4) 45
Table 14: Summary of codes_ Business case justification
Table 15: Summary of codes_ Resistance to change (1)
Table 16: Summary of codes_ Resistance to change (2)47
Table 17: Summary of themes_ RQ248
Table 18: Summary of codes_ Leadership (1)

Table 19: Summary of codes_ Leadership (2)	49
Table 20: Summary of codes_ Leadership (3)	49
Table 21: Summary of codes_ Communication (1)	49
Table 22: Summary of codes_Communication (2)	50
Table 23: Summary of codes_Communication (3)	50
Table 24: Summary of codes_ Collaboration	50
Table 25: Summary of codes_ Organisational structure	51
Table 26: Summary of codes_Trust	51
Table 27: Summary of themes_ RQ3	52
Table 28: Summary of codes_ Facilitating change	53
Table 29: Summary of codes_Power dynamics (1)	53
Table 30: Summary of codes_ Power dynamics (2)	54
Table 31: Summary of codes_ Procedures	54
Table 32: Summary of codes_ Resource constraints	55
Table 33: Summary of codes_ Workforce capability	55
Table 34: Summary of codes_ Generational changes	56
Table 35: Summary of findings (themes)	57

### List of Figures

Figure 1: A typical mining hierarchical organisational structure	27
Figure 2 : Triangulation approach	34
Figure 3: Saturation graph	39
Figure 4: Summary_ Analysis of themes_RQ1	59
Figure 5: Summary_ Analysis of themes_RQ2	63
Figure 6: Summary_ Analysis of themes_RQ3	65
Figure 7: Proposed model facilitating change in the mining industry	66

#### Contents

Abstrac	ct	ii
Keywo	rds	ii
Declara	ationi	ii
List of	Tablesi	٧
List of	Figures	/i
1. Ch	napter 1: Introduction to the Research Problem	1
1.1.	Introduction	1
1.2.	Background	2
1.3.	The research problem	4
1.4.	The research purpose	4
1.5.	Significance of the study	4
1.6.	Research scope	6
1.7.	Delimitations	6
1.8.	Roadmap	6
2. Ch	napter 2: Literature Review	8
2.1.	Introduction	8
2.2.	Organisational change	8
2.3.	The role of Resistance1	1

2.4.	Communication, the human connection	12
2.5.	Workforce inclusion	14
2.6.	Perceived Inclusion	16
2.7.	The role of representation	17
2.8.	Operationalising the change	18
2.9.	Conclusion	19
3. Ch	apter 3: Research Questions	20
3.1.	Introduction	20
3.2.	Main research question	20
3.3.	Sub-research question one	20
3.4.	Sub-research question two	21
3.5.	Sub-research question three	21
4. Ch	apter 4: Research Methodology	22
4.1.	Research design and purpose	22
4.2.	The philosophical approach of the study	22
4.3.	Research approach	23
4.4.	Methodological choices	23
4.5.	Strategy	24
4.6.	Time horizon	24

	4.7.	Proposed research methodology	. 24
	4.8.	Population	. 25
	4.9.	Unit of analysis	. 27
	4.10.	Sampling method and size	. 27
	4.11.	Measurement instrument	. 28
	4.12.	Data gathering process	. 30
	4.13.	The data gathering approach	. 30
	4.14.	Preparing for and dealing with challenges	. 31
	4.15.	Revisiting the conversation	. 32
	4.16.	Ethical considerations	. 32
	4.17.	Participant issues	. 33
	4.18.	Analysis approach	. 33
	4.19.	Quality control	. 34
	4.20.	Conclusion	. 35
5	. Cha	apter 5: Findings/Results	. 36
	5.1.	Introduction	. 36
	5.2.	The sample description	. 36
	5.3.	Coding	. 37
	5.4.	Presentation of results	. 39

5.5. Res	sults for sub-research question 1	40
5.5.1.1.	The strategic intent behind the change	41
5.5.1.2.	Representation	42
5.5.1.3.	Understanding the environment of business	43
5.5.1.4.	Business case justification	45
5.5.1.5.	Resistance to changes	45
5.5.1.6.	Conclusion RQ1	47
5.6. Res	sults for sub-research question 2	48
5.6.1.1.	Leadership	48
5.6.1.2.	Communication	49
5.6.1.3.	Collaboration	50
5.6.1.4.	Organisational culture	51
5.6.1.5.	Trust	51
5.6.1.6.	Conclusion RQ2	51
5.7. Res	sults for sub-research question 3	52
5.7.1.1.	Facilitating change	52
5.7.1.2.	Power dynamics	53
5.7.1.3.	Procedures	54
5.7.1.4.	Resources constraints	54

	5.7	.1.5.	Workforce capability	55
	5.7	.1.6.	Generational changes	55
	5.7	.1.7.	Conclusion RQ3	56
	5.8.	Sumn	nary of findings	56
6.	Cha	apter 6	S: Discussion of Results	58
	6.1.	Introd	luction	58
	6.2.	Analy	rsis of results	58
	6.2	.1. A	nalysis of themes: RQ1	58
	6.2	.2. A	nalysis of themes: RQ2	62
	6.2	.3. A	nalysis of themes: RQ3	65
	6.3.	Analy	rsis summary: Main research question	66
	6.3.1.	. Pro	posed model	66
7.	Cha	apter 7	': Conclusions and Recommendations	69
	7.1.	Introd	luction	69
	7.2.	Princi	pal conclusions	69
	7.3.	Theor	retical contribution	71
	7.4.	Implic	cations for management and other relevant stakeholders	71
	7.5.	Limita	ations of the research	72
	7.6.	Sugge	estions for future research	72

8.	Reference List	73
9.	Appendices	84

#### 1. Chapter 1: Introduction to the Research Problem

#### 1.1. Introduction

In a fast-developing world, the organisation can renew its direction, structure, or design to address the external environment changes that give it a competitive advantage over others (Al-Haddad & Kotnour, 2015; Hussain et al., 2018). In addition, evolving technology and a changing workforce in different industries are crucial in compelling organisations to manage organisational change effectively (Stouten et al., 2018). Hussain et al. (2018) define organisational change as the managerial actions of changing the status quo to a desired future state. Indeed, a desired future state is what differentiates good from great companies. However, sustainable, meaningful changes can be challenging (Stouten et al., 2018), as a desired future state might be uncertain and involve people's input, willingness, and competency (Hussain et al., 2018).

A growing number of academics and practitioners have come to endorse the idea that attaining competitive advantage rests on unleashing the innovative potential of the workforce (Dorenbosch et al., 2005). The innovative potential of the workforce requires a proactive workforce that identifies the need for change before the business environment compels them to an unknown future state. This may result in a personal impact on the employees involved in implementing the change. Apart from this, most organisational changes follow a hierarchical approach that imposes change on the employees (Schulz-Knappe et al., 2019). Employees are instrumental in supporting organisational change and ensuring that the specified objectives are met (Kim et al., 2011). Failing to consider them in organisational change leads to avoidance and opposition to the planned change (Schulz-Knappe et al., 2019). As an organisation moves from a known current state to an unknown desired state, it is critical to understand what facilitates the change to be effective from the perspective of those responsible for making change happen.

To ensure its success, an organisation must show high performance and remain competitive in a complex environment (Köseoglu et al., 2020). Therefore, it is evident that organisations need change; it is a feature of their life that makes them relevant in the competitive market (Hussain et al., 2018). In contrast, Resistance to change impacts organisational change and

requires intervention (Hussain et al., 2018). For example, if change implementation is rushed or incomplete information is shared, it may result in unnecessary pressure, resulting in employee resistance that hinders implementation (Christensen, 2014; Schulz-Knappe et al., 2019). This supplements Hussain et al.(2018), who posit that employee resistance can be addressed when employees understand what's in it for them or the competencies and capabilities required for the change (Hussain et al., 2018). It is, therefore, important to explore the benefits of Inclusion as perceived by the workforce and the subsequent impact on change.

#### 1.2. Background

Growth is optional, but change is not. As denoted by John Maxwell, change is indeed inevitable. Change refers to significant shifts in the surroundings in which people live (van Woerkum et al., 2011). Unfortunately, not all change is planned; it may happen by chance, through social interactions, or because of routines and practices (van Woerkum et al., 2011).

Different factors, such as globalisation, technology, or regulations, may act as drivers for change. Drivers are defined as those actions that accelerate the implementation of change (Whelan-Berry & Somerville, 2010). Furthermore, participation, training, career advancements, and reward systems are significant drivers for individuals involved in the change process (Whelan-Berry & Somerville, 2010). Whelan-Berry and Somerville (2010) argue that individual change must also happen for organisational change to be successful. In addition, Hussain et al. (2018) posit that for change to occur, the forces that drive it must be increased, or the forces that maintain the current situation must be decreased. Indeed, change happens, but does it translate to implementation that results in a value that will benefit organisations toward sustained growth?

One of the challenges facing individuals and organisations is keeping up with the rate of change. Organisational growth, success, and competitiveness are driven by continuous adaptability to change in the business environment (Al-Haddad & Kotnour, 2015). This may result in complexity and uncertainty in the work to be done or for those that must implement the change. It is evident that the change strategy and Leadership cannot be done in isolation but requires a shift in focus toward individuals and their needs (Michel et al., 2013). As a result, uncertainty might also result in organisations resisting future changes due to the high

capital investment in the current status quo (Hussain et al., 2018). Undeniably, when the failure rate keeps increasing, many stakeholders are affected, such as investors, governments, companies and their employees, and families (Kotter & Schlesinger, 2008).

Rønningstad (2018) attributes resistance to change to challenges to the utility of subordinate employees as change agents, such as their role in the organisation. In some instances, resistance might be due to change fatigue. Rønningstad posits that "constant change by an organisation may burn out employees" (2018, p. 11). This is referred to as change fatigue. Even though many scholars attribute change failure to execution, misdiagnosis of the need for change also contributes to the high failure rate in change projects and may result in change fatigue(Anand & Barsoux, 2017). Furthermore, change fatigue may result in negative morale in the workforce as implementation and adoption become complex. Therefore, implementing the planned change becomes unsustainable due to change fatigue and an uninspired workforce.

In the context of South Africa, mining plays an integral part in Gross Domestic Product (GDP), accounting for 8.2% of the total in 2020 (Garside, 2022). Mining has been driving the South African economy for over 150 years, leading Africa's mineral value (Ndlovu, 2018). Furthermore, high unemployment rates demand mines to be more innovative to enhance employee skills and create opportunities for local communities. However, the South African mining industry faces operational challenges ranging from increasing depth, decreasing ore grades, and increasing complexity in mining methods (Gruenhagen & Parker, 2020). Recently, climate change has been a growing concern as it directly impacts the sustainability of water supplies (Ndlovu, 2018). Mines will need to adapt to these changes and develop sustainable solutions for the future. Due to these operational challenges, mining productivity is at the centre of focus in driving the mining value chain for every mine that aims to be successful. In addition, other factors, such as the fluctuation in commodity prices and the high capital intensity nature of the mining environment, contribute to the industry's complexity and motivation to change the future of mining for sustained economic benefit (Ali & Ur Rehman, 2020; Sánchez & Hartlieb, 2020).

In addition, transformation in mining may grow the economy through technological and productivity gains that sustainably spill over to other sectors (Bravus Mining and Resources, 2021). The mining industry is a home for jobs, communities, and entrepreneurship opportunities

(Bravus Mining and Resources, 2021). People are at the centre of mining activities, creating an urgency to address factors that may impact planned changes. Weisbord and Janoff say,"When issues involving people are explored, more creative energy is released, leading to projects that everyone identifies as significant and no one could accomplish alone" (2010, p. 236). This study then explores the workforce as an effective change driver in organisational change. To remain competitive for the desired future, organisations must create an environment where people have a vision for the desired future by reducing uncertainty and motivating their employees to succeed in mining.

#### 1.3. The research problem

When we think about implementing change, we easily imagine a person with excellent leadership skills informing the workforce on what to do and when to do it. This person may be an executive with great charisma or a senior firm manager with a great plan. Bryson et al. (2013) posit that in some instances, employees may be able to persuade management to modify plans for change depending on their level of influence within the organisation. However, in a hierarchical organisation, the functions below the executive and senior manager roles form a more considerable percentage of the workforce. Yet, we know little about their views on the benefits of including them in the change processes. For this reason, we aim to answer the question: How does the workforce's perception of their Inclusion in the workplace impact change in the mining industry?

#### 1.4. The research purpose

This research aims to establish what the workforce perceives as the benefits of being included in change processes and how that impacts the change in the mining industry.

#### 1.5. Significance of the study

The research will make a theoretical contribution to the body of knowledge in mining by indicating the relationship between perceived inclusion and workforce contributions in the workplace. The workforce's perception of their inclusion status influences their behaviour, commitment to the organisation, and role-based performance (Chen & Tang, 2018). When

employees fear changes or believe they will be disadvantaged, they will most likely resist the change (Bryson et al., 2013). As a result, exploring the relationship between the workforce and their Leadership is significant in understanding the perceived value added towards effective change.

Despite its significant contribution to the South African economy, approximately 451 427 people were employed in the different sectors of the mining industry in 2020 (Garside, 2022). Even though mining was historically known to employ low-skill individuals requiring minimal technical skill, the mining industry is embarking on mechanisation and technology to address safety and productivity (Dayo-Olupona et al., 2020). The quest for innovation advocates for upskilling and mechanisation to improve the working environment and lessen reliance on many low-skilled labourers (Sánchez, 2020). The change creates uncertainty and panic in the workforce, given the high unemployment rate in South Africa. Internal business stakeholders such as employees and unions will most likely resist change that may ultimately affect their livelihoods. Therefore, exploring the perceived benefits of workforce inclusion was paramount in understanding how to execute change effectively.

The research inquiry explores current inclusion practices of introducing change, how they facilitate change, and further determining best practice methods of facilitating the change. Chen and Tang (2018) posit that perceived Inclusion improves organisational commitment, improving employees' work-related role performance. Furthermore, it ties the employees intensely to their job (Chen & Tang, 2018). Therefore, it is imperative to understand the workforce in the change process as their performance impacts the overall production output for the South African economy. The study will contribute to the mining practice by illustrating challenges faced by the workforce during planned change implementation and how they facilitate or become barriers to change. Furthermore, it will have management contribution by highlighting the benefits of Inclusion in the workplace and how that impacts change. This will provide management with advice that allows leaders to understand how to treat employees to improve an inclusive and innovative environment and facilitate the effective execution and adoption of changes in the mining industry.

#### 1.6. Research scope

The research scope will be limited to change and Inclusion as the primary constructs. However, the paper covers the general South African mining industry value chain focused on extracting minerals, excluding exploration and processing. The study duration will be limited to five months after the proposal submission.

#### 1.7. Delimitations

This study only focuses on planned change; in this study, it will also be referred to as organisational change. The study excludes emergent changes affected by external environments, such as pandemics and safety incidents. It addresses the question: How does the workforce's perception of their Inclusion in the workplace impact change in the mining industry?

#### 1.8. Roadmap

The research report is made up of seven chapters and their supporting appendices.

**Chapter 1**: This chapter introduces the study's title and the research. It introduces the research problem, the purpose and the significance of the study.

**Chapter 2:** This chapter provides a detailed literature review to define what is known and unknown about the subject clearly. It highlights the key constructs and critical, and all knowledge on the topic is shared.

**Chapter 3:** Sets out the main research questions and the sub-research questions that were derived from the literature review and to close the gap identified.

**Chapter 4:** Sets out the research methodology for the study.

**Chapter 5:** Indicates the research findings of the study

**Chapter 6:** The research analysis is discussed to determine the main themes that emerged from the data collection. In this section, the data analysis will be used to compare with the literature,

as denoted in chapter 2. A model was developed to analyse the findings further and synthesise the information to answer the research question.

**Chapter 7:** This chapter concludes the study through principal conclusions, theoretical contribution, research limitations, implications for management and suggestions for future research

#### 2. Chapter 2: Literature Review

#### 2.1. Introduction

This chapter presents the literature review of the study. Fisch and Block (2018) denoted that a literature review is essential to analyse prior literature and identify gaps in the knowledge critically. It requires a detailed understanding of the process and the necessary skills to analyse the results subjectively (Fisch & Block, 2018). Many authors are criticised for lack of knowledge in the subject of their research. Therefore, the analysis and synthesis of information are crucial in ensuring quality research that contributes positively to the body of knowledge (Boote & Beile, 2005).

For this reason, there was a need to understand what is known and what is not known by prior researchers in the field (Boote & Beile, 2005; Fisch & Block, 2018). Furthermore, it allowed an opportunity to join an ongoing conversation that will cumulatively build and learn from others. Therefore, it remains the researcher's responsibility to know the literature in their field of study; it is "a necessary chore" that will enable new perspectives on the literature (Boote & Beile, 2005, p. 5).

Firstly, the topic was motivated to outline and define key constructs systematically, namely Inclusion and organisational change. Then, the review provided a comprehensive description of how the constructs apply to the context of this study. The literature review was centred on concepts that allow a logical structure to the research report (Fisch & Block, 2018). Finally, this section concludes by transitioning to the next chapter, which addresses the research questions developed from the review. This research aims to establish what the workforce perceives as the benefits of being included in change processes and how this impacts change in the mining industry.

#### 2.2. Organisational change

As defined by Lewin, organisational change is shifting from the current situation to a better one (Hussain et al., 2018). The shift from one state to another shapes how organisations navigate success into the future. This study focused on planned organisational change.

Planned change is proactive and driven by an organisation's leadership (Blumberg et al., 2019). It is purposeful and intentionally applied to move the organisation from one state to another desired state. First, an organisation must identify what is required to implement the planned change successfully (Linstead et al. (2004) cited in Blumberg et al. (2019)). This process entails an application of exponential thinking to ensure that resources, time and efforts are not wasted. It means that the leaders have to start by asking the right questions that enable the planned change to be proactive.

Furthermore, the planned change allows for the Inclusion of relevant participants, giving the change a chance of success. When the leadership drives change, it results in the change being imposed on the employees from the top down (Blumberg et al., 2019; Schulz-Knappe et al., 2019). This type of change communication has a high degree of organisational control which disregards the views of the employee (Christensen, 2014). How the change impacts the employees depends on the type of change that is implemented (Schulz-Knappe et al., 2019). Some changes may involve introducing new equipment, systems or shift changes that the employees might disagree with. Consequently, transformational changes like introducing a new marketing campaign with which the employees have no real issues. Hence, the organisation must have open lines of communication where employees are engaged in the change by sharing their views and concerns. However, where change agents are used to closing the communication loop and ensure effective feedback, caution should be taken to ensure that communication is interactive and allows constructive feedback. Therefore, the impact on employees should be considered when shifting from the current status quo to the desired future.

Planned and emergent change must be clearly defined as it is prevalent in the mining industry. The mining industry is highly regulated, with safety at the core of the operations of a mine. Therefore, specific actions to address emergent change must be activated in cases where emergent change is required. In addition, emergent change assumes that change is dynamic and unpredictable and requires constant readjustments and realignment that cannot always be predicted (Blumberg et al., 2019). Furthermore, the type of change must be defined before an organisation embarks on the change, whether it will only be incremental to the current status quo or require a complete shift in the organisational elements.

Organisations that are not flexible to change end up being irrelevant in the future. Effective change positively impacts multiple stakeholders and results from common goals such as growth, opportunity, and financial security among the stakeholders (Stouten et al., 2018). This implies that alignment between the stakeholders (organisation, workgroup and employees) plays a critical role in laying a foundation for impact. Oreg and Berson (2019) argue that leaders shape how employees react to change by using different roles and leadership styles, which impacts organisational change. Similarly, Stouten et al. (2018) attribute the vast change management literature to the role of the leader and provide different guiding steps on how to implement change in organisations; however, it focuses very little on employees as change agents.

Agote et al. (2016) argue that change has to happen at an individual level; if a leader is not authentic, they cannot be trusted and, thus, cannot influence employees in facilitating the change. In addition, employees always want to know 'what is in it for me'. However, Errida and Lotfi (2021) argue that individual and organisational readiness for change is a crucial step in change preparation. Quite often, the focus is more on the organisation than the individuals. Employees' capabilities, skills, and motivation are crucial for the change's success (Errida & Lotfi, 2021). Therefore, how the recipients of change accept or resist the change determines the success or failure of the change in the organisation (Agote et al., 2016).

Cohen (2019) states that the success rate of change projects has a base between 50% and 55% or even lower depending on the project's complexity. On the other hand, Al-Haddad and Kotnour (2015) refer to a rate of less than 30%. It is evident that investments are made into certain changes, resulting in losses in specific projects. Despite the high change failure rate, organisational change failure reasons have a narrow focus in the research literature (Al-Haddad & Kotnour, 2015). Scholars have focused on various change models to address change failure; however, context matters in each change (Errida & Lotfi, 2021). The high failure rates suggest a continuing need for research to determine what characteristics increase the likelihood of effective organisational change. This may also indicate no reliable frameworks for organisational change (Al-Haddad & Kotnour, 2015).

#### 2.3. The role of Resistance

According to Judson (1991) and Venus et al. (2019), failures in change efforts are primarily associated with employee resistance. This notion is consistent with Ford and Ford (2010) and Pieterse et al. (2012). They argue that the most common cause of change failure is employee resistance. Human beings will do anything to protect themselves from anything that threatens their livelihoods. Similarly, employees resist change to protect themselves from the consequences of change.

In addition, since organisational change requires a change from a known to an unknown, it is normal for resistance to occur (Venus et al., 2019). However, although change is resisted, overcoming resistance is essential for effective change (Bovey & Hede, 2001). The threat, uncertainty, and pain of change result in employees resisting the change process. Michel et al. (2013) and Al-Haddad and Kotnour (2015) argue that context matters when addressing change; it is never a one size fits all approach. Therefore, in a mining industry context, where operations require high capital and operational costs, the success of change projects is imperative, and failure may be detrimental. Hence, it is fundamental to understand the Resistance from the perspective of the workforce as the resistors.

As Simon Sinek puts it, "People do not buy what you do; they buy why you do it" (Sinek, 2009, p. 41). Therefore, start with why change is necessary and involve all the stakeholders in the change (Hussain et al., 2018). The lack of understanding towards why change happens may impact the outcome of the change. People do not want to lose something of great value (Kotter & Schlesinger, 2008). For example, in a mining operation, a miner is a competent person appointed by the employer to ultimately take charge of a team of workers and exercise control over explosives used to initiate a blast safely every day (Mine Health and Safety Act 29 of 1966 and Regulations, 2018). Their work entails ensuring all work regarding safety in marking, drilling, and charging up with explosives is under control as per the explosive's regulations (Mine Health and Safety Act 29 of 1966 and Regulations, 2018). However, one of the mining industry trends is automation, an industry driver toward sustainable mining that saves lives (Dayo-Olupona et al., 2020). Technology trends and economic outputs give mining operations a competitive advantage by maximising efficiency and separating people

from harm by reducing employees' exposure to those risky conditions (Lööw, 2021). As part of an organisation moving towards this goal, imagine implementing new automated drilling equipment that requires the miner not to mark nor lead a drilling team. The miner, as an employee, expects that leaders have their interests at heart (Ellonen et al., 2008). Therefore, the change due to organisational needs for technology may be viewed as unfair to the miner, and the miner may, as a result, resist that change. Hence, understanding how change gets introduced in the organisation and workforce as change agents are central to exploring the effective execution of change in the mining industry.

Trust plays a crucial role in getting people to change; therefore, when people do not understand the change details, they become resistant (Kotter & Schlesinger, 2008). Trust also increases efficiency in the working environment and makes Communication more effective (Ellonen et al., 2008). On the other hand, when the workforce believes that change does not make sense for the organisation, they will resist the change (Kotter & Schlesinger, 2008). For example, if the cost and benefit do not add up, employees will always wonder why we need to do that. Therefore, clarity of the change is crucial to motivate commitment to the change. However, it is not always the case that employees want to resist change. Sometimes, low tolerance for changes may be due to a lack of skills required (Kotter & Schlesinger, 2008). Therefore, organisations must assess the skills required for the planned change and see where their employees fit.

On the other hand, timing matters. When change is planned within a limited time that does not consider all the relevant factors, it may become very strenuous for employees (Schulz-Knappe et al., 2019). In conclusion, change has emotional attributes that need consideration (Kotter & Schlesinger, 2008). Failure to consider these aspects result in Resistance that impacts productivity, costs and safety of people in the organisation.

#### 2.4. Communication, the human connection

Appelbaum et al. (2017) posit that for employees to be committed to change in their work environment, informal and formal communication must be increased. Errida and Lotfi posit that "Effective and constant communication is a key factor for change success and plays a major role in creating change readiness, reducing resistance to change, and obtaining the

buy-in of individuals" (2021, p. 6). Therefore, change communication needs to be clear, frequent and powerful across all the different levels in the organisation (Kotter, 1995). Planned organisational change needs to be understood across all levels of work within the organisation (Appelbaum et al., 2017). It should not be attributed to leaders and managers only.

Employees perceive communication as an area of concern and require intervention (Appelbaum et al., 2017). Depending on the level of the employee, communication may be more informative and not interrogated when presented to different teams (Appelbaum et al., 2017). This could be due to the perceived level of expertise of the leader communicating. Furthermore, it may be due to the organisational design structure that advocates for hierarchies and levels of authority. Lack of interrogation impacts implementation due to team members not correcting each other. Communication should be across all levels and not only between employees and management. Open Communication encourages an innovative culture that promotes team communication, positively diagnosing the need for change and improves personal relationships within the team (Schulz-Knappe et al., 2019). In addition, ineffective Communication may spark unnecessary rumours that may bring uncertainty and instability to the organisation (Christensen, 2014; Schulz-Knappe et al., 2019). As a result, management may wait for planning to be advanced before publicly sharing the proposed change (Appelbaum et al., 2017).

When disagreements and conflict arise during the communication of change, it is an opportunity to use resistance to re-evaluate the change decision (Appelbaum et al., 2017). In addition, this must be viewed as a feedback loop that allows management to understand obstacles towards the buy-in of the employees in the change process. However, it may not always be accepted through a suitable lens due to self-made assumptions about resistance (Michel et al., 2013). Apart from this, the organisational structures and leadership style contribute towards how feedback is received. For example, an organisational structure in the mining industry follows a hierarchy that promotes command and control instead of interactive Communication. This structure will be discussed in chapter 4. In addition, employee voice can be suppressed when a top-down leadership approach is used to influence followers. A decade ago, the era of Leadership represented "formal, command, authoritarian, and

bureaucratic organisational designs" (Martin et al., 2019, p. 466). It required leaders to 'instruct and guide' the employees to prepare them for the change. Then, the leader relies on the feedback received from employees to activate the next step of change. Lewin emphasises the importance of people understanding the need for change (Hussain et al., 2018). However, globalisation and complex organisational designs have led to leadership as a reciprocal process between two people in a relationship, namely, the leader and the follower (Martin et al., 2019). Martin et al. (2019) refer to this period between 1980 and 2022 as the era of relationships. In this period, the leader and follower are diverse; they influence one another and live through specific patterns that allow for a genuine lasting relationship (Martin et al., 2019). How the above factors facilitate or hinder change depends on the perceptions of the workforce and their understanding of the organisational practices.

#### 2.5. Workforce inclusion

Inclusion is defined as "the extent to which employees feel valued for their unique characteristics and have a sense of belonging, thus feeling comfortable about sharing their 'true selves' within the work organisation" (Brimhall & Mor Barak, 2018, p. 475; Shore et al., 2011). Ferdman also subscribes to the notion that "in inclusive organisations and societies, people of all identities and many styles can be fully themselves while also contributing to the larger collective, as valued and full members" (2017, p. 235). Inclusion is made up of two elements, namely uniqueness and belongingness. Unique characteristics include race, gender, colour, age, cultural orientation and language, whilst uniqueness refers to being open to different approaches concerning all cultures during engagements (Shore et al., 2018). Ferdman (2017) posits that while Inclusion is vital to everyone, it matters more to historically excluded individuals. An individual's unique characteristics must be valued for them to feel comfortable, add value to teams and be effective in their work environment (Ferdman, 2017). On the other hand, belongingness refers to the act of being an insider who participates and is part of the decision-making process; information is openly shared with those who belong (Shore et al., 2018). Therefore, an inclusive workplace is made up of unique employees that have a sense of belonging.

Contextual factors of the mining industry must be considered when analysing Inclusion. Given the unique nature of the mining industry, employees of different ages, gender, and cultures will have different perspectives and knowledge on the planned change, such as innovation and how it can potentially be valuable to the organisation. For example, older employees might have insight into the company and industry, whilst younger employees have a high level of business enthusiasm (Shore et al., 2011). That is to say that their uniqueness contributes positively to the quality of information needed for the strategic implementation of any organisational changes. In the mining context, it is evident that a diverse group of people exist, which may include immigrants, different races, and younger and much older adults. According to Shore et al. (2018), a diversified workforce is most likely to be innovative; however, change implementation becomes just a dream without Inclusion.

It has been said that time heals all wounds. However, that is not the case for employees who were members of a social identity group historically discriminated against; this includes immigrants, black people, older adults, people with accents, etc. (Mor-Barak, 2022). These employees are most likely to be excluded from information networks and decision-making (Shore et al., 2018). Consequently, Brimhall and Mor Barak (2018) believe that when the workforce is included, they become more innovative, leading to improved performance in all other areas of their work. It is not surprising that a company like Apple is the most innovative company in the world (Ironhardt, 2020). Their slogan, "How we come together is how we change the world" (Apple, 2022), indicates how Inclusion allows them to change their products into something of value and useful to their users (Ironhardt, 2020). When the users of a product find value in the product or brand, they easily adopt it [as evidenced by the overwhelming support for Apple products].

However, Inclusion should not be confused with diversity. Diversity is "the characteristic of a group or organisation and refers to the composition of differences among individuals (e.g., race, ethnicity, gender, education) in the group or organisation" (Brimhall & Mor Barak, 2018, p. 475). When the workforce is diverse, they become more creative, innovative, and committed and are likely to stay at the company for much longer (Brimhall & Mor Barak, 2018). In contrast, conflict may arise due to diversity, leading to high turnover and low performance, negatively impacting productivity (Brimhall & Mor Barak, 2018). As Liz Fosslien

puts it, diversity is having a seat at the table, Inclusion is having a voice, and belonging is having that voice to be heard. Conflict can be created when silos and favouritism are created in the organisation by valuing certain employees over others, resulting in exclusion (Shore et al., 2011). It is for this reason that every worker wants an equal opportunity to contribute to projects and influence the outcome because Inclusion and belonging are what puts diversity into action. For this reason, workforce inclusion seeks to address the negative impacts of diversity and leverage its benefits. It strives to create equal access to various resources, information, and decision-making opportunities (Shore et al., 2018).

#### 2.6. Perceived Inclusion

Chen and Tang (2018) refer to perceived Inclusion as the perception of employees being acknowledged, while Inclusion indicates the organisation's practices that result in employees being content. It is for this reason that its crucial to explore the employees' perception through understanding the organisations' practices. Consequently, Shore et al. (2011) argue that the employee's perception of belongingness and fulfilment by receiving treatment that meets their requirements determines whether they feel included or not in the organisation. In addition, being open to different approaches and respect for different cultures and perspectives matters to the employees and impacts how they react to changes implemented in the organisation.

Shore et al. (2018) developed a framework that illustrates the role of Inclusion in workgroups and how it positively leads to better relationships between employees and their supervisors, better relationships with colleagues, job satisfaction, commitment to the organisation, improved job performance, and employees' organisational citizen behaviour that encourages them to do more voluntarily. Shore et al. (2018) inclusion framework consists of four elements: exclusion, assimilation, differentiation and Inclusion. The organisation's culture ultimately shapes the workplace climate and the employees' experiences daily (Shore et al., 2018). Exclusion represents the dark, unpleasant side where employees are treated like they are not part of the team (Shore et al., 2018). Robinson et al. (2013) state that "exclusion is destructive to employees" (p. 53). Assimilation is when an employee has low value in uniqueness but tries to fit in so that they can belong (Shore et al., 2018). An employee who assimilates conforms to the organisational culture for the sake of peace and progress. On the

other hand, differentiation is the opposite. This individual has unique attributes that the organisation values, but they are not treated as part of the team; they do not belong (Shore et al., 2018). Therefore, it is crucial to understand the industry culture and whether it promotes Inclusion, which ultimately empowers employees to participate in transformative projects that will impact the growth of their organisation. Thus, when employees are included, they are treated as insiders and have a sense of belonging, and their unique characteristics are valued (Shore et al., 2018).

Diesel and Scheepers (2019) argue that appreciating individuals enables them to thrive, thus contributing to their success and the organisation's success. Chen and Tang (2018) posit a relationship between perceived Inclusion and employee performance in their study. Employees' perception of their relationships with supervisors, peers, and organisational practices may make employees feel that the organisation cares for and supports them. Furthermore, perceived inclusion accentuates performance by encouraging organisational commitment, which affects their overall behaviour (Chen & Tang, 2018). Therefore, a supportive environment is essential to motivate employees to contribute positively towards change projects; this is created by understanding their need to belong, their uniqueness, and the environment in which they operate.

#### 2.7. The role of representation

Kotter's change model refers to creating a guiding coalition to support and facilitate the change (Kotter, 1995). This refers to a group that will act as catalysts in the change process. These individuals are responsible for ensuring that change is formulated and implemented across all levels of the organisation. Therefore, as denoted by Errida and Lotfi (2021), change agents must be equipped with all the knowledge, skills, and capabilities to impact the change positively.

When an individual is a representative, they are empowered to speak up, question the status quo and provide feedback to the people they represent. That individual must understand their role and identify what they know and do not know. Furthermore, change agents must be trained and coached to allow them an opportunity to clearly articulate what is working and what is not, thereby addressing any obstacles that may be a barrier to the proposed change

(Errida & Lotfi, 2021). These individuals must be highly motivated, and their feedback and challenges be addressed; as the success of the project depends on how well they actively engage the rest of the stakeholders in the change (Errida & Lotfi, 2021).

According to Koch (2000), unions are central to changing management practices in an organisation. They represent a collective of individuals contributing to gradual changes implemented within a specific social group, such as a workplace (Koch, 2000). It would be unreasonable to deny that unions are also a political avenue for driving political strategies; therefore, a conflict of interest in strategies is inevitable. Thus, where unions' political priorities and positions are not aligned with the organisation's strategy, the support for change processes in the organisation may be impacted (Koch, 2000). As perceived Inclusion is explored, the role of unions as change agents was explored. It is fundamental that there is a clear understanding of why representation is important for facilitating change through different mining practices.

According to Errida and Lotfi (2021), a stakeholder engagement strategy must be established to ensure that all relevant stakeholders are engaged using various methods. Communication and engagement should not be a once-off event. However, senior leadership, such as executives and managers, should be active and visible to give credibility to the change process (Errida & Lotfi, 2021). In addition, middle managers are the most crucial stakeholders contributing to change success and should be engaged appropriately. When leaders are reliable role models and initiators, employees can easily trust the process and be open to change (Appelbaum et al., 2017; Ellonen et al., 2008). It is, therefore, essential for the Leadership to identify who is crucial for change to occur and ensure that they are appropriately engaged and that Communication is effectively monitored on whether the strategy and the change process are understood. The commitments of the employees are fundamental in driving the change.

#### 2.8. Operationalising the change

To ensure that the change is engraved in the organisational culture, it must be formalised and documented for future reference. Appelbaum et al. (2017) posit that creating social norms ensures that a new behaviour or change is engraved into the operation's day-to-day running.

Failure to do so results in degradation and ultimate failure of the change project (Appelbaum et al., 2017). The nature of the mining industry has a culture of operationalising processes, as the lives of the people involved in the processes depend on those policies and standard operating procedures. This notion can be adopted for change management.

#### 2.9. Conclusion

This chapter indicated the significance of the study using different lenses of researchers in the field. It highlighted what is known and further indicated where the gap exists. Finally, it allowed the researcher to identify the need for further research by developing research questions discussed in chapter 3.

#### 3. Chapter 3: Research Questions

#### 3.1. Introduction

This chapter discusses the research questions addressing the study's objective. Findings from the literature review were used to form the research questions. This study explores the workforce's perceptions of their Inclusion in the workplace and how that impacts change in the mining industry. The research questions were further used to formulate an interview guide to engage the workforce to answer the research questions, as shown in Appendix 1. The interview guideline design and data collection approach are discussed in the following chapter.

#### 3.2. Main research question

## RQ: How does the workforce's perception of their Inclusion in the workplace impact change in the mining industry?

This question explores the workforce's perceptions of their Inclusion in the workplace and how this impacts change in the mining industry. By exploring how change is introduced and understanding the organisation's practices using the workforce's insights, this question provided an understanding of how mining organisations handle change. In addition, it created an opportunity to highlight practices that hinder and facilitate change, allowing change leaders and business leaders to proactively design solutions that add value through the effective execution of the planned change.

#### 3.3. Sub-research question one

#### RQ1: How is change introduced in the mining industry?

Sub-research question one aims to understand how change is introduced in the mining industry. This question provided insights into whether the workforce was included during the introduction phase of any organisational change. The results highlighted some of the challenges associated with the introduction of change. In addition, they provided contextual insights that enable change to be effective.

#### 3.4. Sub-research question two

#### RQ2: What inclusion practices facilitate and hinder change in the mining industry?

Sub-research question two was developed to understand further any inclusion practices that the workforce experience that may facilitate or hinder the execution of that change. The aim was to explore what worked from the perspective of the workforce. It created an opportunity for mining professionals to be aware of what works and what doesn't from the perspective of the people in the arena.

#### 3.5. Sub-research question three

## RQ3: What does the workforce perceive as best practices for workforce inclusion in facilitating change in the mining industry?

This question was designed to conclude the study with the viewpoints of what could work best as perceived by the implementors of change. It helped provide clarity to ensure that a human-centred design for change is implemented, thereby providing value for organisations to move from the current status quo to a future desired state.

#### 4. Chapter 4: Research Methodology

#### 4.1. Research design and purpose

As Abutabenjeh and Jaradat (2018) noted, deciding on the appropriate research design is probably the most critical step after identifying the research topic and the research questions applicable to the study. A research design refers to the plan of conducting the overall study to provide the relevant answers to the research problem; this is the framework of technique followed in undertaking the research (Asenahabi, 2019). This study adopted an exploratory research design. Within the context of this study, the purpose of the adopted research design was to explore the workforce's perceptions ns about Inclusion and the role of these perceptions in shaping change in the South African mining industry. An exploratory research design allowed the study to study the topic within the constraints of not well-established constructs or the absence thereof (Jain & Tiwari, 2020). In this context, the primary objective was to explore the benefits of workforce inclusion in accentuating change in the mining industry. Therefore, this study adopted an exploratory qualitative research design to study the impact of change when those affected by it are included in the process. The primary driver in adopting an exploratory design was in alignment with Swedberg's view that "all good science is the result of exploratory research" (2020, p. 17), arguing that if we devoid ourselves, the devotion to making discoveries of scientific research will come to a halt.

#### 4.2. The philosophical approach of the study

According to Fossey et al., a research paradigm denotes "a system of ideas, or world view, used by a community of researchers to generate knowledge" (2002, p. 718). Ontologically, it relates to the nature of reality (Alharahsheh & Pius, 2020). It also relates to knowledge creation, the researcher's values, reality construction, and obtaining knowledge relating to that reality (Ryan, 2018). This study adopted an interpretivist paradigm as it seeks to understand the subjective view of reality and the different perspectives of the workforce. The objective and reasoning underpinning the selection of this philosophical approach emanated from the notion that knowledge about reality is subject to human factors as it is a social construct (Walsham, 1995).

The critical philosophical underpinning of this paradigm is that human beings are not physical objects and, therefore, must be explored differently (Alharahsheh & Pius, 2020). It is a contextually appropriate way that considers the notion that different social realities emerge from various circumstances, cultures, and times (Alharahsheh & Pius, 2020). Furthermore, interpretivism views human intentions as a critical factor in behaviour (Packard, 2017). Interpretivism, therefore, became an essential tool in obtaining a deeper understanding of human experience (Mackenzie & Knipe, 2006). According to Pham (2018), reality is subjective, with multiple realities that cannot be measured. Therefore, the interpretivism philosophy enabled a deeper and richer understanding of the mining workforce as social actors in their natural environment.

#### 4.3. Research approach

A research approach refers to the data collection and analysis methods (Fleming & Zegwaard, 2018). The study adopted an inductive research approach to attain the research objective. The fundamental purpose of deploying an inductive approach was that, as a method of inquiry, it allows conclusions about the phenomena in question to arise out of the raw data from significant, frequent, and dominant themes (Thomas, 2006). The inductive approach offers one advantage in dealing with data from multiple sources and noise within the data(d'Amato et al., 2008). In addition, this approach provided a systematic qualitative data analysis process guided by the research objectives (Thomas, 2003). Finally, as Hollstein (2011) noted, an inductive research approach was helpful in scenarios where the informants' systems of relevance or individual meanings were expected to vary considerably from subject to subject. This approach helped capture these diverse views and create an informed intuition from the emerging themes.

#### 4.4. Methodological choices

There was often an ontological division between qualitative and quantitative research approaches. The researcher's belief influenced the selection of the "rightness" of the approach and research discipline (Wilson, 2016). This dichotomy of views often compels a researcher to select between the two methods based on the premise of their research

questions (Doyle et al., 2009). Qualitative research was the frame of reference for the research method (Fleming & Zegwaard, 2018).

#### 4.5. Strategy

This study takes a phenomenological approach in line with the said beliefs about the nature of reality and how knowledge is created within the interpretivist paradigm. The central argument in phenomenology was that the human aspect was essential to the setting and that fundamental truths about humans are subjective (Flood, 2010). As Flood (2010) explains, phenomenology is a research approach and a philosophical attitude. Phenomenology was considered an essential and critical aspect of interpretivism because it brought into perspective the previously marginalised aspect of the human experience phenomena in research by asking philosophical questions (Wojnar & Swanson, 2007). This study is aligned with Zahavi's phenomenological view that "there is no purely intellectual point of view and there is no view from nowhere, there is only an embodied point of view" (2018, p. 12). Therefore, capturing the views and holding the context within which a phenomenon occurs in high regard was crucial.

#### 4.6. Time horizon

The study took a cross-sectional view of the industry, given the time constraints and requirements of the faculty. However, when discussing change-related questions, a cross-sectional approach seemed relevant as the rate of change was time-bound. As indicated, a cross-sectional study discusses a snapshot at a time. Though longitudinal studies provide a view over a prolonged period to observe trends, a cross-sectional study nonetheless provides a valuable means of understanding the prevalence of certain behaviours at a point in time (Sedgwick, 2014). Therefore, the study was conducted within a five-month time frame after proposal submission.

#### 4.7. Proposed research methodology

This study adopted a qualitative research methodology. The methodology choice was determined by the research purpose and the nature of the research questions (Fleming &

Zegwaard, 2018). As a method of inquiry, qualitative research provides an idealistic and humanistic approach to research (Pathak et al., 2013). It concerns understanding the meaning and human experiences within a social contrast (Fossey et al., 2002). In qualitative research, the experience of the people matters. The method aims to understand phenomena using the lens of the user experience, as this gives a deeper insight into the understanding of the matter (Castleberry & Nolen, 2018). People's meanings of actions, events, and relationships are explored deeply in qualitative research (Castleberry & Nolen, 2018).

The study took an instrumental case study methodology using the qualitative research method. This was because an instrumental case study method provided insight into the research issue in which the organisational case is representative of other cases in the industry (Lucas et al., 2018). The use of a case study methodology allowed for a flexible approach while allowing the author an opportunity for in-depth scrutiny and understanding of the case(Fleming & Zegwaard, 2018; Lucas et al., 2018)Baxter & Jack, 2008; Miles, 2015; Pearson et al., 2015 cited in Lucas et al., (2018)). It assists in expediting investigations of phenomena using different data sources within their context; to enable a holistic view from different angles and to reveal and provide an understanding of the phenomenon (Hafiz et al., 2008). Although many scholars alluded to case study methodology as being too specific, lacking theory contribution, and being non-generalisable (Fleming & Zegwaard, 2018), it was evident that this methodology provided the necessary depth of information on the subject and gave an insightful interpretation. This approach aligned with the research questions and the general objectives of the study. For this reason, the study was bounded by industry and levels of work with precise analytical techniques to prevent explosion and ensure robustness. Therefore, the study was conducted in the mining industry context and covered the general workforce's work levels, the supervisor, and the middle manager.

## 4.8. Population

Population is "the complete set of group members" (Saunders & Lewis, 2018, p. 138). The target population for this study was the mining employees within a mining organisation in South Africa. This study represented the mining industry; however, due to time constraints, data was only collected in one mine within the organisation. Even though the study context

was in one mine, the issues addressed apply to different mining organisations, therefore construing the study as representative of other mining operations. The study focused on the relationship between employees and their leaders. Furthermore, a pilot interview at another mine within the organisation revealed similar findings, verifying the study's transferability at the industry level. There was, therefore, no perceived value in conducting the study within multiple mining companies as the data wasn't specific to a mine but was about people and their relationships with their employers.

Purposive non-probability sampling was used to precisely choose relevant employees involved in the change who were best suited to answer the research questions appropriately. The sampling covered only individuals below the senior mining manager level per the organisational structure indicated in Figure 1 below. The organisational structure is important as it affects decision-making in change. For this study, orange (group1) illustrates the general workforce, green is the supervisors (group 2), and grey is the middle management (group 3). The general workforce are defined as the change recipients, as they mostly receive and impelement the change. The supervisors are the change recipients and communicators of the change. They are the link between the general workforce and the middle management. Finally, the middle managers are responsible for change formulation and implementation. They are the group of people that are mostly stuck in between top management and the general workforce. As indicated in Figure 1, the organisational structure in the mining industry is hierachical in nature and this may impact the flow of information from the general manager all the way down to the operator who will have to implement the change.

**General Manager Engineering Technical Services** Senior BI **Principal Mining** Senior Mining Manager Manager Engineer Manager Manager Business **Planning** Senior Mining Section Engineer Improvement Manager Manager Engineer Manager General Mine Planning **Business** Mining Engineer Engineering Engineer Overseer Improvement Foreman specialist Junior Junior Mining Shiftboss Shiftboss Change planner Engineer Foreman Co-ordinator Junior Mining Junior Miner Miner Change Engineer planner Artisan Co-ordinator Operator Operator Mechanic Electricican

Figure 1: A typical mining hierarchical organisational structure

# 4.9. Unit of analysis

The unit of analysis seeks to identify what was analysed in the study. The question of analysis and unit of observation is crucial as it has implications on what or to whom the results conclude (Sedgwick, 2014). The unit of observation and analysis within the context of this study was the individual. This study saw the employees as agents of decision-making regarding their Inclusion in change. It, therefore, seeks to understand their behaviours and contribution to the process.

## 4.10. Sampling method and size

While quantitative research sampling techniques seek to minimise research bias and maximise generalisability, qualitative sampling techniques, on the other hand, aim to create a "mirror-like" image of the phenomenon under investigation (Koerber & McMichael, 2008). As Hollstein, (2011) noted, sampling in qualitative research relies on the researcher's objectives and what they need to know. Furthermore, sampling implies deciding on whom or

what to include for contribution to the data that will inform the results and conclusion of the research, making it important to apply sound judgment to the selection process (Etikan et al., 2016). For these reasons, this study purposively sampled the participants that acted as informants for the study. This was seen as an appropriate technique because purposive sampling is a non-random sampling technique that involves the researcher determining knowledge to be obtained without a need for a priori theory or a present number of informants (Etikan et al., 2016).

Table 1 indicates the sampling decision criteria used. The idea here was to capture the critically diverse perspectives that arose out of the views and perspectives of the participants. It was not to capture variation but to create a holistic view that captures the essence of the prevailing views about Inclusion in change processes within the industry. Therefore, the level of change assessed addressed persons most likely impacted by change rather than the Leadership that imposes the change.

Table 1: Participants' sampling size and rationale

	Participants: Employees in a mining organisation			
Category		Target number of participants	Role Description	
Group 1	General Workforce	10	These are the change recipients.	
Group 2	Supervisors	4	Supervisors are involved in the Communication and implementation of the change.	
Group 3	Middle managers	2	Middle managers are change recipients who are also responsible for formulating the change process. They are a critical link between senior management and the rest of the workforce.	

#### 4.11. Measurement instrument

Qualitative research tools seek to capture the diversity of experiences within contexts (Yilmaz, 2013). For this reason, the study used an interview guide tool to collect the data during the

interviews. Kallio et al. (2016) noted that the quality of the interview guide has a fundamental influence on the results and conclusions of the study. He further suggested some valuable guidelines for developing an interview guide that was followed in this study. Step 1: Determine whether semi-structured interviews are appropriate for the research. In this study, semistructured interviews were appropriate because, in my experience of the culture, mining people are most relaxed and willing to give more insights in less rigid and informal settings. The idea here was to determine whether semi-structured interviews would provide the needed rigour or not. Step 2: Retrieval and use of prior knowledge. This step aimed to gain sound knowledge about the subject under study that would generate a framework for the interview. Step 3: Formulation of the interview guide. The objective was to seek coherence and allow the questions to be participant oriented. The questions had two levels to attain a rich understanding. They consisted of the main question followed by a possible probing follow-up question to attain a level of deeper conversation. Step 4: Pilot testing the interview guide. This step was necessary to test the interview question's relevancy and coverage. It provided an opportunity to change, improve the quality, remove inappropriate leading questions, and amend the interview guide to fit the study's intended purpose. The purpose of an interview guide was not to restrict but to offer flexibility (Turner III, 2010).

In addition, as a research instrument, the author played a critical role in the study. Since the study was conducted within the author's industry and organisation, it offered the advantage of being an insider with deep mastery and interpretation of the organisational setting (Fleming & Zegwaard, 2018). The organisational issues may not be easily identified by an outsider looking in, necessitating-depth exploration (Lucas et al., 2018). On the other hand, it may pose challenges related to personal bias, coercive behaviour during interviews, patterns, regularities being taken for granted, and conflict avoidance during data collection. Upon recognising some of the key challenges of being an insider in the pilot interview, a few amendments were made to the approach. According to Watt (2007), reflexivity is fundamental in assisting the researcher as the primary instrument for data collection and analysis. Reflexivity refers to the researcher's ability to reflect on their own actions, assumptions, and behaviours that positively and negatively contribute to the ultimate research direction (Watt, 2007). A research journal with notes was kept throughout the data collection period to highlight some of the emerging concepts that were unexpected and new insights from the

participants. Ultimately this journal helped with the data collection period from the pilot study to the ultimate final interview. It revealed different stages of the research journey. Watt (2007) emphasises that keeping a research journal helps the researcher join theory to practice. When other academic obligations disrupted data collection, the research took a slump, making it hard to regain momentum. It became evident that continuous journaling during the research journey is necessary to keep one's focus on the topic and actively engage in it.

#### 4.12. Data gathering process

The primary approach to gathering data for this study was semi-structured interviews. The selection of this mode of data collection was primarily motivated by the understanding that interviews allow the subjects a degree of freedom to express their views in alignment with their system of relevance (Hollstein, 2011). In addition, although qualitative research is perceived as generally having low generalisable results over populations, the primary objective was to reach conceptual generalisation to other settings (Kitto et al., 2008). According to Whiting (2008), for the researcher to get richer insights, they need to practice interviewing techniques to develop and enhance their skills for conducting interviews. To achieve this, the researcher took practice sessions on conducting face-to-face and virtual interviews as warm-up sessions before the study interviews. This was instrumental in sharpening the lines of inquiry and guiding the research process to ensure that all the research questions were fully answered without making the participants feel constrained to express themselves.

#### 4.13. The data gathering approach

According to the media richness theory, based on the communication cues that are carried, the different modes of Communication differ in their level of richness (Wolff & Burrows, 2021). The data collection process mainly took place virtually on a recorded video call. However, some of the interviews were done in person and recorded. The one thing worth noting is that the participants who conducted the interviews seemed more relaxed and willing to express themselves easily. They appeared more comfortable and took ownership of their space during the interview. Though some participants initially started the interview process a little

conservative in expressing themselves, as the interview progressed, they became more expressional.

The data collection was conducted until saturation was reached. According to Guest et al. (2006), qualitative phenomenological studies reach saturation when the 12<sup>th</sup> interview is conducted. This is a point where no new themes emerge in the interviews (Guest et al., 2006). In contrast, Braun & Clarke (2021a) argues that whether saturation has been reached or not, requires precaution and reflection on the research process. The researcher must place an effort into describing what they did and then do it. It is not a measure of the sample size but a factor of richness (quality) and thickness (quantity) of data, and therefore the researcher must aim for both (Braun & Clarke, 2021a). Fusch & Ness, (2015) Subscribes to the same argument indicating that what's important is choosing a sample size that gives the researcher an opportunity to reach saturation due to the depth of insights. In this study, the sample size chosen gave an opportunity, to reach saturation.

# 4.14. Preparing for and dealing with challenges

As Jones and Abdelfattah (2020) highlighted, technical issues associated with using technology can be challenging, making it important to prepare, set up, and test the equipment timely to sort out any emerging issues and provide adequate room for arranging alternatives. In this study, the pre-testing of the research instrument stage allowed the platform to be well tested and understood, with a secondary recording alternative platform also tested. The other advantage was that a platform well understood by most participants was selected for use. Therefore, going into the interviews, there were minimal challenges experienced. Immediately after each interview, the recordings were downloaded and stored securely in a password-protected folder on the cloud. This was an important step in ensuring the protection of personal information. To ensure minimum interruptions during the interview, the load-shedding schedule was evaluated on both the participant's and researcher's side. This ensured minimal disruptions associated with power and connectivity during the interview.

## 4.15. Revisiting the conversation

The one approach instrumental in enriching the gathered data was revisiting the conversation. This entailed the following: 1) After each interview, one would promptly transcribe the recorded interview no later than a day or two. This allowed for ease of the transcription process and made it relatively easy to note some critical non-verbal cues identified during the interview while they were still fresh in memory. It also made it easy to immerse in the conversation within context fully. 2) The second step involved revisiting the participants or calling them on Microsoft Teams to thank them for participating in the study. In this process, one would highlight some of the critical parts of the conversation that I found interesting or needed clarity on. This resulted in interesting insights and provided enriched clarity on the initial conversation. 3) The final part of the process entailed going back to the transcription and adding more notes to the initial conversation. This entire process of revisiting the conversation was an effective and enlightening engagement because as the number of interviewed participants increased, the follow-up conversations would sometimes be even more affluent than the initial interview itself. Seidman (1998, cited in Watt, 2007) recommends spreading interviews from about three days to a week to allow the researcher to reflect. However, that was not possible due to time constraints and participants' availability.

#### 4.16. Ethical considerations

Since human participants were a fundamental unit of analysis for data collection, ethical clearance was necessary. Ethical considerations ensured the elimination of certain predicaments, such as power dynamics and relationships with participants (Fleming & Zegwaard, 2018), given that the study was conducted within the organisation and with some participants at a lower level than the researcher. As per university guidelines, the ethical clearance process was followed before data collection. Firstly, permission to collect data from the organisation was obtained, and all interview participants signed an informed consent letter (see Appendix 2) before the interview. The informed consent was essential to put the participant at ease by fully informing them of the researchers' information, the research intent, what they will be asked, and how the data collected will be handled and used (Fleming & Zegwaard, 2018). Furthermore, the informed consent letter aimed to explain their rights to

participate and their freedom to withdraw from the study at any stage when feeling uncomfortable with the process. To ensure confidentiality, the collected data had no identifiers for the organisation or persons interviewed. This protected the privacy of the employees as well as any organisational data collected. Lastly, interviews were virtual and in-person; all data will be stored on a cloud drive safely for ten years and have no access restrictions.

#### 4.17. Participant issues

I was worried about certain people's participation and how they would interpret the research purpose; this trepidation emanated not only from being a novice researcher, but also from fear of making expectations that things would be sorted soon without having the power to do so. As Watt (2007) noted, "Conducting research, which looks so intensely at the personal lives of others, is not for the faint of heart" (p. 87). Knowing that employees are unhappy with the status quo was an opportunity for deep insights on the subject but equally intimidating.

Many employees wanted to be part of the research; it was like an opportunity to speak to someone who would finally listen. On the other hand, some of the people I expected to participate refused without any genuine reason. As a novice researcher, this was an accurate indication of the impacts of bias on participant selection. Furthermore, this indicated how biases might lead one to think rich data collection comes from specific places. In contrast, rich data is embedded in other areas, which unfold during the research process.

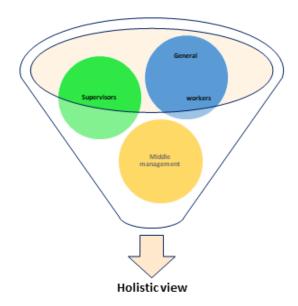
## 4.18. Analysis approach

One of the data analysis techniques used in this study, useful in qualitative research, was thematic data analysis, which involved participants' views, descriptions, and interpretations (Smith & Firth, 2011). Thematic analysis is used to structure an unstructured document by developing categories and themes (Braun & Clarke, 2021b). After the interviews and transcription were conducted, the researcher was now more familiar with the data and coding was then conducted to establish the themes. This process will be elaborated further in chapter 5.

#### 4.19. Quality control

To ensure the quality of the perspectives that contributed to the results and conclusion, the study interviewed a diverse set of employees to mitigate against data source bias. One method of ensuring quality in qualitative research in this study was the triangulation of data sources. The idea was to capture the research questions under inquiry from a holistic view. This was done by capturing views from the general workforce, supervisors, and middle management (see Figure 1: *A typical mining hierarchical organisational structure*Figure 1). The second triangulation entailed using interviews, observations, and analysis of publicly available documentation as data sources, as indicated graphically in Figure 2, in order to holistically analyse the data. The primary objective here was to create a holistic view of the phenomenon that was captured exhaustively in a manner that minimises biases.

Figure 2: Triangulation approach



One other technique that was deployed in the study to ensure the attainment of quality was using reflexivity. Reflexivity was centred around acknowledging the understanding that the subjects, the phenomenon under study, and the researcher influence the study's results (Kitto et al., 2008). This reflection was useful in accessing methodological judgments that could be used as learning for further engagements (Hammersley, 2007). Furthermore, the interviews were recorded for later analysis to ensure that the participants' views were captured correctly.

with prior written and informed consent. This allowed review by others in case of contention and interest.

Seale (1999) noted that quality is of utmost importance in qualitative research. The quality of qualitative research improves when the researcher immerses themselves in methodological and philosophical arguments (Seale, 1999). This ensures they develop methodological and philosophical awareness that translates to use in practice when carrying out the research (Seale, 1999). In carrying out this study, the research aligned with the philosophical argument that reality is socially created, which is illogical to separate the researcher's perspectives and belief system from the research. This acknowledgement also allowed the researcher to identify their own biases and actively guard against them overbearing the study. This creates a critical aspect of self-criticism that generates appeal in the research (Seale, 1999). Therefore, an iterative process of reflexivity through journaling and immersion in the data makes the researcher cognisant of their relationship with the research, providing richness and depth to the body of knowledge.

#### 4.20. Conclusion

In conclusion, a qualitative research methodology gave the researcher more insight into the workforce's perception of their inclusion. In addition, it allowed richness and depth into the data collection process. Having a plan on how the study will be conducted gave the researcher an opportunity to prepare and conduct the research and ultimately draft the research report.

## 5. Chapter 5: Findings/Results

#### 5.1. Introduction

This chapter will present the results of the empirical research conducted to answer the question: How does the workforce's perception of their inclusion in the workplace impact change in the mining industry? Given the high failure rate of change projects, it is important to understand how workforce inclusion plays a role in facilitating change from the perspective of those implementing the change.

In presenting these results, the researcher will first indicate the suitability of the sample by presenting the participants' demographic details. This brings credibility to the study by indicating that the sample was representative of the population. Furthermore, the chapter presents the themes that emerged from the research questions, as indicated in chapter 3. An interview guide was developed to guide participants' questioning to allow the researcher to answer the research questions. It was used as a measurement of data collection instrument for the research to convert the research questions into interview questions as outlined in Appendix 1.

## 5.2. The sample description

A total of 13 participants in a mining organisation in South Africa took part in the study. The demographic description of these participants is tabulated in Table 2 below. The level of seniority of the participants was a key consideration for the study; therefore, only people that reported below the level of a senior mining manager were interviewed. Both female and male participants participated in the study, with most participants being male (11) and females as the minority (2). Both females were part of the general workforce.

**Table 2:** *Interview participants' summary* 

	Participants: Employees in a mining organization				
( ategory		Number of participants	Role Description		
Group 1	General Workforce	6	These are the change recipients.		
Group 2	Supervisors	4	Supervisors are involved in the communication and implementation of the change.		
Group 3	Middle managers	3	Middle managers are change recipients who are also responsible for formulating the change process. They are a critical link between senior management and the rest of the workforce.		

To further understand the participants' role in the organization and the credibility of the information provided during the interview, the participants were asked background questions relevant to their role in change, age, and years of experience in the mining industry.

## 5.3. Coding

Interviews formed a critical process of collecting data which was transposed into information that will be presented in this chapter. It was important for the researcher to conduct enough interviews to ensure the study's credibility and content validity. Coding commenced in this deep process of immersion and understanding of the data. The analysis approach started with developing codes. A code is defined as "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldaña, 2021, p. 3). Coding was used to interpret the data collected from the interviews easily. It was done using Atlas.ti, a qualitative data analysis software. Atlas.ti removed the complexity of using spreadsheets during analysis. Upon transcription of the interviews, the documents were loaded into the software to allow for analysis. Coding aims to remove the lengthy texts in the transcripts to more concise themes that enable easy data interpretation (Saldaña, 2021; Skjott Linneberg & Korsgaard, 2019). A summary of the developed codes in indicated in appendix 3.

As a novice researcher, data analysis was exciting yet exasperating due to the time limitation of the research project. Indeed, we learn more by engaging in the act of doing the actual activity at hand; the more the researcher immersed herself in the data, the more it made sense. As denoted by Skjott Linneberg & and Korsgaard (2019), interview transcripts are mere documents; the researcher drives the findings and the results. Braun & and Clarke (2021) regard coding as subjective and therefore requiring analysis and interpretation of the data. In contrast, given the research timeframe and other requirements within the researcher's academic calendar, keeping track of the data collected was challenging. At a certain stage, the researcher embarked on a global module for a week which created a gap in the data analysis. However, the use of coding and analysis software made data easily accessible and retrievable (Saldaña, 2021; Skjott Linneberg & Korsgaard, 2019). Furthermore, it sorted the data and provided structureto it (Saldaña, 2021; Skjott Linneberg & Korsgaard, 2019). The software gave the researcher a different perspective on the data, as they could easily index and validate the data during the process.

When the researcher started coding, it was a cumbersome process where everything interesting ended up being coded. However, an inductive qualitative study was conducted, given the complexity of the data. An inductive approach was appropriate since the researcher was exploring employees' experiences and had no theoretical concepts at hand. However, the researcher was cognisant of the available literature on the subject and incorporated that into the coding. Furthermore, any new frequently emerging themes were noted for analysis. After coding, the researcher left the data for a few days before analysing it in depth. This allowed them to reflect on the data and have a different perspective when reviewing and grouping the codes into the second level of coding by merging similar codes into categories (Skjott Linneberg & Korsgaard, 2019). Categories were then used to develop reviewed, refined themes and used for writing the analysis section (Braun & Clarke, 2021b). At this stage, the researcher was cognisant of the available literature related to the study and used it as a guide toward developing themes that enriched the study.

The analysis process is an iterative process of ensuring that data is reliable, has credibility, and avoids the subjectivity bias of the researcher (Braun & Clarke, 2021b). To maintain the quality and transparency of the data collected, the researcher kept a journal throughout the

study period, which helped with reflections on any assumptions that may be limiting factors in the study, a process known as reflexivity. Notes were then combined from the journal with what was emerging from the coding process to identify new patterns and evolving concepts. The ability to be transparent in how the story behind the data unfolds provided a structure that gave depth to the study (Skjott Linneberg & Korsgaard, 2019).

Furthermore, information redundancy was tested during interview data analysis to ensure that no new themes emerged; this process is called saturation (Braun & Clarke, 2021a). It was crucial to ensure enough relevant data was collected as this may impact the quality of the research outputs (Fusch & Ness, 2015). The saturation graph (Figure 3) below indicates the number of new codes for each interview until saturation.

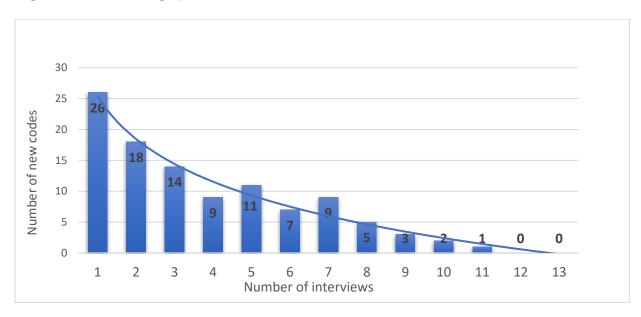


Figure 3: Saturation graph

When saturation was reached, the researcher stopped the interview process as no new themes were emerging.

#### 5.4. Presentation of results

Since coding was conducted as elaborated in the section above, the data was now more structured to be presented visually. The coding process gave structure to an unstructured document. The categories were grouped into fifteen (15) themes to answer the research questions, as shown in chapter 3. The study used tables and network diagrams to illustrate

relationships between different variables. Furthermore, absolute frequencies were used to check the frequency of the themes from each individual theme that emerged. Doing this provided depth and richness to the themes that were analysed. It further indicated the groundedness of the data, as indicated in appendix 3.

## 5.5. Results for sub-research question 1

## RQ1: How is change introduced in the mining industry?

The question was aimed at understanding how changes happen in the mining industry. The research question was subdivided into interview questions meant to understand firstly what changes were happening within the organization, how people were convinced that the changes were necessary, and how a business case is ultimately justified. The interview questions went further to enquire about the role of representation during change and if the workforce sees any value in it (see interview questions in Appendix 1). In addition, it enquired about the involvement of employees at the initial stages of the change process. The different groups provided interesting insights divided into themes, as shown in Table 3 below.

**Table 3:** Summary of themes\_ RQ1

Themes	Totals (Absolute frequencies)	Group 1_ General Workforce	Group 2_ Supervisors	Group 3_ Middle management
The strategic intent behind the proposed change	111	35	52	24
Representation	78	37	19	22
Understanding the environment of business	48	20	22	6
Resistance to change	43	11	22	10
Business case and justification	39	15	19	5
Totals	319	118	134	67

# 5.5.1.1. The strategic intent behind the change

Participants showed interest in understanding the strategic intent of the proposed change. According to the participants, It was not merely about implementing the change but understanding why change happens in the business environment. For example, participant 3 and participant 1 in Table 4 highlighted the importance of identifying what changes need to happen.

**Table 4:** Summary of codes\_ Strategic intent (1)

Groups	Participant	Quotation Content	
Group 1	P3	"It is a bit of a mystery; you will find that the guys who should be involved in the change are not even aware of what needs to be done."	
Group 2	P1	"if people were included early enough, what seems to be a problem can be quickly resolved".	

Furthermore, participant 3 indicated that understanding what will work for the organisation helps ensure the solution is applied and tailor-made for the business environment. This is shown with participant 3 in Table 5.

**Table 5:** Summary of codes\_ Strategic intent (2)

Groups	Participant	Quotation Content
Group 1	P3	"The challenge is even when change is planned; it is not communicated until execution time."

According to the participants, clarity on the vision, understanding of what success will look like, how it will be measured and if the change is worthwhile in the first place is essential for change success. A high proportion of this need comes from the supervisors and the general workforce, and a low number from middle management. In addition, the participants' evidence codes in Table 6 indicate a need for involvement and communication to be more effective.

**Table 6:** Summary of codes\_ Strategic intent (3)

Groups	Participant	Quotation Content	
Group 1	P3	"Sometimes you hear about the planned change from the corridors."	
	P9	"No, we are not included. They just inform us."	
Group 2	P5	"You will have resistance if you do not involve them, and they somehow hear about it."	

# 5.5.1.2. Representation

Representation is valued more by the general workforce than by the other groups. However, participants were not clear about the role of the unions in change. Their role seemed to be attributed to other employee challenges and not necessarily supporting business performance. Furthermore, a call to action towards the leadership in organisations in ensuring that the union is capacitated to handle the information they are expected to share. This was illustrated in by participants in Table 7.

**Table 7:** Summary of codes \_ Representation (1)

Groups	Participant	Quotation Content
Group 1	P9	"The unions understand the human resource challenges but are not equipped to address business performance challenges."
	P6	"the workforce does not have much to say; they must just accept that there is a change."
	P3	"The union is a bargaining power, and their strength is in numbers."
Group 3	P10	"We, as the leadership team, must also acknowledge that knowledge is understood differently. We must view the union as representatives of knowledge sharing but not necessarily as representatives of understanding. This means that although we use them as gatekeepers to go and to discuss with their members, we still have to carry the responsibility of making sure that our leadership team, in their different levels and supervision levels, can still carry the message to the different sections in their own capacity"

In contrast, representation by the union as change leaders came out strongly from some of the participants, as this impacted their resistance to the proposed change. Middle managers value representation more than supervisors. There seems to be confusion and distrust on precisely who the union represents; the employees or themselves or whether they are fit to be change representatives. This came out strongly from the following participant quotations in Table 8.

**Table 8:** Summary of codes\_ Representation (2)

Group	Participant	Quotation Content
Group 3	P10	"if you are a union leader, you need to be interested in delivering value on both sides."
	P12	"Unions are your change champions that influence employees in your absence. So how you use them matters and impacts the result."
	P7	"They serve people within the mine and represent a certain group of people or levels within the working organization. Obviously, that role will need to be involved in change."

In addition, the capability of the people leading change is crucial in ensuring that change happens. Participants 9, 4, and 5 highlighted the need for people to understand the strategic intent of the proposed change in Table 9 below.

**Table 9:** Summary of codes\_Representation (3)

Group	Participant	Quotation Content
Group 1	P9	"People must understand how important it is to run this mine to be successful until production that we want."
	P4	"The union need to be trained to have a bigger picture. Furthermore, to be well vested in what is expected from the employees."
	P13	"The more you are equipped and empowered, and the more you have information, the more you will be able to you know, adapt and be resilient enough to implement"

# 5.5.1.3. Understanding the environment of business

The operational context of the mining industry should be considered when dealing with the change. According to the general workforce and supervisors, there is a need to understand the environment where change happens. The following participant evidence in Table 10 indicates the mining industry as an environment highly regulated through the mine health and safety act. All work has to abide by the regulation, and safety is prioritised.

**Table 10:** Summary of codes\_ Understanding the environment of business (1)

Group	Participant	Quotation Content
Group 1	P9	"Safety is a priority; all employees must understand the risks involved with the operation of a mine."
	P3	"When managers are visible and driving the change, employees start viewing the change as important."
	P1	"I think the complexity is created by the fact that the mine is not at steady state production."

Furthermore, productivity is important for the benefit of all the stakeholders in the value chain, and sometimes employees attribute some changes to the nature of work.

**Table 11:** Summary of codes\_ Understanding the environment of business (2)

Group	Participant	Quotation Content
Group 1	P3	"Mining is very high-paced. So, some of these things may be seen as time-consuming."
	P2	"Changes happen quite often, mostly because mining is dynamic."
Group 2	P1	"Many things are changing in the organisation; it feels like we are not in control".

In addition, understanding whether the organization has the capability and agility to handle the change is crucial to its effective delivery. This allows the organization to invest in resources that enable efficiency and productivity.

**Table 12:** Summary of codes\_ Understanding the environment of business (3)

Group	Participant	Quotation Content
Group 3	P10	"I like the organisation's boldness in doing what the rest of the industry just aspires to do."
Group 1	P13	"And for me, it is about being agile. It is not as straightforward as implementing a system."

However, employees still see this as a compliance factor that ensures safety rather than creating sustainable value. Participant 9 showed evidence in Table 13.

**Table 13:** Summary of codes\_Understanding environment of business (4)

Group	Participant	Quotation Content
Group 1	P9	"We might not be included, but the organisation makes sure we get the most technologically advanced equipment. It ensures our operators are trained and upskilled"

Therefore, participants posit that understanding what value the change will add in the context of the environment is being applied is important to how change happens.

## 5.5.1.4. Business case justification

On this theme, it is crucial to operationalise the strategy in that whatever the proposed change needs to be verified for practicality in the context of that environment.

**Table 14:** Summary of codes\_ Business case justification

Group	Participant	Quotation Content	
Group 2	P5	"We would organize a visit to go and verify if the work is done as planned before handing the workplace over to the contractor."	

## 5.5.1.5. Resistance to changes

Participants attributed resistance to change to different factors such as not understanding the objective of the change, the union not aligning with management, communities in which the mine operates, and anxiety from the uncertainty brought by change. The following participants in Table 15 highlighted that change comes with uncertainty and may be uncomfortable for different employees. In this section, the personal impacts of change is highlighted. That ultimately, the change affects the employee's well-being.

Table 15: Summary of codes\_ Resistance to change (1)

Groups	Participants	Quotation Content
	P13	"It is tough for people to change, whether in your personal or professional life."
	P13	"A lot of the guys have come across as being resistant to the change, but it is because of the uncertainty that comes with it. Imagine if one has built their career around something that is changing completely. It is a lot to take in a short period."
Group 1	P1	"difference in interest and understanding of the ultimate objective to be delivered."
		"There were rumours that the mine was going to be fully automated, and only 50 people would be required as employees. This created panic and negativity as people did not have the skills"
		"So, I do not think they could guarantee the future for the employees."

Similarly, multiple changes contribute to resistance to change, as highlighted by employees in Table 16. **Error! Reference source not found.** Employees emphasize the need for a standardised process that addresses how change must happen.

**Table 16:** Summary of codes\_ Resistance to change (2)

Group	Participant	Quotation Content
	P2	"There is quite a lot of change that happens here."
	P9	"As our mine is still new, there are a lot of changes."
Group 1_	P6	"The type of changes are a lot."
General workforce	P13	"There have been so many leadership changes. I think there have probably been three or four different General Managers."
Group 2_ Supervisors	P1	"Many things are changing in the organisation; it feels like we are not in control."
	P1	"We have multiple solutions that try to solve multiple problems, but those problems are not talking to one another. We, therefore, end up creating more and more problems by introducing more and more solutions."
	P1	"So there's a lot of things that are happening, which are not standardized, there are just so many changes that are happening, that there's a need for a process of managing those changes. That process will make all these projects and sub-projects that are happening to talk one another, or at least to be intertwined to make all these deliverables reached on time and then also support the bigger picture of the project, which is to deliver the project on that set date."

#### **5.5.1.6.** Conclusion RQ1

In conclusion, the employees see understanding the strategic intent for the proposed change as the most significant contributor towards how change happens in the mining industry. Furthermore, even though representation matters across all groups, it matters more to the general workforce. In contrast, middle management does not consider resistance to change and the need for the business case justification as a significant contributor to how change happens. The findings from this study show that, as compared to supervisors and the general workforce, there is a lack of concern from middle management on how change happens, the evidence from the participants indicates much uncertainty about their roles and the future of the organization.

# 5.6. Results for sub-research question 2

# RQ2: What inclusion practices facilitate and hinder change in the mining industry?

This question aims to understand the inclusion practice in the organization that would hinder or facilitate change in the mining industry. What are the employees and their leaders doing which facilitates or hinders change? The themes from participants' answers are summarised in Table 17.

Table 17: Summary of themes\_ RQ2

Themes	Totals (Absolute frequencies)	Group 1_ General Workforce	Group 2_ Supervisors	Group 3_ Middle management
Leadership	76	29	33	14
Communication	56	24	17	15
Collaboration	48	16	15	17
Organizational culture	31	21	9	1
Trust	15	8	6	1
Totals	226	98	80	48

# 5.6.1.1. Leadership

Leadership is critical in creating the vision that will direct the change effort. Leaders are the gatekeepers of trust; when employees do not have the relevant support, they lose trust in management and resist the change. Participant 1 expressed the need for leadership support in the change in Table 18.

**Table 18:** Summary of codes\_ Leadership (1)

Group	Participant	Quotation Content	
Group 2	P1	"I feel there is not much value that we can add past the point the level where we are, mainly because we are not getting the right support."	

Participant 6 highlighted the importance of managers as change agents and how that can positively impact the change in Table 19.

Table 19: Summary of codes\_ Leadership (2)

Group	Participant	Quotation Content
Group 1	P6	"Once management buys into the change, it's easier for the workforce to follow suit. They look up to their bosses, and they listen to their managers. Therefore, it becomes easier if the managers are the drivers of change."

Employees allude to the concept of being in charge but not leading. However, leadership is associated with authority by participant 1 in *Table 20*.

**Table 20:** Summary of codes\_ Leadership (3)

Group	Participant	Quotation Content
Group 2	P1	"So, currently, the most senior person is in charge of the changes that are happening but not leading the changes. Only what is a priority to the manager gets taken into account."
		"There are too many people at authority levels. As a result, decision-making becomes a challenge."

#### 5.6.1.2. Communication

Communication was explored by type of communication and the communication medium, which allowed an understanding of what was effective. For example, participant 5 in Table 21 below argues that communication does not reach the employees at the lower level of the organisational structure. However, as noted in Figure 1, the hierarchical structure makes communication challenging due to the different levels of information transfer.

**Table 21:** Summary of codes\_ Communication (1)

Group	Participant	Quotation Content
Group 2	P 5	"I think there is this perception that information is shared only at the manager level. It is not supposed to go to an artisan level. I think that is sometimes difficult. For example, suppose we have created information that's only for managers. In that case, it is difficult not to disseminate which one should go to the lower level and which one should not."

Communication is one way and not a way to engage employees but to push down information, as alluded to by participants in *Table 22*.

 Table 22: Summary of codes\_Communication (2)

Group	Participant	Quotation Content
Group 1	P6	"Change is forced into people, and they just inform them that this is happening."
Group 3	P10	I think the thing about change and how one perceives change is that it's subjective. As an organization, we tend to mass communicate the change, to say, these are the proposed changes that are going to take place within the organization."
		"The disadvantage is that the communication is not verbal by the direct supervisor, manager or leadership. So often, it is subject to interpretation because you read it off a particular plan."

The communication medium varies but is mainly done through emails, as indicated in Table 23 below. In such a diverse organisation, this could be a concern.

Table 23: Summary of codes\_Communication (3)

Group	Participant	Quotation Content
Group 2	P 8	"We communicate everything that we do through emails"

#### 5.6.1.3. Collaboration

Employees were willing to collaborate towards a common goal as shown in Table 24.

Table 24: Summary of codes\_ Collaboration

Group	Participant	Quotation Content
Group 3	P12	"I make room for the fact that I do not know everything. So if we collaborate, we have the best chance of everyone experiencing something. So we can get things right better if we listen to everyone."

# 5.6.1.4. Organisational culture

There is a need to evaluate the organisational structure as it impacts the change process, as indicated by the following participants' evidence in Table 25.

**Table 25:** Summary of codes\_ Organisational structure

Group	Participant	Quotation Content	
Group 2	P1	"I am reporting to 4 bosses, and they have four different interests."	
Group 1	P4	"We have two organisational structures in the same organisation."	

#### 5.6.1.5. Trust

Trust was indicated as the catalyst for whether employees bought into the change or not. According to the participants, trust impacts their empowerment towards participation in change initiatives. Their views are shown in Table 26.

**Table 26:** Summary of codes\_Trust

Group	Participant	Quotation Content			
	P 1	"The only time I feel free to speak up is if that concern really affects my area of work directly, but not with trust that it will be considered, but at least with the hope that it will be mentioned that at least it's pure out there but with much faith that by voicing it out, it will be heard and considered."			
Group 2	P 8	"It depends on who is in the room. Again, it is a matter of managing characters. So, certain characters get easily offended, or certain characters give you the sense that they don't trust you or resist accepting your input. So yes, I would not say those characters must be removed for me to feel completely free to participate. But yes, the characters I'm talking about are people who are defensive, people who hold that information, and they don't give you the full view because they don't trust where you're going to take that information".			

#### **5.6.1.6.** Conclusion RQ2

The participants express their views as discussed in the above themes, which indicates evidence of practices that hinder change. Inclusion practices that hinder change were indicated in all the themes, namely leadership, communication, organisational structure and

trust. Furthermore, the sentiment from the evidence in responses indicates a negative experience with inclusion practices in the workplace. Furthermore, what stands out from the general workforce and the supervisors is the appetite for leadership to lead the change effectively. In addition, the supervisors have no trust in the leadership and, as a result, hold back on contributions that could benefit the organisation.

On the other hand, the participants express positive sentiments about collaboration and its importance in facilitating change. This presents an opportunity for the organisation to use collaboration to convert negative sentiments into positive ones.

# 5.7. Results for sub-research question 3

RQ3: What does the workforce perceive as best practices for workforce inclusion in facilitating change in the mining industry?

**Table 27:** Summary of themes\_ RQ3

Themes	Totals (Absolute frequencies)	Group 1_ General Workforce	Group 2_ Supervisors	Group 3_ Middle management
Facilitating change	84	18	44	22
Power dynamics (new)	97	36	35	26
Resource constraints	17	9	5	3
Procedures	16	1	14	1
Generational changes (new)	14	8	2	4
Totals	228	72	100	56

#### 5.7.1.1. Facilitating change

In facilitating change, participants viewed collaboration as an enabler. However, according to participant 3, a good listener that empowers their employees and rewards work accordingly has a better chance of facilitating change.

**Table 28:** Summary of codes\_ Facilitating change

Group	Participant	Quotation Content
Group 3	P12	"I make room for the fact that I do not know everything. So if we collaborate, we have the best chance of everyone experiencing something. So we can get things right better if we listen to everyone."
Group 1	P3	"You have people as resources. So always hear from them, what can be done, what can happen, let them run with the change, and see where you need to support them. Then, when those things materialize, you'll recognize that you appreciate everything people have done."

The participants further emphasised the need for employees to be self-empowered and motivated to be part of the process as it impacts their work. Participant 3 expressed it passionately: "What you need to do is always to ensure that whatever changes, you participate in it. First, we need to decide what needs to change. Then, employees need the knowledge that if someone decides the change for them, that is how they will work every day. However, if they participate, they can be part of the decision. If they do not participate, someone else will make decisions for them".

# 5.7.1.2. Power dynamics

Participants expressed their fear of speaking, participating and contributing in meetings. Their views are expressed in Table 29.

**Table 29:** Summary of codes\_Power dynamics (1)

Group	Participant	Quotation Content
Group 2	P 1	"Sometimes people with the right things to say keep the right things to themselves and not say anything."
Group 3	P12	"It is not a safe space for us to talk."
Group 3	P 7	"It depends on who is introducing this change and who is leading it. It is considered if the person is more influential and looks awful in other eyes. However, if it is from a person, who is just a person, there is a chance that the change might not be considered."

Furthermore, participants referred to the concept of "the room" and how it matters whos there.

**Table 30:** Summary of codes\_ Power dynamics (2)

Group	Participant	Quotation Content
Group 1	P 3	"You need to check the rooms and see who is there. Sometimes for peace in such settings, you do not even speak."
Group 2	P11	"It depends on who is in the room and the levels in. Say, for instance, when you're in the room, the senior director is there, you've got the senior mining manager there in the section mining manager, there, I wouldn't want to create a situation whereby I'm sort of seen as overruling what my senior mining manager is trying to share in front of his supervisor."
Group 1	P6	"It depends on who brings it to the table".

Participant 8 concludes by arguing that "make sure that what you are trying to say does not come out in the wrong way or it's not taken in the wrong way, and people do not see it as an attack. So you try and sugar-coat it, and you will probably not say what you want to. However, you'll find that the response is quite different when you engage one on one with these individuals, you find that they tend to share more".

#### **5.7.1.3. Procedures**

Participant 5 highlighted the need for a formalised process towards change. A change management procedure that is focused on the inclusion of people.

**Table 31:** Summary of codes\_ Procedures

Group	Participant	Quotation Content
Group 2	P 4	"There is a change, let us say, a change management procedure. However, the procedure is specific to that process.; it is not standardized. So if you ask a different person, they will have a different way of bringing about a change. It is not standardized."

## 5.7.1.4. Resources constraints

Participants indicate the challenge with multiple changes as unsustainable, resulting in resources being compromised for other projects. This indicated the effect of one change on the rest of the system, as indicated by participants 1 and 2 in Table 32.

**Table 32:** Summary of codes\_ Resource constraints

Group	Participant	Quotation Content	
Group 1	P2	"We are putting more resources in areas that don't need us to while the other areas are suffering."	
Group 2	P1	"But in that process that change is happening, what has been overlooked is that bringing external resources impacts the change negatively and creates more problems."	

## 5.7.1.5. Workforce capability

According to the workforce, their capability is essential in facilitating change. Participants express the need for the capability to be enforced across all levels, including leadership, as they must be the change's drivers. It is difficult for others to follow when they also do not understand the need. However, the time allocated for training seems not to be planned into the overall change management as supervisors complain of employees spending time in training and impacting productivity.

**Table 33:** Summary of codes\_ Workforce capability

Group	Participant	Quotation Content
Group 1	P 3	"To ensure that these people can attend the training without impacting production labour. Ensure that you have a schedule that works for you and them."
Group 2	P 1	"I want you to take at least ten of my leadership guys; I want you to take them onto these intelligent training courses, make them understand this business. Take us to courses that will make us literate to communicate with you on the same level

# 5.7.1.6. Generational changes

According to participant 6, generational changes play a role in change. Participant refers to the ageing generation as the main hinderance to change. This is indicated in Table 34 below.

**Table 34:** Summary of codes\_ Generational changes

Group	Participant	Quotation Content
	P 6	"I think that is the danger with the ageing workforce."
		"It's the ageing workforce, as I think some of them have just retired while they are still at work."
Group 1_		
General workforce		"It's old people; they are more focused on, you might even call them a retired workforce. They have retired, but they are still at
		work; they are more concerned about the pension and then
		securing their bag and then pushing their side hustles."

#### 5.7.1.7. Conclusion RQ3

In ensuring best practices in the team, participants highlighted power as a barrier towards having an inclusive workplace as it negatively impacts participation and disables an innovative culture in the workplace. It makes them feel disempowered and not have a voice. In their expressions, the participants highlighted the importance of having a diverse workforce as generations changes. Furthermore, all employees and their leaders must be capacitated to drive the same goal with the same mindset. When there is an alignment of thinking, the engagements are easily aligned, and everyone pushes for the same goal. Participants further expressed the need to have a formalised process that will enable planning for inclusive change focused on the change process and how the employees can make the change happen.

## 5.8. Summary of findings

The three sub-research questions were aimed at ultimately answering the main research question:

# How does the workforce's perception of their inclusion in the workplace impact change in the mining industry?

The themes for the three sub-research questions can be summarised in Table 35 below. The codebook in appendix 3 further indicates the different codes that were used to develop themes and their level of groundedness.

**Table 35:** Summary of findings (themes)

Themes RQ1	Themes RQ2	Themes RQ3
The strategic intent behind the proposed change	Leadership	Facilitating change
Representation	Communication	Power dynamics (new)
Understanding the environment of business	Collaboration	Resource constraints
Resistance to change	Organizational culture	Procedures
Business case and justification	Trust	Generational changes (new)

The first research question revealed that the workforce wants to understand the organisational strategy and why change happens before they can implement the change. There is a concern about multiple changes that occur within a short period within the work environment. They do not feel included as part of the process as information is not openly shared with them. Furthermore, participants expressed the lack of leadership in change as middle managers are not informed of the changes that are supposed to occur however expected to implement the changes. Communication is a big concern as many projects are in progress, but the employees are not well informed. This creates trust issues that hinder change.

6. Chapter 6: Discussion of Results

6.1. Introduction

In this chapter, the key findings are compared to identify similarities as well as differences in

relation to the literature, as indicated in chapter 2. As part of the analysis, participants were

divided into three groups (general workforce, supervisors and middle management) to allow

for a rich and deep data collection. The number of participants was designed with a high

number at a much lower level than the employees higher up in the hierarchy. This gave the

researcher a different perspective on how employees at different levels experience inclusion

and how that impact planned change. The analysis of the results will be divided into three

sections that will link the research questions to the themes and the literature in chapter 2. In

this section, sunkey diagrams will be used to analyse the emerging themes. The diagrams

will link connections and flow, allowing one to visualize how grounded the finding is within the

different groups.

6.2. **Analysis of results** 

6.2.1. Analysis of themes: RQ1

How is change introduced in the mining industry?

As indicated in Figure 4, five themes emerged from this question: strategic intent behind the

proposed change, representation, understanding the business environment, resistance to

change and business case justification. In understanding how the organization introduces

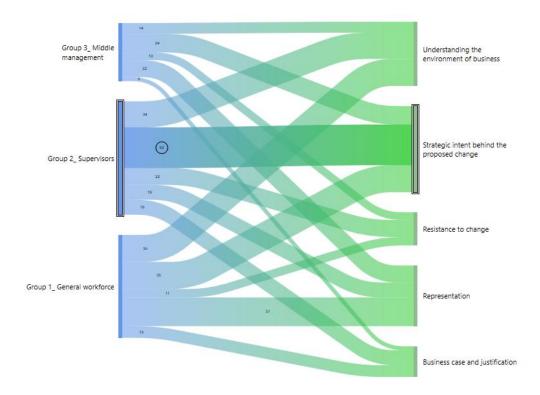
change, it is clear that the responses are grounded in group 2 (supervisors). Furthermore,

supervisors are highly grounded in strategic intent behind the proposed change and possess

the highest number of codes for this research question.

58

Figure 4: Summary\_ Analysis of themes\_RQ1



Due diligence must be conducted before any change project is embarked on. This involves the business clearly understanding the theoretical and practical aspects of the change. As **Participant 1** denoted, "if people were included early enough, what seems to be a problem can be quickly resolved". Anand and Barsoux (2017) argued that misdiagnosis contributes to the high change rate failure. The complexity attributed to the multiple changes in the organisation is an indicator of the misdiagnosis in the change projects. **Participant 1** highlighted the overwhelming feeling of the multiple changes "Many things are changing in the organisation; it feels like we are not in control". Sustainable value can be created by clearly defining the need for change. When the strategic business intent is understood, the organization can benefit from having the certainty that business value will be realised.

Context matters when dealing with change; therefore, the mining industry should be treated contextually as a business. Safety remains a priority in mining; it is the license to operate any mine in South Africa. Due to the complexity of extracting minerals, mining is one of the riskiest occupations worldwide. Consequently, **Participant 9** emphasises that "Safety is a priority; all employees must understand the risks involved with the operation of a mine." Furthermore,

understanding at what stage of the mining value chain the organisation is operating ensures a customised approach. "I think the complexity is created by the fact that the mine is not at steady state production", Participant 1. For example, a mine in its initial project stage of shaft sinking and waste development will experience change differently than another mine in a steady state of production. Therefore a different approach must be taken to accommodate the environment of business.

Participants emphasised that for change to happen, different stakeholders must be involved. Buy-in is relevant to all change stakeholders; it involves employees, supervisors, technical experts, and management. This implies that change does not happen only from the top but may also come from the workforce. Buy-in is conducted differently at different levels. At all levels of work, buy-in requires the use of data as a tool to validate the need for change. Many organizations collect lots of data but hardly take the time to analyse it and transform it into information that can be used for decision-making. In addition, the ability to visualise the change through understanding the status quo offers stakeholders an opportunity to interrogate the data and make informed decisions. However, at an operator's level, it goes beyond understanding the information and analysis of the data but focuses more on active involvement. **Participant 3** highlighted the importance of leadership visibility: "When managers are visible and driving the change, employees start viewing the change as important."

Resistance may be due to the uncertainty of whether one has the capacity or capability for the new change environment. **Participant 13** argued, "A lot of the guys have come across as being resistant to the change, but it is because of the uncertainty that comes with it. Imagine if one has built their career around something that is changing completely. It is a lot to take in a short period." Diesel and Scheepers (2019) attribute the organisation's success to its ability to appreciate and support its employees. This indicates the need for management to support the individuals going through the change to allow change at the individual level. As Agote et al. (2016) denoted, when change happens at the individual level first, it creates buy-in for the individual to be part of the change.

Rønningstad (2018) posits that when subordinate employees are not allowed to lead the change, they are bound to resist it. Even though resistance is evident across all the groups,

supervisors have a high resistance as compared to others. This may be attributed to their position on the organisational structure, as shown in Figure 1. Supervisors are responsible for communicating and implementing the change; their role becomes challenging when they are incapable of implementing it because of a lack of inclusion in the change process. Therefore, employees need support and empowerment to lead during any transitioning period. In the same manner, Rønningstad, (2018) also attributes resistance to change fatigue caused by multiple changes occurring in the organization. "We have multiple solutions that try to solve multiple problems, but those problems are not talking to one another. We, therefore, end up creating more and more problems by introducing more and more solutions" Participant 1.

In addition, when employees do not have a voice, they become reliant on the voice of their representative. As shown in Figure 4, representation is essential across all organisational levels. However, it matters more for the general workforce than for middle management. Representatives can be senior leadership, supervisors, unions or change champions. Sometimes, mascots can be used as change icons to drive a particular narrative. The role of representatives is to ensure effective communication between employees and management. In addition, they are role models in the change and should walk the talk with the executors and change recipients. Errida and Lotfi (2021) highlight the importance of equipping change agents with all the knowledge, skills and capabilities to allow them to make a valuable impact on the change. According to Participant 9, "The unions understand the human resource challenges but are not equipped to address business performance challenges." In addition, Participant 12 criticises: "The union is a bargaining power, and their strength is in numbers." This indicates their vulnerability to ensure the needs of those they represent. Equipping the unions with all the information, knowledge, and skills can effectively influence change. Participant 10 agrees: "We, as the leadership team, must also acknowledge that knowledge is understood differently. We must view the union as representatives of knowledge sharing but not necessarily as representatives of understanding. This means that although we use them as gatekeepers to go and to discuss with their members, we still have to carry the responsibility of making sure that our leadership team, in their different levels and supervision levels, can still carry the message to the different sections in their own capacity". This subscribes to Koch (2000), who posits that unions are central to changing organisational management practices.

In addition, an organisation may appoint specific individuals who are part of the workforce to become change agents. Like the unions, change champions facilitate change and ensure easy buy-in from the employees by creating a link between the workforce and management and creating a feedback loop for effective change. Since these individuals are part of the operations teams, they must have easy belonging to the rest of the teams where they have to make an impact. In addition, they must be available to the workforce for any consultation or clarity needed. However, the workforce has no voice as they only receive the change and do not get involved in formulating it. According to **Participant 6**, "the workforce does not have much to say; they must just accept that there is a change." When team voice is valued, employees become more innovative and share knowledge openly as they believe their ideas are valued(Ye et al., 2019). It is evident that representation is not necessary where employees are empowered. All employees will have a voice and therefore own the proposed change. In addition, representation does not matter in an inclusive workplace because every employee is part of the process, and they have a voice in the change processes. It is an environment where problem-solving takes priority, and employees form an integral part of the process.

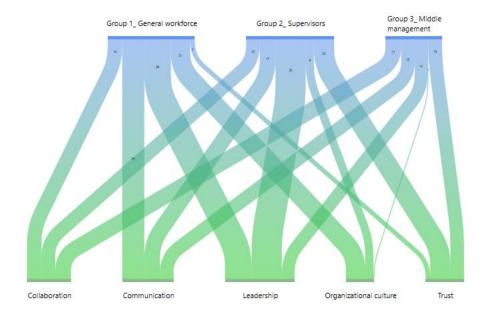
Venus et al. (2019) say change comes with resistance. However, it is in understanding the needs of the people that change leaders can overcome resistance for projects to be successful. **Participant 9** confirmed by saying, "change is pain", indicating the challenges attributed to a changing environment or working practices. However, when stakeholders understand why change is necessary and are involved in the process, a better outcome is experienced (Hussain et al., 2018).

# 6.2.2. Analysis of themes: RQ2

# What inclusion practices facilitate and hinder change in the mining industry?

In answering the above question, the following themes, as shown in Figure 5 were developed.

Figure 5: Summary\_ Analysis of themes\_RQ2



Employees expressed their need for senior leadership to support them in their work. They relate adding value proportional to how much support they get from their leaders. This subscribes to Diesel and Scheepers (2019), supporting and appreciating employees contribute to both their individual and organisational success. The feedback from Participant 1: "I feel there is not much value that we can add past the point the level where we are, mainly because we are not getting the right support", shows evidence that employee support is crucial for facilitating change. This is because when leaders planned change is driven by the leadership (Schulz-Knappe et al., 2019), it is therefore crucial for them to shape how employees react to the change (Oreg & Berson, 2019). Employees look up to them as their leaders: "Once management buys into the change, it is easier for the workforce to follow suit. They look up to their bosses, and they listen to their managers. Therefore, it becomes easier if the managers are the drivers of change" Participant 6. Therefore, a leader must understand their leadership style and how that influence the followers. The command and control leadership style associated with the structure in Figure 1 may be a barrier towards leading a diverse team which have no respect for authority. Participant 1 refers to authority and power as a barrier because "Only what is a priority to the manager gets taken into account." This also impacts communication as "information is shared only at the manager level" Participant 1. Furthermore, the organisational structure seems to be hindering the change as Participant 1

refers to "reporting to four bosses" and how that creates confusion regarding the outcome of their deliverables. Again power and authority hinder the flow of information.

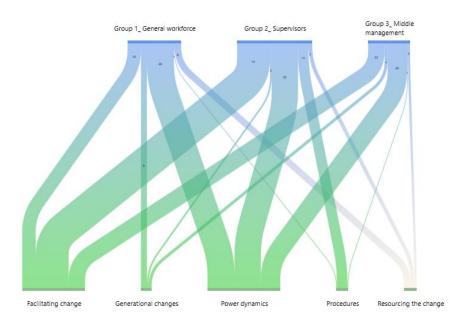
Frequency of communication is key to facilitating the change. It ensures that the change is embedded in people's daily routines. Unfortunately, the long, tedious, repeated stuff gets implementation to be part of a routine that becomes a culture. However, communication must be done through various mediums to instil interest in the subject. Participant 8 refers to email as the frequently used communication medium: "We communicate everything that we do through emails". This might create challenges, especially at a lower level of the organisational structure where employees cannot access computers and emails. Furthermore, communication must be simplified into a language that everyone understands. This notion is consistent with Errida and Lotfi (2021). They posit that communication should be done frequently using a prescribed stakeholder engagement strategy. Change should not be "forced onto people", as indicated by Participant 6. Senior leadership, such as executives and managers, should be active in the change process, recognising and rewarding where necessary. Employees at the lower level of the organisational structure require visibility of management and consistent engagement with feedback that will address their concerns. Participant 10 denotes " "The disadvantage is that the communication is not verbal by the direct supervisor, manager or leadership. So often, it is subject to interpretation because you read it off a particular plan."

Employees have no voice, even where they see the need for change and inform relevant parties. The response and decision-making take a long period which impacts the change. There is a notion that specific people must first validate before change can be effected. **Participant 8** says, "It depends on who is in the room", indicating the level of psychological safety in the organisation. This is emphasised by **Participant 1**, saying: "The only time I feel free to speak up is if that concern affects my area of work directly."

On the other hand, employees value collaboration and see it as a means to create value for the organisation. There is a culture of continuous learning that most participants portray. Suppose collaboration addresses some of the barriers and hindrances associated with not including the employees. In that case, it can allow improvement.

# 6.2.3. Analysis of themes: RQ3





The analysis of this research question was based on the themes shown in Figure 6 above. It is clear that power dynamics played a tremendous role in hindering change. This is consistent with Blumberg et al. (2019), who denoted that planned change is driven by leadership; therefore, there is an opportunity to ensure that the right participants are included in the process. However, participants attribute their lack of participation and involvement to the change leaders and the power dynamics in the organisation. This links to the lack of psychological safety highlighted in the previous section.

Generational changes play a role in addressing resistance to change. Millennials who are new in the industry find it hard to adjust to the work culture and some of the leadership practices. **Participant 6** referred to *the "aged workforce"* or the *"retired workforce"* as a hinderance to change in the mining industry. This is attributed to their resistance to changing the status quo for the benefit of the future. Furthermore, when change is planned, all components of it need to be resources, employees, and leadership capacitated to the level that enables them to adjust to the change 1. However, it also emphasises the need for the individual to understand the personal benefit of the change. That way, resources can be allocated to suitable projects and not compromise others.

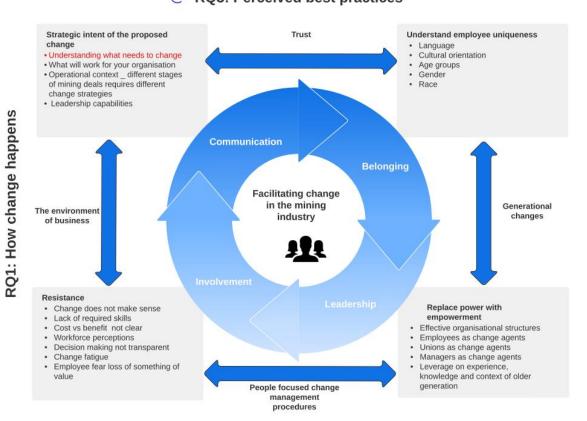
# 6.3. Analysis summary: Main research question

RQ: How does the workforce's perception of their inclusion in the workplace impact change in the mining industry?

# 6.3.1. Proposed model

The proposed model will be used to summarise the analysis of the main research question, as indicated in **Error! Reference source not found.** below.

Figure 7: Proposed model facilitating change in the mining industry



RQ3: Perceived best practices

RQ3: Perceived best practices

The above model (Figure 7) indicates how change can be facilitated in the mining industry. It indicates the value of understanding how change happens and what inclusion practices

RQ2: Inclusion practices

facilitate the change. Firstly, one must appreciate that organisational change requires a change from a known to an unknown state; therefore, resistance is inevitable (Venus et al., 2019). Different factors contribute towards the resistance, including the fact that change does not make sense because the people do not understand the why behind the change or perhaps people fear that they would lose something of value to them. Therefore, overcoming resistance requires the involvement of the people and making them part of the journey as well as understanding the business environment.

Secondly, the strategic intent of the proposed change must be clear to all the stakeholders impacted and affected by the change. As mining companies go through different stages of exploration, shaft sinking, development and production, different change approaches should be implemented due to different levels of complexity at the different stages. Clarity matters as it impacts the quality of outcomes of the proposed change.

Once the project is clearly defined, it must be communicated adequately with the relevant stakeholders. It is through this communication that trust among the different stakeholders is built. Indeed, Trust also increases efficiency in the working environment and makes communication more effective (Ellonen et al., 2008). This means that communication must be done in a language that everyone understands; this includes simplifying financial statements, for example, to a level that the operator understands and, most importantly, understanding their role and impact in the change.

An element of inclusion that contributes to the practices is uniqueness. Shore et al. (2018) emphasized that social groups historically discriminated against are most likely to be excluded in decision-making and other information networks. It is essential that when communication happens, management is cognisant of the uniqueness of their employees and tries to include them in those information networks intentionally. That means where gender, age, race, language, and cultural orientation is not considered; an intentional intervention should be made to address that gap and acknowledge the uniqueness of each employee and the value they bring to the team. In addition, power must be replaced with empowerment in the age of partnerships and changing generations. However, leveraging the older generation's experience, knowledge and context will give value to the organisation. In

addition, designing organisational structures that are inclusive and effective towards sustainable change allows for innovative cultures that enforce improved performance across the entire value chain to emerge (Brimhall & Mor Barak, 2018).

Finally, people-focused change management procedures will enforce inclusion across all stages of the change. As the industry culture is legal compliance and responsibility, the change procedures are mostly process-focused. However, individual change must also happen for organisational change to be successful (Whelan-Berry & Somerville, 2010). Therefore, by placing people at the centre of organisational change, the status quo can be changed from the current to a future desired state.

### 7. Chapter 7: Conclusions and Recommendations

#### 7.1. Introduction

This chapter aims to conclude the study by synthesizing the analysis and their implications for the mining industry, the leadership, mining unions and employees. It draws the principal conclusions per the research questions and how that contributes to the theory. Implications for management and relevant stakeholders in the mining industry are highlighted. Furthermore, the chapter will indicate the research limitations and any suggestions for future research. The primary aim of this study was to explore how the workforce's perception of their inclusion in the workplace impact change in the mining industry.

### 7.2. Principal conclusions

The suggested model in **Error! Reference source not found.** can be used as a guideline for m ining companies aiming to facilitate change through inclusion. The principal conclusions will be analysed per the research question:

#### 7.2.1. First sub-research question finding

#### Misdiagnosis of change impacts how change is introduced

Even though many scholars attribute change failure to execution, misdiagnosis of the need for change also contributes to the high failure rate in change projects (Anand & Barsoux, 2017). Misdiagnosis is especially prevalent in complex industries such as mining, where quick decisions are required to ensure safety and maintain high productivity. It is, therefore, crucial for organisations to first understand the current status quo and then determine what needs to change. It is evident from the "multiple changes" that diagnosis is a critical factor towards sustainable change. This confirms Michel et al. (2013) and Al-Haddad and Kotnour (2015) argument that a blanket approach cannot be taken when dealing with change. Context matters, and it is up to the organization to customize what will work for them.

In an inclusive workplace, debates are critical to validating the need for change. In contrast, where employees do not have a voice or where they must always check "who is in the room"

before they contribute will result in limitations towards transformative change. The expressions from the participants indicate a lack of psychological safety within the organization. This could be attributed to employees not feeling valued for their various unique characteristics, like their age, and the fact that management is not open to different approaches during engagements (Shore et al., 2018). Therefore, understanding the unique characteristics of the employees, as well as making them feel that they belong, allows them to fully invest in the change, thereby providing ownership and accountability. It was evident from the interviews that employees who feel valued were more confident towards embarking on any change process.

### 7.2.2. Second sub-research question finding

### Leaders shape how employees react to change

The role of the leader is crucial to facilitating inclusion practices within the organization. Even though Agote et al. (2016) posit that change needs to happen at an individual level for it to be effective, leaders are vital in enabling the individual buy-in into the change process by recognising their uniqueness and ensuring that they belong. When leaders are change agents and reliable role models, the employees develop trust and become more effective in implementing the change (Ellonen et al., 2008). When leaders are authentic, and employees trust them, communication efficiency increases, and resistance minimises. A critical insight from this finding is that leadership is not about authority; all levels of the organisation can be leaders. Leaders may be from the general workforce to unions, supervisors and middle managers. Trust is earned; it is not a byproduct of the leaders' authority. Therefore, representation doesn't matter in an environment where all employees are empowered to lead and contribute towards the business strategy.

#### 7.2.3. Third sub-research question finding

#### Replace power with empowerment

The command and control culture attributed to the mining industry culture must be replaced by inclusive leadership that supports and assists employees. Inclusive leaders can increase team innovation through support, independence, openness to different perspectives and trust towards their subordinates (Ye et al., 2019). It was evident from the findings that the lack of inclusivity impacts the employees' well-being as they do not feel valued. When a leader invites employees for their opinions and concerns, it empowers them to do more (Shore et al., 2018; Ye et al., 2019). When everyone feels recognised and valued, their degree of performance increases as they can generate new ideas and have a voice in respective projects that are in progress. In addition, when power is replaced with empowerment, the "missing middle management" will finally have a voice, and they can drive the change.

#### 7.3. Theoretical contribution

The majority of the research conducted on inclusion focuses on the leader. This research has focused on the perceptions of the workforce in organizations in the mining industry. However, it goes beyond the inclusive workplace and explores the practicality of how the workforce perceives the workplace. The research also revealed the challenges of union capability in driving change.

# 7.4. Implications for management and other relevant stakeholders

The mining industry needs to invest in having data analysts that ensure all data collected is used and creates value for the organization. It is through immersion in the data that one understands the need for change. Therefore, the focus should shift from data collection to translating the data to information that can be used for decision-making. Through the use of data, management can be able to make decisions on what needs to change.

A platform for engagement must be created to allow an easy flow of information. Through feedback, management can easily understand the workforce's perceptions and attend to them timeously. This will, however, require having crucial conversations and being on a journey towards continuous improvement. This platform will provide access for employees and their managers.

#### 7.5. Limitations of the research

The findings of this study have limitations that should be taken into account. First, the study is limited to planned change. It acknowledges that the study will require different strategies to apply to emergent change. Second, only historically disadvantaged people were included in the population. If a broader sample was used, their perception could give a broader insight into the benefits of being included. The current sample size limits the generalisation of the findings. Third, the responses received are based on how respondents interpreted the research questions. It is possible that some respondents could not freely share their views and would not want the organisation to be seen through a negative lens.

# 7.6. Suggestions for future research

The relevance of this study is based on the fact that change is inevitable, and the rate of change is much faster. The mining industry is getting more complex, with innovation and technology separating good from great companies. Change failure due to resistance affects many stakeholders and negatively impacts South Africa's economy. Therefore, investigations on the role of change fatigue

Representation plays a role in facilitating change. However, the study has indicated that representation must be across all work levels and not specific to unions. The union's role in facilitating change, are they empowered to enhance the business needs, or do they thrive better in a dysfunctional workplace where employees are not included?

Investigation on the impacts of cultural differences (on a national level) on change. Many organisations are moving globally to gain competitiveness, putting pressure on those operating in these different time zones. How does the impact of the different cultures impact change in the context of a South African mining industry bounded by the Mine Health and Safety Act.

#### 8. Reference List

- Abutabenjeh, S., & Jaradat, R. (2018). Clarification of research design, research methods, and research methodology: A guide for public administration researchers and practitioners. *Teaching Public Administration*, *36*(3), 237–258.
- Agote, L., Aramburu, N., & Lines, R. (2016). Authentic Leadership Perception, Trust in the Leader, and Followers' Emotions in Organizational Change Processes. *The Journal of Applied Behavioral Science*, *52*(1), 35–63. https://doi.org/10.1177/0021886315617531
- Al-Haddad, S., & Kotnour, T. (2015). Integrating the organizational change literature: A model for successful change. *Journal of Organizational Change Management*, 28(2), 234–262. https://doi.org/10.1108/JOCM-11-2013-0215
- Alharahsheh, H. H., & Pius, A. (2020). A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, *2*(3), 39–43.
- Ali, D., & Ur Rehman, A. (2020). Adoption of autonomous mining system in Pakistan Policy, skillset, awareness and preparedness of stakeholders. *Resources Policy*, 68(June), 101796. https://doi.org/10.1016/j.resourpol.2020.101796
- Anand, N., & Barsoux, J. (2017). What everyone gets wrong about change management. *Harvard Business Review*, 2–9.
- Appelbaum, S. H., Cameron, A., Ensink, F., Hazarika, J., Attir, R., Ezzedine, R., & Shekhar, V. (2017). Factors that impact the success of an organizational change: a case study analysis. *Industrial and Commercial Training*, 49(5), 213–230. https://doi.org/10.1108/ICT-02-2017-0006
- Apple. (2022). Inclusion & Diversity Apple. https://www.apple.com/diversity/

- Asenahabi, B. M. (2019). Basics of research design: A guide to selecting appropriate research design. *International Journal of Contemporary Applied Researches*, *6*(5), 76–89.
- Blumberg, M., Cater-Steel, A., Rajaeian, M. M., & Soar, J. (2019). Effective organisational change to achieve successful ITIL implementation: Lessons learned from a multiple case study of large Australian firms. *Journal of Enterprise Information Management*, 32(3), 496–516. https://doi.org/10.1108/JEIM-06-2018-0117
- Boote, D. N., & Beile, P. (2005). Scholars before Researchers: On the Centrality of the Dissertation Literature Review in Research Preparation. *American Educational Research Association*, *34*(6), 3–15. https://www.jstor.org/stable/3699805
- Bovey, W. H., & Hede, A. (2001). Resistance to organizational change: the role of cognitive and affective processes. July.
- Braun, V., & Clarke, V. (2021a). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. In *Qualitative Research in Sport, Exercise and Health* (Vol. 13, Issue 2, pp. 201–216). Routledge. https://doi.org/10.1080/2159676X.2019.1704846
- Braun, V., & Clarke, V. (2021b). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Counselling and Psychotherapy Research*, 21(1), 37–47. https://doi.org/10.1002/capr.12360
- Bravus Mining and Resources. (2021). *The Positive Effects of Mining on the Economy |*Bravus Mining & Resources. https://www.bravusmining.com.au/the-positive-effects-of-mining-on-the-economy/
- Brimhall, K. C., & Mor Barak, M. E. (2018). The Critical Role of Workplace Inclusion in Fostering Innovation, Job Satisfaction, and Quality of Care in a Diverse Human

- Service Organization. *Human Service Organizations Management, Leadership and Governance*, *42*(5), 474–492. https://doi.org/10.1080/23303131.2018.1526151
- Bryson, A., Barth, E., & Dale-Olsen, H. (2013). ARTICLE The Effects of Organizational Change on Worker Well-being and the Moderating Role of Trade Unions / The effects of organizational change on worker well-being and the moderating role of trade unions (Vol. 66, Issue 4). SI.
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? In *Currents in Pharmacy Teaching and Learning* (Vol. 10, Issue 6, pp. 807–815). Elsevier Inc. https://doi.org/10.1016/j.cptl.2018.03.019
- Chen, C., & Tang, N. (2018). Does perceived inclusion matter in the workplace? *Journal of Managerial Psychology*, *33*(1), 43–57. https://doi.org/10.1108/JMP-02-2017-0078
- Christensen, M. (2014). Communication as a Strategic Tool in Change Processes.

  International Journal of Business Communication, 51(4), 359–385.

  https://doi.org/10.1177/2329488414525442
- Cohen, H. (2019). The Change Management Fallacies. S.A.M.Advanced Management Journal, 84(1).
- d'Amato, C., Fanizzi, N., & Esposito, F. (2008). Query answering and ontology population: An inductive approach. *European Semantic Web Conference*, 288–302.
- Dayo-Olupona, O., Genc, B., & Onifade, M. (2020). Technology adoption in mining: A multi-criteria method to select emerging technology in surface mines. *Resources Policy*, 69(September), 101879. https://doi.org/10.1016/j.resourpol.2020.101879
- Dorenbosch, L., Engen, M. L. van, & Verhagen, M. (2005). On-the-job innovation: The impact of job design and human resource management through production ownership. *Creativity and Innovation Management*, *14*(2), 129–141. https://doi.org/10.1111/j.1476-8691.2005.00333.x

- Doyle, L., Brady, A.-M., & Byrne, G. (2009). An overview of mixed methods research. *Journal of Research in Nursing*, *14*(2), 175–185.
- Ellonen, R., Blomqvist, K., & Puumalainen, K. (2008). The role of trust in organisational innovativeness. *European Journal of Innovation Management*, *11*(2), 160–181. https://doi.org/10.1108/14601060810869848
- Errida, A., & Lotfi, B. (2021). The determinants of organizational change management success: Literature review and case study. *International Journal of Engineering Business Management*, 13. https://doi.org/10.1177/18479790211016273
- Ferdman, B. M. (2017). Paradoxes of Inclusion: Understanding and Managing the Tensions of Diversity and Multiculturalism. *Journal of Applied Behavioral Science*, 53(2), 235–263. https://doi.org/10.1177/0021886317702608
- Fisch, C., & Block, J. (2018). Six tips for your (systematic) literature review in business and management research. In *Management Review Quarterly* (Vol. 68, Issue 2, pp. 103–106). Springer Verlag. https://doi.org/10.1007/s11301-018-0142-x
- Fleming, J., & Zegwaard, K. E. (2018). *Methodologies, methods and ethical considerations for conducting research in work-integrated learning*. 205–213.
- Flood, A. (2010). Understanding phenomenology. *Nurse Researcher*, 17(2).
- Ford, J. D., & Ford, L. W. (2010). Stop blaming resistance to change and start using it. *Organizational Dynamics*, *33*(2), 24–36.
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian & New Zealand Journal of Psychiatry*, 36(6), 717–732.
- Fusch, P. I., & Ness, L. R. (2015). Are We There Yet? Data Saturation in Qualitative Research. In *The Qualitative Report* (Vol. 20, Issue 9). http://www.nova.edu/ssss/QR/QR20/9/fusch1.pdf

- Garside, M. (2022). *Number of people employed by South Africa's mining industry in 2020 by commodity*. 2022. https://www.statista.com/statistics/241420/south-african-mining-key-facts/
- Gruenhagen, J. H., & Parker, R. (2020). Factors driving or impeding the diffusion and adoption of innovation in mining: A systematic review of the literature. *Resources Policy*, 65. https://doi.org/10.1016/j.resourpol.2019.101540
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, *18*(1), 59–82. https://doi.org/10.1177/1525822X05279903
- Hafiz, K., Baxter, P., & Jack, S. (2008). Case study ecmple Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. In *The Qualitative Report* (Vol. 13). http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf
- Hammersley, M. (2007). The issue of quality in qualitative research. *International Journal of Research & Method in Education*, *30*(3), 287–305.
- Hollstein, B. (2011). Qualitative approaches. *The Sage Handbook of Social Network Analysis*, 404–416.
- Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2018). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change. *Journal of Innovation and Knowledge*, 3(3), 123–127. https://doi.org/10.1016/j.jik.2016.07.002
- Ironhardt, B. (2020, October 15). The Real Reason Behind Why Apple Is The Most Innovative Company in The World... | by Bruce Ironhardt | Mac O'Clock | Medium. MacO'clock. https://medium.com/macoclock/why-apple-is-an-innovative-company-but-not-an-inventive-one-9a9194c571e8
- Judson, A. S. (1991). Changing behavior in organizations: minimizing resistance to change. B. Blackwell.

- Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965. https://doi.org/10.1111/jan.13031
- Kim, T. G., Hornung, S., & Rousseau, D. M. (2011). Change-supportive employee behavior: Antecedents and the moderating role of time. *Journal of Management*, 37(6), 1664–1693. https://doi.org/10.1177/0149206310364243
- Kitto, S. C., Chesters, J., & Grbich, C. (2008). Quality in qualitative research. *Medical Journal of Australia*, 188(4), 243–246.
- Koch, C. (2000). Building coalitions in an era of change Building coalitions in an era of technological change Virtual manufacturing and the role of unions, employees and management. In *Journal of Organizational Change Management* (Vol. 13, Issue 3). # MCB University Press. http://www.emerald-library.com
- Koerber, A., & McMichael, L. (2008). Qualitative sampling methods: A primer for technical communicators. *Journal of Business and Technical Communication*, 22(4), 454–473.
- Köseoglu, M. A., Altin, M., Chan, E., & Aladag, O. F. (2020). What are the key success factors for strategy formulation and implementation? Perspectives of managers in the hotel industry. *International Journal of Hospitality Management*, 89. https://doi.org/10.1016/j.ijhm.2020.102574
- Kotter, J. P. (1995). Leading Change: Why Transformation Efforts Fail Harvard Business Review.
- Kotter, J. P., & Schlesinger, L. A. (2008). Choosing Strategies for Change. 130–139.
- Lööw, J. (2021). Understanding technology in mining and its effect on the work environment. *Mineral Economics*, 35(0123456789), 143–154. https://doi.org/10.1007/s13563-021-00279-y

- Lucas, P., Fleming, J., & Bhosale, J. (2018). The utility of case study as a methodology for work-integrated learning research.
- Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, *16*(2), 193–205.
- Martin, R., Epitropaki, O., Erdogan, B., & Thomas, G. (2019). Relationship-based leadership: Current trends and future prospects. In *Journal of Occupational and Organizational Psychology* (Vol. 92, Issue 3, pp. 465–474). John Wiley and Sons Ltd. https://doi.org/10.1111/joop.12286
- Michel, A., By, R. T., & Burnes, B. (2013). The limitations of dispositional resistance in relation to organizational change. *Management Decision*, *51*(4), 761–780. https://doi.org/10.1108/00251741311326554
- Mor-Barak, M. E. (2022). Managing diversity: toward a globally inclusive workplace.
- Ndlovu, S. (2018). Climate change: the impact on the mining sector. *The Journal of the South African Institute of Mining and Metallurgy*, 118.
- Mine Health and Safety Act 29 of 1966 and Regulations, 1 (2018).
- Oreg, S., & Berson, Y. (2019). Leaders' impact on organizational change: Bridging theoretical and methodological chasms. *Academy of Management Annals*, *13*(1), 272–307. https://doi.org/10.5465/annals.2016.0138
- Packard, M. D. (2017). Where did interpretivism go in the theory of entrepreneurship? *Journal of Business Venturing*, 32(5), 536–549.
- Pham, L. T. M. (2018). Qualitative approach to research a review of advantages and disadvantages of three paradigms: Positivism, interpretivism and critical inquiry. *University of Adelaide*.

- Pieterse, J. H., Caniëls, M. C. J., & Homan, T. (2012). Professional discourses and resistance to change. *Journal of Organizational Change Management*, *25*(6), 798–818. https://doi.org/10.1108/09534811211280573
- Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*, 25(4), 41–49.
- Saldaña, J. (2021). The Coding Manual for Qualitative Researchers. 1–440. www.sagepublications.com
- Sánchez, F. (2020). Innovation in the Mining Industry: Technological Trends and a Case Study of the Challenges of Disruptive Innovation. 1385–1399.
- Sánchez, F., & Hartlieb, P. (2020). Innovation in the Mining Industry: Technological Trends and a Case Study of the Challenges of Disruptive Innovation. *Mining, Metallurgy and Exploration*, 37(5), 1385–1399. https://doi.org/10.1007/s42461-020-00262-1/Published
- Saunders, M., & Lewis, P. (2018). *Doing Research in Business and Management* (2nd ed.). Pearson.
- Schulz-Knappe, C., Koch, T., & Beckert, J. (2019). The importance of communicating change: Identifying predictors for support and resistance toward organizational change processes. *Corporate Communications*, *24*(4), 670–685. https://doi.org/10.1108/CCIJ-04-2019-0039
- Seale, C. (1999). Quality in Qualitative Research. *Qualitative Inquiry*, *5*(4), 465–478. https://doi.org/10.1177/107780049900500402
- Sedgwick, P. (2014). Unit of observation versus unit of analysis. *Bmj*, 348.

- Shore, L. M., Cleveland, J. N., & Sanchez, D. (2018). Inclusive workplaces: A review and model. Human Resource Management Review, 28(2), 176–189. https://doi.org/10.1016/j.hrmr.2017.07.003
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Ehrhart, K. H., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. In *Journal of Management* (Vol. 37, Issue 4, pp. 1262–1289). https://doi.org/10.1177/0149206310385943
- Sinek, S. (2009). Start with Why Simon Sinek. https://simonsinek.com/books/start-with-why/
- Skjott Linneberg, M., & Korsgaard, S. (2019). Coding qualitative data: a synthesis guiding the novice. In *Qualitative Research Journal* (Vol. 19, Issue 3, pp. 259–270). Emerald Group Holdings Ltd. https://doi.org/10.1108/QRJ-12-2018-0012
- Smith, J., & Firth, J. (2011). Qualitative data analysis: the framework approach. *Nurse Researcher*, *18*(2), 52–62.
- Stouten, J., Rousseau, D. M., & De Cremer, D. (2018). Successful organizational change: Integrating the management practice and scholarly literatures. *Academy of Management Annals*, *12*(2), 752–788. https://doi.org/10.5465/annals.2016.0095
- Swedberg, R. (2020). Exploratory research. *The Production of Knowledge: Enhancing Progress in Social Science*, 17–41.
- Thomas, D. R. (2003). A general inductive approach for qualitative data analysis.
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 27(2), 237–246. https://doi.org/10.1177/1098214005283748
- Turner III, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, *15*(3), 754.

- van Woerkum, C., Aarts, N., & van Herzele, A. (2011). Changed planning for planned and unplanned change. *Planning Theory*, 10(2), 144–160. https://doi.org/10.1177/1473095210389651
- Venus, M., Stam, D., & van Knippenberg, D. (2019). Visions of change as visions of continuity. Academy of Management Journal, 62(3), 667–690. https://doi.org/10.5465/amj.2015.1196
- Walsham, G. (1995). The emergence of interpretivism in IS research. *Information Systems Research*, *6*(4), 376–394.
- Watt, D. (2007). On Becoming a Qualitative Researcher: The Value of Reflexivity. In *The Qualitative Report* (Vol. 12). http://www.nova.edu/ssss/QR/QR12-1/watt.pdf
- Weisbord, M., & Janoff, S. (2010). Fu tu r e Se ar ch: Ge ttin g th e Wh ole Syste m in th e Room f or Vision, C om m itm e n t, and Action.
- Whelan-Berry, K. S., & Somerville, K. A. (2010). Linking change drivers and the organizational change process: A review and synthesis. *Journal of Change Management*, 10(2), 175–193. https://doi.org/10.1080/14697011003795651
- Wilson, V. (2016). Research methods: Mixed methods research. *Evidence Based Library* and *Information Practice*, 11(1 (S)), 56–59.
- Wojnar, D. M., & Swanson, K. M. (2007). Phenomenology: an exploration. *Journal of Holistic Nursing*, *25*(3), 172–180.
- Ye, Q., Wang, D., & Guo, W. (2019). Inclusive leadership and team innovation: The role of team voice and performance pressure. *European Management Journal*, 37(4), 468–480. https://doi.org/10.1016/j.emj.2019.01.006
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311–325.

Zahavi, D. (2018). Phenomenology the basics. Routledge.

### 9. Appendices

## Appendix 1: Interview guide

The perceived benefits of workforce inclusion in driving change in the mining industry

Name:	Date:
Job Title:	Start Time:
Organization:	End Time:

#### Research question

Primary: How does the workforce's perception of their inclusion in the workplace impact change in the mining industry

#### Introduction

Thank you very much for the opportunity to engage with you. Please note that I will be recording the session to be able to go back to it at a later stage. Is that ok?

As mentioned, I am researching workforce inclusion and learning more about how it helps overcome the barriers to change in the mining industry. I would like to get some background on you and then ask a few questions about your views on organizational change. What I'm looking for is your personal views and experiences on the matter; I appreciate the time made to be part of this conversation. Please note that your participation is voluntary, and you may withdraw at any time without penalty. All data collected within this interview will be reported without identifiers.

#### Biographic background

Main background information question

1. May you please start by telling me about you and your role in the organization you are currently employed?

#### Probing Questions

- a. What is your gender, and how old are you?
- b. What is your role in the mine, and what does it entail?
- c. How long have you been in the mining industry and organization?
- d. What do you like about the organization?
- e. What do you like about your role in the organization?

Thank you. Now, let's talk about current practices in the organization.

#### RQ1: How is change introduced in the mining industry?

### Main question

How does the organization go about introducing a change?

#### Probing questions:

- What changes are happening
- How do people get convinced that change is necessary?
   This might mean that certain people gather with the relevant senior leadership to discuss the status quo and the need for change. [For general workers, it would be the unions/supervisors]
  - o Do you think that the union represents employees' views on the changes that are happening in the mine?
  - Would you say the representation by the union assists or hinders employees from participating and feeling included in the changes made on the mine? In what way do they do that?
- Is there a group of people who are assembled to lead the change effort? Are there any change champions who lead change efforts in the organization to encourage teamwork towards the change?
- How is the vision created (to ensure it's not too complicated for people to understand?)
- What communication medium is used to communicate any changes on the mine? Is the communication effective? Does it help you to understand your role in the process of change?

Thank you, now, let's talk about inclusion.

# RQ2: What current inclusion practices facilitate or hinder change in the mining industry?

#### Main questions

How does the organization go about making sure that everyone is part of the change process or embracing all employees as part of the process?

Probing questions:

- Tell me, How is it going?
- At what stage are you involved during the change process?

- · How are those included selected?
- In your role, do you feel empowered to act and drive any changes relevant to you/your role? Why? What do you think is a barrier to your empowerment?
- When changes are being made within the organization (especially those relevant to your role), do you think you have something positive to contribute to those changes?
   Why do you say so?
- Do you think that all your knowledge and expertise are fully utilized in implementing changes that are relevant to your role?
- During engagements on change, do you think that you can participate freely? Why do you feel that way?
- Are the final decisions made out of the participation process during change reflective of your views and opinions? In what way?
- During participation in change processes, do you think the facilitators of the process acknowledge or are sensitive to your character, prior knowledge, age, etc
- What would be the most comfortable way for you to participate and to be fully engaged to raise your opinions?

RQ3: What does the workforce perceive as best practices for workforce inclusion in facilitating change in the mining industry?

#### Main question

In your opinion, what do you think is the best way/process of making sure that all parties are involved in implementing change and what are the benefits of following that process?

#### Probing questions

- Is there a coalition of diverse individuals in terms of information, expertise, reputations, and relationships? Etc
- Who in the organization leads the change to develop that vision and create a minimum level of trust and communication?
- Does it matter to you who drives the change in the organization?
- · How often is change communicated? How is this done?
- What are some of the best outcomes of you being included in a change process?
- Would you have done things differently if you were included in the process? How?
- If you were in charge and responsible for bringing up changes, how would you have preferred for the changes to be handled?
- What would you do differently?

 If you were running the union, what would you do differently to encourage and improve the current levels of employee participation?

Thank you so much for taking part in this interview. I appreciate your valuable time and input into this research.

# Appendix 2: Consent letter



#### Dear participant

I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of an MBA. I am researching workforce inclusion and trying to find out more about how it helps overcome the barriers to change in the mining industry. Your participation is voluntary, and you can withdraw at any time without penalty. All data will be reported without identifiers. If you have any concerns, don't hesitate to contact my supervisor or me. Our details are provided below.

Researcher: Lebelo Khutjo Ivy Email: <u>24252205@mvqibs.co.za</u>

Phone: +2776 115 3005

Research Supervisor: Jabu Maphalala

Email: maphalalai@gibs.co.za
Phone: +2771 679 2770

Signature of participant: _		Date:
Signature of researcher	Lebelo, Khutjo Digitally signed by Lebelo, Khutjo Dale: 2022.08.10 21.55:53 +02'00'	

# Appendix 3: Codebook

Code	Grounded	Code Groups
Involvement of stakeholders	42	Trust
Empowerment	40	Power dynamics
Representation by unions	39	Representation
Leading change	38	Leadership
Legitimate power	31	Power dynamics
Decision making	27	Facilitating change
Communication medium	23	Communication
Push communication	22	Communication
Stakeholder buy-in	22	Understanding the environment of business
Benefits	21	Facilitating change
best practice	20	Facilitating change
Participation	20	Collaboration
Why change happens	20	The strategic intent behind the proposed change
Workforce capability	20	Leadership
Workforce communication perception	20	Communication
Psychological safety	19	Power dynamics
Mining industry context	18	Understanding the environment of business
Engagements	17	Collaboration
Barriers to change	16	Resistance to change
Multiple changes	15	Understanding the environment of business
Uncertainty	15	Representation
Impact on workforce	14	Business case and justification
Multi diverse team	14	Business case and justification
conflict	12	Organizational culture
Innovative culture	12	Organizational culture
Types of change	12	Understanding the environment of business
Unique individuals	12	Generational changes
Communication type	11	Communication
Organizational structure	11	Understanding the environment of business
Resistance to the change	11	Resistance to change
Safety	11	Understanding the environment of business
Formalised process	10	Procedures
Resourcing the change	10	Resourcing the change
Capability	9	Leadership
Hindering change	9	Resistance to change

Code	Grounded	Code Groups	
How change happens	o	Strategic intent behind the proposed	
How change happens	8	change	
Adding value	7	Facilitating change	
Change champions	7	Representation	
Exclusion	7	Resistance to change	
Access to information	6	Power dynamics	
Change agents	6	Representation	
Clarity of change methods	6	Strategic intent behind the proposed change	
Data as a tool	6	Resourcing the change	
Facilitating change	6	Facilitating change	
impact on change	6	Business case and justification	
	5		
Implications of the change	5	Business case and justification  Communication	
Interactive communication			
Leader capability	5	Leadership	
Leadership support	5	Leadership	
Leadership capabilitites	4	Leadership	
Ownership	4	Collaboration	
People impacted by the change	4	Representation	
Performance	4	Strategic intent behind the proposed	
measurements	4	change	
Personal benefit	4	Power dynamics	
Social groups	4	Representation	
Common ground	3	Collaboration	
Communication frequency	3	Communication	
feedback	3	Facilitating change	
Interdependencies	3	Strategic intent behind the proposed change	
People focused change management	3	Procedures	
Privileged individuals	3	Power dynamics	
Understanding the process	3	Strategic intent behind the proposed change	
Differentiation	2	Representation	
Organizational culture	2	Organizational culture	
Organizational values	2	Organizational culture	
Organizational values		Strategic intent behind the proposed	
Project definition	2	change	
Referent power	2	Power dynamics	
Relationships	2	Generational changes	
Responsibility for communication	2	Communication	
Standardised change process	2	Procedures	

Code	Grounded	Code Groups
Teamwork	2	Collaboration
Verification	2	Business case and justification
who's in the room	2	Representation
Workforce personal interest	2	Strategic intent behind the proposed change
Accountability	1	Collaboration
Blame culture	1	Organizational culture
Change management procedure	1	Procedures
Change sustainability	1	Understanding the environment of business
Changing mindsets	1	Strategic intent behind the proposed change
collaboration	1	Facilitating change
Contribution	1	Facilitating change
Cultural transformation	1	Organizational culture
Defining deliverables	1	Procedures
Delivery of results	1	Procedures
Flexibility	1	Collaboration
Inclusive culture	1	Organizational culture
Managers as change agents	1	Representation
Review Platforms	1	Resourcing the change
Understanding the problem	1	Strategic intent behind the proposed change
Visibility	1	Collaboration