Transformational Barriers Against Women’s Advancement In South African Platinum Mining Companies

A Research Report

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by

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ABSTRACT

This thesis addresses the transformational barriers against women’s advancement in South African Platinum mining companies. The four key objectives of the study were derived to answer the research questions, that is: if South African Platinum mining companies recognize such advancement as a business imperative, if women can advance in such companies, if women need support to advance in these companies and lastly if the leadership of the said companies is embracing women’s advancement and talent.

A literature review on the knowledge base of transformation was conducted to determine global, South African, industry and sector perspectives on the issues of the study and to contextualise the latter. The central research tool utilised was a questionnaire using a Likert-5 type rating scale and open-ended questions to elaborate on the objectives. Employees, on C3 level and higher in terms of the Patterson Grading System as traditionally used in the given industry, hailing from various companies of this kind were selected to respond to the questionnaire which was mailed to them. Open-ended questions were used in the development of themes and the data was analysed on the basis of tables and graphs. The findings were that transformational barriers against women’s advancement in these mines are rife. Most women were not afforded opportunities to grow, and were not given sufficient support. The study also found that leadership focuses more on economic benefits in terms of the bottom-line exclusively to human capital interventions, thus failing to strike the balance. The study concluded with recommendations as to what can be done to improve the situation with which women in these firms are faced.
ACKNOWLEDGEMENTS

To the Great Lord and his wisdom for writing Psalm 23, which is a text by which my whole life is led, no matter how hard the situation. His guidance, strength, encouragement, love and wisdom have assured me that I will complete my research and should not fear anything as long as I have Him in my life.

I would like to express profound gratitude to my Research Supervisor, Mr A. Vermaak, for his invaluable support, encouragement, supervision and useful suggestions throughout this research work. His moral support and continuous guidance enabled me to complete my research successfully. I appreciate all the time he invested through telephone calls, e-mails and meetings, to motivate me no matter how hard it was for me. His constructive criticism has added a lot of value in shaping my thinking towards a meaningful and value-adding study.

I am grateful for the cooperation I received from South African Chamber of Mines, by providing me with the required information, and to the Platinum mining companies’ Human Resources and Transformation Managers who granted me permission to conduct the study within their organisations and distributed the questionnaires to the selected sample accordingly. Moreover, I would like to acknowledge all of my respondents who took the time to complete the questionnaires when requested to do so.

My sincere gratitude also goes to my employer, for paying all my fees and granting me time-off to study through the years, to all my friends, colleagues and fellow students who supported me with their encouragement during my studies and to every person who either directly or indirectly contributed to the successful completion of my research.

I wish to share this special moment in my life with my wonderful mother and brothers who instilled in me the values I hold dear today, offering love,
support and leading by example irrespective of their level of education and background.

To the Almighty God, for blessing me with a loving, caring, supportive, understanding and patient husband. Sydney, thank you so much for understanding; all the late nights, time away from home, shifting of responsibilities, assisting with calculations and finally for mothering and fathering the kids all alone without judging me. Your selfless support made it possible for me to complete my study. I thank you. Finally, to my two children, Simphiwe and Siyabonga, for praying for mommy to pass every examination she wrote, and who put mommy’s needs before their own during my study. Thank you for giving me the space. Lastly I dedicate this thesis to God and to Him be the glory.
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# Acronyms and Abbreviations

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<tr>
<td>AA</td>
<td>Affirmative Action</td>
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<tr>
<td>ANC</td>
<td>African National Congress</td>
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<td>ARM</td>
<td>African Rainbow Minerals</td>
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<tr>
<td>BBBEE</td>
<td>Broad-Based Black Economic Empowerment</td>
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<tr>
<td>CM</td>
<td>Chamber of Mines of South Africa</td>
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<tr>
<td>DME</td>
<td>Department of Minerals and Energy</td>
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<tr>
<td>EDS</td>
<td>Electronic Delivery System</td>
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<tr>
<td>EEA</td>
<td>Employment Equity Act</td>
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<tr>
<td>GLOBE</td>
<td>Global Leadership and Organisational Behaviour Effectiveness</td>
</tr>
<tr>
<td>HDI</td>
<td>Historically Disadvantaged Individuals</td>
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<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
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<tr>
<td>JCI</td>
<td>Johannesburg Consolidated Investments Company</td>
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<tr>
<td>LPC</td>
<td>Labour Committee Meeting</td>
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<tr>
<td>NGO</td>
<td>Non Governmental Organisation</td>
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<tr>
<td>PGM</td>
<td>Platinum Group Metals</td>
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<td>SA</td>
<td>South Africa</td>
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<tr>
<td>SAC</td>
<td>South African Constitution</td>
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<tr>
<td>SADC</td>
<td>South African Democratic Countries</td>
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<td>SAMRC</td>
<td>South African Medical Research Council</td>
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<tr>
<td>SBL</td>
<td>School of Business Leadership</td>
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<tr>
<td>SDA</td>
<td>Skills Development Act</td>
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<tr>
<td>SAWIMA</td>
<td>South African Women In Mining Association</td>
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<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>UNDFEM</td>
<td>United Nations Development Fund For Women</td>
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<tr>
<td>UNISA</td>
<td>University of South Africa</td>
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<tr>
<td>WIM</td>
<td>Women In Mining</td>
</tr>
<tr>
<td>WAM</td>
<td>Women At The Mine</td>
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<td>WIB</td>
<td>Women In Business</td>
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Acronyms and abbreviations
CHAPTER 1: ORIENTATION

1.1 Introduction

This thesis aims to address transformational barriers to the advancement of women in South African Platinum mining companies.

Transformation is a key issue facing businesses, government and all other spheres of life globally. Women’s advancement in relation to career advancement has recently been placed top of the agenda in many corporations with transformation strategies achieving no or little success if any.

Since the demise of apartheid at the beginning of the 1990s, the mining industry was, and still is, subjected to various perceptions in as far as transformation is concerned. This industry is perceived to be underrepresented in as far as women employees are concerned, and is known to be male dominated. The only logical reason is that it is a highly labour intensive and demanding environment in which females apparently cannot succeed and advance.

According to the Chamber of Mines of South Africa, most mining companies, if not all, have Human Resource Development and Employment Equity policies in place; yet these still have not improved the transformation process.

This research report attempts to establish objectively whether transformational barriers against women’s advancement exist in South African Platinum mining companies, through carrying out an in-depth qualitative analysis: gathering data by using a survey, checking the background of these companies, their workforce composition, employment equity status, progress in terms of implementing the mining charter mandate and finally determining if the research question has been answered.
1.2 Definitions of Key Concept

1.2.1 Transformation

*Webster's Dictionary* defines transformation as an act, process, or instance of change in structure, appearance, or character.

According to the *Oxford Dictionary*, “transform” is a verb denoting... “to change the form or appearance or character of a person or thing”. Transformation is therefore a noun expressing the same concept.

1.2.2 Barriers

Something immaterial that obstruct or impede.

1.2.3 Women

Women is the plural of the noun woman, meaning a grown-up female human being.

1.2.4 Advancement

Webster defines advancement in four ways, that is as “promotion: encouragement of the progress or growth or acceptance of something”; as “progress: the act of moving forward (as toward a goal)”; and as “gradual improvement or growth or development: advancement of knowledge and great progress in the arts”. He holds the view that “advancements is the act of advancing, or the state of being advanced; progression; improvement; furtherance; promotion to a higher place or dignity; as, the advancement of learning”.

1.3 Problem Statement

The problem being investigated in the study is that of transformational barriers against women’s advancement in South African Platinum Mining Companies.

Traditionally, the mining industry has not been an obvious career choice or preferred place of employment for women. In South Africa women were, until the 1990s, legislatively prohibited or otherwise constrained from being employed in operations underground. Mining as a discipline inclusive of Platinum mining, was not regarded or marketed as a worthwhile career choice for professional women; in addition, at the lower levels, the industry has
traditionally drawn its labour from a largely male, rural workforce. Practically, working underground has been difficult for women with inadequate facilities being designed to accommodate them.

Hence, the said industry is faced with the challenge of including more women in the sector. Statistics from the Chamber of Mines of South Africa revealed that there was only a 2.6% representation of women in SA mining companies in the year 2000; this number has increased to 13.7%, indicating a percentage growth of 11.1% percent, of which 18% of the latter figure represent women in management. (South Africa.Chamber of Mines, 2008) The general observations regarding why it is generally believed that there is no advancement for them in this industry are, amongst others, supported by the difficulties below.

- Women joining the mining industry are often perceived not to command sufficient knowledge of the industry or their workplaces and are frequently placed in inappropriate positions, thus setting them up for failure. Men in the industry become resistant to women being ‘pushed’ into workplaces, and do not see or hear of many ‘successes’, but rather focus on the ‘failures’.
- Physical constraints and health and safety are very real and perceived issues. This applies particularly to pregnancy and physical capacity where insufficient education is provided in respect of both women and their male counterparts. Specifically in terms of physical work capacity, insufficient care is taken in recruiting physically fit women, and in placing women in appropriate jobs.
- There is total disregard of equal employment opportunities which are viewed as simply rhetorical.
- There is a need for role models and mentors, and a lack of knowledge about career development opportunities.
- Concerns about the inequity of employee grading systems.
- Male counterparts tend to be protective of their territory and make sure that women are excluded from the so-called ‘old boys’ network.
• Site infrastructure (such as a nursing facility or crèches), changing facilities, medical facilities and the provision of personal protective equipment are often inadequate.

The above mentioned problems tie up with the research topic and questions being investigated, although the study is Platinum mining specific. Needless to say, the mining industry challenges at a higher level are pretty much generic and very similar.

While the South African Government has put in place a range of programmes to address the recruitment and advancement of women at both a corporate and operational level through progressive ground-breaking legislation such as the Mines Health and Safety Act of 1996, for instance, promulgated in order to remove the restrictions on women working underground, and the Employment Equity Act of 1998, intended to do away with discrimination on the grounds of gender, among others, there is clearly a need to try and understand some of the barriers to the employment of women in the industry and develop strategies to overcome these.

This report addresses the following research questions:

• Do SA Platinum mining companies recognize women’s advancement as a business imperative?
• Can women advance in these companies?
• Do women need support to advance in such companies?
• Is the leadership of Platinum SA mining companies embracing women’s advancement and talent?
• What should be done to address transformational barriers to this issue in the said companies?

The target set by the Chamber of Mines, that every mining company should achieve a proportion of 10% women in its workforce by 2010, is not just a question of placing women in the right jobs, but challenges years of tradition in the male-dominated underground environment.
Little research has been conducted into the topic being investigated, even less so in the South African Platinum sector, though much research has been conducted on women’s advancement issues in general. This study will consequently add to the new body of knowledge in the field being investigated across the globe, as women’s advancement and empowerment are now more frequently top of the agenda in government as well as business. The study further aims to assist both government and business in handling the challenges as its results have revealed where the challenges are and have led to recommendations to address the latter.

1.4 Research Objectives
The objective of this study is to carry out an in-depth analysis of transformational barriers towards women’s advancement in South African mining companies, through the investigation of the following objectives stemming from the research questions:

- To establish if SA Platinum mining companies recognize women’s advancement as a business imperative.
- To establish if women can advance in the said companies.
- To establish if women need support to advance in such companies.
- To establish if the leadership of SA Platinum mining companies embraces women’s talent?
- To recommend actions required in addressing the issues of transformational barriers to women’s advancement in SA Platinum mining companies.

1.5 Delimitations of the Study
In brief, the study does not include the mining industry as a whole. It only focuses on the Platinum sector, even though there may be useful guidelines for such other sectors emerging from this study. It also does not cover transformational barriers against women’s advancement outside South Africa. The selected sample excludes women employed in lower level grades, who may be the people affected directly by the problem. Members of junior to top management as identified in the sample may lead the study to run a high risk
of faking resulting to bias, by virtue of the position they occupy in the company.

1.6 Limitations of the Study
Three major issues emerged: Firstly, the unwillingness of some respondents to participate in the study. Secondly, the limited or non-existent participation of Board Members, that is, both Executives and Non-Executives, as a result of their travelling commitments, especially considering the current global economic situation, which calls for numerous strategic meetings to re-shape the industry. Thirdly, the current political and socio-economic climate in the country is bound to exert a negative impact on the results of the study.

1.7 Importance of the Study
This study will contribute to the body of knowledge in handling and dealing with women’s advancement in mining. The proposed research will explore ways and means of striking the balance in gender relations, thus creating positive synergies across gender in both family and work settings.

This should enhance women’s commitment, in wanting to do more to prove to their male counterparts that they are capable. The leadership should come to realise the effect and impact of driving transformation and commit their time to implementing and enhancing such initiatives as a business imperative in the future.

It is hoped that mining companies will realise the need for creating an environment where women will feel welcome and have a sense of belonging. This will call for improvement in facilities such as ablution facilities, drafting of key policies such as sexual harassment to protect all genders, in order to address behaviours and effect a paradigm shift. This could also assist employers in developing policies which are more family friendly, so as to integrate work and family life, reduce instability, improve quality output, minimise stress and enhance social wellbeing.

Education would play a major role in removing the obstacles towards these stereotypes. The younger generation will be educated about women’s issues
at a younger age thus assisting in obliterating negative stereotypes towards women.

Employers should also gain a fair understanding regarding the implementation of gender equality legislation within the workplace and eventually address the issues of unfair discrimination towards women.

(Moravec M, no date) indicated that it is time to overcome the psychological and bureaucratic barriers of transformation; he further mentioned that the risk of not changing is far more threatening. This study may well create good corporate citizenship and gender diversity in mining companies, increasing a firm’s value for its stakeholders.

1.8 Outline of the Research Report

The research report consists of 6 chapters and Appendix. The basic structure of these is:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Description</th>
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<tr>
<td>Chapter 2</td>
<td><strong>Foundation of the Study</strong> – This chapter addresses a range of issues concerning the perspectives on the topic. Detailed information on the subject is discussed to create a solid base on which to develop value adding arguments pertaining to the topic being investigated for a credible outcome of the study.</td>
</tr>
<tr>
<td>Chapter 3</td>
<td><strong>Literature review</strong> – This chapter evaluates the current critical analyses and body of knowledge about the chosen topic. Various academic arguments are debated, stemming from global, sectoral, industry and company levels. This chapter is also used in questionnaire design, so as to constitute a logical thought process in evolving questions to test the constructs and debate the theory adequately.</td>
</tr>
<tr>
<td>Chapter 4</td>
<td><strong>Research Methodology</strong> – This chapter explains the methodologies available to the researcher. It explains the philosophy behind each methodology, identifies each</td>
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<td>Chapter</td>
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<tr>
<td>Chapter 5</td>
<td><strong>Research Results</strong> – This chapter furnishes an analysis and synthesis of the material obtained through research. It tests the constructs in relation to theory. Results are interpreted in whatever appropriate form.</td>
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<tr>
<td>Chapter 6</td>
<td><strong>Discussion, Recommendations and Conclusion</strong> – This chapter discusses critical and key factors drawn from the study, makes recommendations concerning what can be done to tackle transformational barriers against women’s advancement in South African mining companies and arrives at a conclusion on the basis of the previous chapters’ results, Recommendations for further study are also discussed.</td>
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Table 1-1: Chapters Outline
Chapter 1
ORIENTATON

Chapter one discussed the orientation of the study, with reference to the background of the study, its problem statement and the importance of the research.

The next Chapter :2
FOUNDATION OF THE STUDY
explores the foundation of the study using Porter’s 5 Forces Model, a SWOT Analysis and a Stakeholder Analysis, as the models to evaluate the internal and external environments in which the Platinum mining industry operates.
2 CHAPTER 2: FOUNDATION OF THE STUDY

2.1 Introduction

The research at hand focuses on investigating transformational barriers erected against the advancement of women in South African Platinum mining companies. Taking into cognisance the research objectives in Chapter 1 above, an environmental diagnosis of the Platinum industry is conducted.

Three tools are identified to diagnose the industry, i.e. **Porter's 5 Forces Model**, a **SWOT analysis** and **Stakeholder analysis** as these tools are highly effective in analysing the competitive conditions of the industry, its attractiveness, level of sustainability and how the industry impacts on the macro environment. Below is a summary of how these forces impact on the industry.

2.2 Porter's 5 Forces Model

For the purpose of this study, the application of this model is two-fold, that is, from the Industry perspective and the Human Resources perspective.

2.2.1 Industry Perspective

This model sets an enterprise in connection with its environment as shown in the figure below. These forces are: Supplier Power, Threat by new competitors, Buyer power, Threat of substitutes and Competition in the industry itself. All five forces were considered in the analysis described in this report. Analysing the five forces together provided an overview of the industry’s attractiveness and sustainability.

![Porter's Five Forces Model](image)

*Figure 2-1: Porter’s Five Forces Model (Porter, 1990)*
a) Threats of new entrance
There are entry barriers to the Platinum Group Metals (PGM) market; this is due to the enormous sums of monies that must be invested into research and development, feasibility, and production methods. Starting up or buying a stake in mining is capital intensive. The current global economic situation exerts a huge impact as the financial institutions cannot grant credit.

The industry is also highly regulated, making it very difficult to enter. Some, if not all, Platinum mining companies have established co-operation with automobile manufacturers to achieve higher sales potential so as to remain in business, but these contracts are not easily attainable. Economies of scale will constitute another high entry hurdle, as the commodities are mass produced in tons and are not available for sale at per unit cost. Nevertheless, in the next few years large companies will continue to invest enormous sums towards PGM production. This type of investment is affordable to key players with huge capital earnings and strong balance sheets, such as large mining houses, fuel manufacturers, and high technology environment and energy companies.

b) Threat of Substitute
The threat to substitute is a reality, but to date, the only metal that is successfully being used as a substitute for platinum has been its cheaper sibling – palladium. There are six metals collectively referred to as “platinum group metals” and three of them – platinum, palladium and rhodium – are used in autocatalysis.

According to a Mining Week report (2008), South African platinum supplies are likely to be restricted by anything up to 300,000 ounces this year, as a result of the electricity supply problems; then, all other things being equal, that is, if jewellery demand were the only variable in the equation, it would have to contract by almost 20% in 2008 in order to offset the reduction in the primary supply of refined metal.
While it is too early yet to quantify the absolute shifts within the platinum and palladium markets, it is reasonable to say that platinum prices will remain high and that jewellery demand will suffer. The cautionary note which must be sounded, of course, is that when the market rids itself of this tightness then there is scope for plenty of profit taking. Since the early nineties palladium has been increasingly used to substitute for platinum in such catalysts.

c) Bargaining Power of Supplier
On one hand, the negotiation strength of the suppliers will be very strong. Platinum remains extremely high in price and is not easily available. Owing to the current economic conditions Platinum producers have cut the number of tons produced. Hence the price of this commodity remains unaffordable, especially to small scale mining companies. This continues to threaten the supply chain relationship with mining companies.

d) Bargaining Power of Buyers
On the other hand, the negotiation strength of the customers is large, because the customers, for example, the car manufacturers, will continue to concentrate on merging into a few large companies, which may each cover a reasonably substantial percentage of the worldwide vehicle market. Although the transfer costs (the switching from one buyer to another) will be high, Platinum mining companies will be able to exercise a strong market power.

The current market conditions increase the bargaining power of the commodity as mining companies are trying to get rid of inventories. The stockpiles currently set aside need to be sold for the sustainability of their business. Buyers can negotiate prices suitable to their affordability, making the industry even more volatile.

e) Competitive Rivalry within an Industry
The market power will be high as competitors can threaten platinum miners with palladium as a substitute. While it is too early yet to quantify the absolute shifts within the platinum and palladium markets, it is reasonable to say that platinum prices will remain high and that demand will suffer. Development in the platinum mining companies had already slowed down more than 24
months ago, as the South African rand weakened. In summary, it can be said that the competitive pressure within the PGM will increase. Future manufacturers cannot win the contest by simply lowering their price, because the cost of materials will remain too high.

Clearly, the above analysis shows that the industry is highly volatile, and that platinum mining companies could remain competitive for a long time if their business continues to grow. This will call for dynamic talent and a different touch with emotional, spiritual, cultural intelligence in the boardrooms to enable debates on issues beyond the global economic crisis. The question is: will the mining industry stand the test of time?

This chapter would not be complete without embarking on the same process from a Human Resources and Development (HRD) perspective. A detailed (HRD) analysis is further discussed using the same model: although the model was used to test the industry’s attractiveness and competitiveness, it was imperative to analyse whether the industry can cope with the people’s processes in relation to attraction, recruitment, development and retention of women as an integrated approach to handle the demands and pressures faced by it.

2.2.2 Human Resources Development Perspective using Porter’s 5 Forces
The Human Resources Development perspective affords an overview of the current observations, perceptions and the work done by various stakeholders in South African mining in general. The topic boasts little theoretical background, but is being discussed at various forums in the country and globally.

- Threats of new entrance
The demand for skills and shortage of skills in the platinum mining industry, including the shortage of engineers in general, call for a more innovative approach when recruiting, at all levels in the organisation. Innovative solutions such as transferability of skills should be implemented; it is cheaper to induct
external professionals into mining than to train them from scratch; the use of
retired and offshore professionals will provide short term relief; contractors
and foreign nationals could run key projects or act as coaches and mentors to
younger engineers. Organisations should also be focusing on internal skills,
assessing competency levels and whether there is potential to invest in
training for promotion.

It is in the area of gender equity that the most significant shifts have occurred
in the mining sector. There have been substantial increases in numbers of
women at top, senior and professional levels in mining. Much like the
construction sector, mining has traditionally been a male orientated industry,
with a large proportion of its operations teams being based on remote sites.
This together with the nature of the work (much of it being underground and
physically challenging), affects the number of women in the sector. There are
still substantially fewer women in technical and engineering disciplines across
disciplines and industries.

- **Threat of Substitute**

A significant increase in investment in the development of graduates, young
professionals and mid tier professionals, will help to balance the supply and
demand, and in the long run will be more cost effective. This implies that
executives’ incentives should be aligned to increasing skills across the
business, not just to the bottom line.

Traditionally, mining houses are conservative with slower career acceleration.
There has been a shift in the traditional hierarchical upward career
progression and a move to much shorter tenure. The change in the mining
business model, moving away from a cost centre to a profit centre, means
that individuals require both technical and commercial or business skills at
mine management level: this is quite a shift from the past focus on technical
skills only. Traditionally women have been snowed under with other
responsibilities such as home and child rearing, making it difficult for them to
advance to the level of their male counterparts.
• Bargaining Power of Supplier
A war for suitable talent is on: consulting firms have identified firms in the mining industry as potential business partners, and it is clear that this industry faces many organisational development issues. The dynamic nature of the environment calls for dynamic change management measures. Organisational structures within mining reflect the level of supplier requirements in terms of service delivery. The management of the supply chain with respect to the Human Resources departments as well as community requirements calls for adequate support of highly skilled individuals. The success of this industry lies in the skills mix stemming from both internal and external resources.

There is a major business risk in procuring services: only competent leadership and talent can identify potential suppliers. There are a number of opportunities and yet very few people possess the competencies to access these opportunities. The scorecard as a measure proposed by the Department of Minerals, to evaluate success of women advancement and other related transformational imperatives, monitors the progress of transformation to women who procure their services to the mines.

• Bargaining Power of Buyers
The reciprocal of supply is always demand; as with others, the mining industry is aggressively searching for talent. Hence its retention strategy is a major challenge.

Investment and spending in skills development is not just a scorecard measure: it is an economic imperative for a sustainable South African mining industry. Mining survey reports, by Remchannel, Compensation Technology and 21st Century remuneration and salary surveys companies, reveal how remuneration packages have tripled and quadrupled over the 2007 and 2008. Scarce skills incentives, shares, long term incentives, performance bonuses, retention incentives have become the norm in the mining sector. This will ensure that the skills premium for specific core business and scarce talent activities will continue to rise. Women advancing in these roles will be retained, creating long-term career paths.
Competitive Rivalry within an Industry

Mining companies are perfectly positioned to provide employees with opportunities for more involvement with a range of different projects — not only technical projects. International exposure and skills exchanges could also be made use of for broadening experience and supporting the retention strategy. This could place the mining sector amongst the prime employers in the future.

The hiring requirements will most likely cause their most severe effects at the managerial level. There is a perception that South Africa has an undersupply of qualified management personnel in this regard the mining companies and all corporate have been urged to produce qualified staff from within their own ranks as articulated in South Africa Skills Development Act. The managerial training of mineworkers, who in many cases do not hold any formal schooling qualifications, will come at a significant price. The same holds for the other goals of the South African Mining Charter including improvements in company housing and nutrition, and increases in home ownership among employees.

The unease about this new measure is, therefore, palpable. The charter adds to the already complicated picture of the mining industry, which is obliged to function under increasingly difficult conditions. The country's inflexible labour laws are a major concern for potential investors, and the recent nationalization of South Africa's mineral rights makes long-term returns on investment even more uncertain. The expansion of the mining companies overseas needs to be seen in the light of that increasing uncertainty. As such, the recent investments of South African companies in the mining operations in Canada, South America, and Australia must be perceived not as signs of growing prosperity, but as ways of getting the accumulated capital out of the country.

It appears clearly that South African companies are hedging their bets against future negative developments. If the problem being investigated is not accorded the attention by the business and government which it deserves, potential socio-economic and political issues will continue to emerge in the
country, bringing the nation down, irrespective of any endeavour by those in the country’s leadership roles.

### 2.3 SWOT Analysis

The Platinum industry, being the biggest player in South African mining, enjoys a strong position. However, the outlook for the mining industry globally is currently threatened, as a result of the world economic crisis.

This SWOT analysis framework attempts to discuss the issues relating to women’s advancement and seeks to identify potential micro-environmental challenges impacting on the study at hand.

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Table 2-1: SWOT Analysis

#### 2.3.1 Strengths

- **Investor relations can improve**

Bringing women into the mining industry and empowering them may attract more investors as the latter will perceive South Africa, as a progressive country.
Global investment opportunities

Several sets of challenges face contemporary mining in South Africa. In part, these take their origins from the legacy of apartheid with its human capital deficit and its consequent unique current social, political and economic transformation. In part, they relate to South Africa’s position in the world as an emerging economy and the timing and nature of its entry into the global economy.

In general, globalization entails systemic implications for an economy like South Africa’s. Not only does globalization expose the macro-economy to ongoing volatility but, with the market liberalization that inevitably follows in its wake, it also brings about considerable structural change at sectoral and microeconomic levels. The consequent technology changes in turn impact on the socio-political arena, further straining its already delicate balance.

According to the Department of Minerals and Energy (2008), South Africa possesses the largest resources in the world of platinum-group metals (over 85 percent), chromium (over 70 percent), manganese (80 percent) and gold (40 percent). It is therefore imperative for mining companies in the so-called “developing world” to take full advantage of the industry even though currently there is an economic slump, as the industry is naturally cyclical.

Furthermore, the prioritisation of favourable investment conditions provides mining companies with the ability to engage in what is popularly called a ‘race to the bottom’ by seeking to minimise costs by investing in countries that provide the lowest costs of production and regulatory standards.

Employment and offering of opportunities to women will raise the bar for others to start taking cognisance of environmental, labour and occupational health and safety standards because these factors are keys in mining and more visibly so when women are active participants.

Greater financial and mining company mobility has further enhanced the ability of mining companies to rapidly invest in ‘investor friendly economies’ and disinvest when they are no longer considered to be so.
2.3.2 Weaknesses

• **Time spent on training**
The one major concern about mines is the production process, which is very much time driven. Much concern has been expressed that production suffers as a result of lack of skills in women. Mine leaders are greatly pressurized to produce the required tons in time. This has a negative impact on training and skills transfer, as they perceive these as a waste of production time.

• **Lack of skills**
Modern large scale mining is very technical and requires highly skilled workers, which excludes women from the workforce where they have not had the same education, training and vocational opportunities as men.

• **Flexibility**
Lack of flexibility on the part of women is also seen as a major challenge towards their advancement. Most mining operations are twenty four hour processes, making it impossible for women to work certain shifts, due to family responsibilities.

• **Power still lies with white males**
Since its inception the mining industry has always been operating in terms of a gender-biased hierarchy, which is expressed in an unequal valuation of what is female and what are male and an unequal power distribution between men and women, even amongst male racial groups. Although progress has been made in all countries in public gender policymaking, this is not reflected in the field of specific social and labour plans.

• **Deadwood Retention**
Mining houses use the skills gap as an excuse for opposing the exclusion of women from the mining mainstream. The male retirees are often contracted after retirement, making it difficult for the mining artisans, graduates and women to occupy high positions. This exerts a huge influence on the advancement of women.

• **Transnational assignments**
When transnational corporations begin to work in mining, an ecological, social and gender imbalance takes place, affecting women in the communities
who have to take up new tasks. In mining districts, the assignment of roles to women becomes even more demanding as besides their productive and reproductive roles, the women workers’ civil rights are affected by an increase in discrimination and inequity. In many cases, women cannot afford to commute or transfer to other places far away from home due to family responsibilities.

2.3.3 Opportunities

- **Economic upliftment**
  Mineral commodities have become the potential life-blood that could finally bring economic growth and development to many areas of the continent where poverty is a major problem, creating real wealth and, as a spin off, the prospect of social harmony in the current strife-torn areas.

- **Skills development and transfers**
  Besides the threat that transformation will deny opportunities to males and the excuses by men that women are not competent, will take away the jobs held by males and dominate the industry, the transfer of skills presents an opportunity for the development of new women entrants into mining through mining charter initiatives. The new emerging mining graduates are therefore able to compete with white males and grasp these opportunities, as they have the right education, background and dynamic personalities.

- **Aging workforce**
  Most South African mines are headed by males with much experience, most of whom are retiring and leaving gaps to be filled. Even though currently there is a mine strategy to obtain these skills through contracting, natural attrition will eventually open opportunities: as the male workforce ages and becomes unable to work, women will enter the mining labour market.

- **Job opportunities**
  Factors such as the alteration in the mining legislation with a focus being placed on the development of Historically Disadvantaged South Africans (HDSA) including women, together with the mushrooming of small scale mining, indicate that more mines will be opened and eventually opportunities will be made available to the nation at large – especially its women.
2.3.4 Threats

- Health and safety

The struggle for women in mining is a long standing one, including fighting for better working conditions and safer living environments at the mine sites and in the communities, for equal participation and remuneration in employment, combating gender injustice, mine induced health problems and atrocities at the work place, as well as problems related to pregnancy, as some chemicals are harmful to unborn babies.

Women must face more complex health problems without any relief or rehabilitation. Culturally the status and spaces for livelihood and expression have dangerously affected women. Indigenous women are the worst sufferers as most large scale mining is displacing them from their lands and denying them access to and control over natural resources. The living and working conditions of women mine workers are fast deteriorating and yet the current legal protection, for women to demand their rights, is ineffective.

- HIV/AIDS

One cannot possibly underestimate the serious impact of mining on women’s health, particularly reproductive health, and more alarmingly, social health, with illnesses such as HIV/AIDS being reported in epidemic proportions in mining regions. The outright denial and continued callousness of the mining industry supported by weak and complicit governments are increasing the vulnerability of women to technological justifications, inaccessibility to information and rights of choice over their bodies and their dignities. The frustrations and lonely suffering of women exacerbated by mining are now leading to a breaking of this passivity, invisibility and silence.

- Mining Closure

Mining is inherently unsustainable: after mine closures, mining communities lose the support they have received and government may end up spending on scarce state resources to solve the huge post closure problems, which are the result of a weak legal framework for regulating mining activities in addition to a weak capacity to monitor strategy. This poses numerous threats, making the women in mining initiatives counter productive.
• **Women are set up for failure**

Where women are present as workers, they are placed either in processing and highly hazardous areas of the mining activities or in administration, where they will not add much value. The control of mineral extraction and processing by the multinational mining industry has brought in worse forms of exploitation of women by downsizing labour; which means women are the first to be retrenched, and by destroying community or traditional mining activities which are the location where women’s work is evident as part of community livelihoods.

• **Cyclical nature of the industry**

The cyclical nature of the industry makes it difficult to ensure continuity and to track the progress of women. Retrenchment, and sometimes job transfers, disrupts the social labour plan, making it difficult for the government to penalize non delivery as regards any interventions, as the reasons are operationally motivated.

2.4 **Stakeholder Analysis**

Various stakeholders exert an impact in terms of influencing the relationships of the mining industry. The Platinum mines in South Africa are located in various provinces which make various demands and have differing expectations of how the relationship should work. Most relationships take a *tripartite form, where organised labour, employees and employer represent primary relations*. Further stakeholders identified in line with the study and objectives are: **owners, shareholders, employers, employees, the Chamber of Mines, the Department of Minerals and Energy, Communities, Business Associations and others (Academics, scientists, researchers and NGO’S)**. The analysis of the various stakeholders’ responsibilities and undertakings in terms of the Mining Charter requirements for the purpose of this study is limited to human resources development. Table 2, further, outlines the stakeholder analysis on the basis of **economic, legal, ethical and philanthropic perspectives**
<table>
<thead>
<tr>
<th>STAKEHOLDERS</th>
<th>PURPOSE</th>
<th>FACTORS CONTRIBUTING TO STAKEHOLDERS RELATIONS</th>
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| Owners                       | To buy-in as regards women’s advancement opportunities in support of the Mining Charter.  
                              | To provide funding for programmes and projects to benefit the society in which the mine is located. | ECONOMIC  
In order to measure progress on the broad transformation front the following indicators are important:  
The currency of measures of transformation and ownership could, inter alia, be that of market share as measured by attributable units of South African production controlled by HDSA’s, including women.  
That there would be capacity for offsets which would entail credits / offsets to allow for flexibility.  
The Government to consider special incentives to encourage HDSA companies to hold on to newly acquired equity for a reasonable period. |
| Shareholders                 | To invest in the mining operations to maintain future sustainability and profitability. | LEGAL  
The Department of Minerals and Energy will, therefore, continue promoting investment in unexploited or minimally exploited but economically viable mineral deposits thus maintaining and enhancing the currently high global competitiveness in mineral production and sales. Steps taken at state level to ensure that mineral exploitation continues to play a major role in supporting the economy will involve the Department of Minerals and Energy in cooperation with other related government departments.  
The steps taken will include:  
Maintaining ongoing macroeconomic stability;  
Advising on the need to maintain a fiscal environment that will always encourage investment  
Maintaining competitive energy prices  
To facilitate the processing of licence conversions through a scorecard approach to the different facets of promoting broad based socio economic empowerment in the mining industry.  
This scorecard approach would recognise commitments of the stakeholders at the levels of ownership, management, employment equity, human resource development, procurement and beneficiation. |
| Employer                     | To create opportunities for communities with specific reference to women’s advancement.  
                              | To be ethical towards its stakeholders.  
                              | To improve the conditions of the communities.  
                              | To protect the community and environment. | ETHICAL  
Follow development strategies that help poor people, protect the environment.  
Enable the meaningful participation of civil society in decisions on extractive industry projects.  
Ensure that corporate contracts are fair and publicly disclosed, and benefit local communities. |
| Employees                    | To serve the mines with integrity, honesty, trust.  
                              | To act as custodians of the operations.  
                              | To deliver the service to keep the mines sustainable. | PHILANTROPIC  
Corporate Social Responsibility  
While there are no standard definitions, ‘corporate responsibility’, ‘corporate accountability’ and corporate citizenship are broadly synonymous terms. Corporate responsibility generally refers to business decision-making that is linked to ethical values, occupational health and safety, labour practices and respect for people, communities, and the environment. It recognises that a company or business-like organisation has social, cultural, and environmental.

| Chamber of Mines             | To facilitate the relationship between the DME and all stakeholders |  |
| Department of Minerals and Energy | Promote equitable access to the nation’s mineral resources to all the people of South Africa;  
                                 | Substantially and meaningfully expand opportunities for HDSA’s, including women, to enter the mining and minerals industry and to benefit from the exploitation of the nation’s mineral resources;  
                                 | Utilise the existing skills base for the empowerment of HDSA’s;  
                                 | Expand the skills base of HDSA’s in order to serve the community;  
                                 | Promote employment and advance the social and economic welfare of mining communities and the major labour sending areas; and  
                                 | Promote beneficiation of South Africa’s mineral commodities;  
                                 | Regulate the industry in line with the mining charter and other relevant legislation. |  |
| Business Associations        | To be proactive in engaging with the global economy. Enable business to flourish, and its enormous capacity to be fully utilized in the service of sustainable growth and development as regards the broader society. |  |
| Communities                  | To protect the interests of the community members,  
                              | Manage environmental issues,  
                              | Ensure a safe and harmless environment |  |
| Organised Labour And others (NGO’S, academicians and researchers, professionals etc) | To negotiate matters of common interest with stakeholders in betterment of the life of their members.  
                              | To ensure harmonious relations with all parties. NGO’s to fight displacement issues, social, cultural and legal violations faced by human beings. |  |

**Table 2-2: Stakeholder Analysis**
All stakeholders have a responsibility for promoting responsible mining that generates gender-sensitive socio-economic changes, taking into account cultural values, beliefs, ethnicity and promoting technological, financial, educational and health-related adequacy in accordance with the viewpoint of women related to and affected by mining. These stakeholders must therefore focus on strategy building to exert an influence on specific policies for women miners, housewives, union workers and women in communities affected and displaced by mining.

In many cases, the role of women in the mining communities is significantly different from men’s roles, because they are subject to different risks and opportunities since their needs and demands are often ignored both in private initiatives and in government development plans and programmes. It cannot be assumed that women automatically benefit from economic development efforts, especially in respect of traditionally male dominated industries such as large-scale mining. As women are primarily in the informal and invisible labour force, and are often not active or only partially active within the paid labour force, especially in relation to male dominated activities such as large scale mining, their non-paid labour has no ‘economic’ value.

As mentioned, mining is a very masculine, gender exclusive and discriminatory industry. Countries where mining is a predominant economic activity are not necessarily the most prosperous ones. On the other hand, the situation may be just the opposite. Privatization is hitting hard and the biggest reality for mine labour is that women are almost entirely being driven into the unorganized and informal sector.

Gender studies on the impact of mining would be helpful in gaining a clear understanding of the many problems that confront women affected by it; effective mining advocacy cannot succeed without the involvement of women in the campaigns. South African societies, and hence their economies, require a comprehensive development emphasising a single equitable citizenship that becomes apparent in any type of public actions, including legislation, policies
and programmes, with an influence on decision-making spaces within organisations.

The fact is that mining causes uncertainty in the associated communities as mining could give rise to an environmental liability, to the detriment of their living environment. However, at the same time, exploitation of resources could also provide an income.

2.5 Conclusion
Mining operations do not occur in isolation and without an impact on the society and environment in which they operate. The industry’s competitiveness and a more attractive development of its (female) human resources make perfect sense as the two need each other for survival and sustainability.

The rising numbers of women entering the industry pose a number of threats: this is not only as regards to their male counterparts who feel threatened, but is also more skills related, where the inability to perform and lack of training become major obstacles to advancement.

Times have changed; the early mining industry was built on back-breaking labour performed by poorly paid black men, who were prohibited from rising to skilled and professional posts. Gone are the days where women were relegated to low-level posts such as those of clerks. Women are making great strides in this industry, which will continue to be an issue to be debated in business and government. Yet they still only comprise a fraction of the mining workforce and less than a handful has made it into the top positions in South Africa.
3 CHAPTER 3: LITERATURE REVIEW

3.1 Introduction

The discipline of Leadership and Change Management and the approaches associated with it are explored to analyse various pieces of literature for this study.

3.2 Umbrella Approach

This chapter then indicates and describes the barriers to women’s advancement in the corporate environment, taking into consideration the various perspectives in terms of which women experience transformational barriers. Figure 2 hereunder furnishes an indication of how these perspectives integrate into a bigger system.

![Umbrella Approach Diagram]

Figure 3-1: Umbrella Approach

3.2.1 A Global Perspective

Globalization has not only altered the environment for doing business in South Africa, but also quite dramatically exposed inherent fault-lines in business organizations in the country. Globally, the environment has become more competitive and dynamic, so that various leaders throughout the world have
realised the need to make changes in their way of operating if their organisations are to survive (Kotter, 1990).

According to Mihail (2006), on a global scale, women represent a relatively untapped source of talent in the workplace albeit progress has been made over the last decades; barriers to women’s advancement continue to persist. Magazine headlines and a growing number of surveys highlight the glass ceiling, a concept that refers to the experience of women when they face a subtle set of barriers to career advancement. While women’s achievements of higher levels of education and accumulation of human capital allow them to obtain entry-level positions, these are not sufficient to lead women to positions of power. Hence, the advancement of women into management has not kept pace with the astonishing increase of numbers of working women in corporations across industrialized economies (International Labour Organisation, 2003).

Burker (2001) argued that the trend of women entering the workplace have increased in numbers over decades in all developed and developing countries: their pursuits of education have shifted to the professions of business management, engineering and computer science. Burker (2001) further confirmed the level which women have made great strides in entering management in various professions; however, this has not transformed the way in which business perceives women globally. According to recent research, much of the problem lies at the leadership development stage within an organization. Whilst companies are good at recruiting from a diverse group, they are less competent at ensuring that high potential minorities are identified and developed. Reasons for this include:

- few role models, mentors or established networks;
- roles and abilities subject to stereotyping;
- lack of visibility; and
- family commitments.
According to (Kephart and Schumacher, 2005) women have been struggling within all types of organisations for equal roles and equal respect alongside their male counterparts for years. According to (Linstead, 2000), top women executives in most global companies do not have families, are very much career oriented, have abrasive personalities and exercise a very masculine leadership style. The fact is that as a female leader at that level, pressures seem to be very heavy and female leaders have to constantly defend themselves, since they cannot join the so called ‘old boys’ club’. Gender formation issues such as displacement, marginalisation, exclusion, obstruction of women’s progress display a general subjectivity in this regard.

The common known barriers internationally in terms of women’s advancement are those of striking the balance between family and career, a national ideology which tends towards chauvinism and a lack of policies and diversity programmes in support of their career advancement. According to Burke (2001), generally, in almost all countries, management is perceived as a career suitable for men, thus dominated by them. This applies even in those countries where women are highly educated. Globally women have complained of having to deal with blocked mobility, discrimination and stereotypes.

Women are faced with the challenge of coping with two and yet incompatible roles, which men do not have to face: the issue is not whether women should work or not but rather how to juggle the two. Economically, at the rate the global market is taking shape, women cannot be housewives and depend on their husband for survival anymore. Men are generally accepted as sole providers, however; hence their career mobility is not questionable.

According to Bajdo and Dickson (2001), there is a challenge stemming from the cultural fit, where transformation takes place. Most women experience the cultural fit in a male dominated environment as a barrier to their advancement. The recent research conducted by GLOBE (Global Leadership and Organisational Behavioural Effectiveness) over 62 cultures throughout the world, in which 170 social scientists and management scholars collaborate to
examine interrelationships between societal cultures, organisational cultures and organisational leadership practice. From this study one can adduce sound cultural fit arguments. Yousry (2006) holds the view that as more and more women migrate into existing corporate cultures, create value and gather agreement, women will naturally begin to find more other women at the top. Women tend to stop and neglect to understand and appreciate the underlying culture that is weighted toward men. Yousry (2006) further emphasised the fact that women have to learn the language of the culture if they want to be at the top.

Culture consists of a set of basic assumptions that are shared by the people belonging to that culture. It also includes the various artefacts through which those basic assumptions are expressed. Authentic transformational leadership requires that one first learn the distinction between the essentials and the non-essentials in everything. Uprooting people and making them adopt an alien culture ignores the essentials, while refusing to alter certain non-essentials that need to be modified to keep pace with the changing environment. In the first place, certain artefacts and practices must be changed, for they may no longer be relevant to the times and could even be actually harmful.

Organisations need to be ready for and strive to promote transformation. Some international companies have gone as far as altering their recruitment and selection process, inviting females who are underrepresented to apply, by placing a positive statement to attract females in their job advertisements (Anonymous, 2003).

There is a need for establishing a theory of global leadership, to overcome the barriers of transformation against women advancement. The ‘old-boy network’ will continue to constitute a barrier if organisations do not devise creative gender equality measures to demolish these barriers.
3.2.2 South African Perspective

Southern Africa is one of the least developed regions in the world. The current crisis of development arose through debt, falling commodity prices, falling per capita food production, growing poverty, socio-economic differentials both within developing countries and between countries (Adams, 2001).

The mining industry in South Africa has seen significant restructuring and changes since the early 90s with the traditional “big six” mining houses, Anglo American, De Beers, Gencor, Billiton, Goldfields, Johannesburg Consolidated Investments, Anglovaal and Rand Mines being restructured and extending their global presence. These companies traditionally controlled gold, platinum, chrome, coal, diamonds and base metal production in South Africa. The advent of a new democratic constitution and rising costs from gold mining activities resulted in several changes in the industry.

According to the Department of Labour and Minerals Energy Report (2005), in this country, platinum-group metals, together with the by-products gold, silver, nickel, copper and cobalt, occur in economically viable concentrations in three separate, extensive layered reefs associated with the mafic rocks of the Rustenburg Layered Suite of the Bushveld Complex. Annexure 1 shows the geographical location of Platinum operations in South Africa.

The Department of Minerals and Energy (No Date) has made public statements in various reports, publications, conferences and seminars that it is strongly committed to resolving the issues which women experience in mining. The department acknowledges that there are a number of matters that need to be addressed, as this is a relatively new concept in South Africa.

In general, South African society is still grappling with getting women into the working place. There have been some great advancements and a number of very positive events. However, there are also a number of remaining challenges. Several cultural and social issues and some discriminatory matters still exist quite strongly and must be dealt with. And there are numerous practical issues as well in terms of infrastructure. Incorporating
women into the mines is a slow process of change that needs to be championed by those global countries such as the USA, Australia and Canada who have already gained experience.

According to the Department of Minerals and Energy (2006), a certain transformation manager from a major platinum mine indicated that they could just recruit a thousand women tomorrow, but would probably lose them in two months for reasons such as a lack of readiness, in terms of male counterparts and all other employees, to manage and handle issues of women in mining: this person emphasised that it is a case of being ready, set-up and having everything in place to deal with the changes in the South African mining industry.

The heart of the capitalist economy, in other words, the energy, mining, metal, engineering, transport, petro-chemical industries, is all but closed to women (Horn, 1991). In South Africa, employers in these sectors unashamedly offer training opportunities and employment to males only. One obvious task in creating equality for women is therefore to introduce effective employment equity in all sectors of the economy and, in addition, to implement affirmative action programmes to phase women into these sectors at an accelerated rate in order to equalise the proportions of men and women employed in traditionally male sectors of the economy. Clearly this would go hand in hand with the transformation of the education system. Women also need to be drawn into political and professional life, at all levels, not merely in the lower ranks, as is usually the case.

Trade unions bear a responsibility in pushing for the transformation of women’s marginal role in the formal economy. However, all over the world, and South Africa is not an exception, unions tend to display the same patriarchal character as the rest of society, because patriarchy is not specific to the bourgeoisie: it is equally strongly entrenched among the working class. This means that presently in trade unions, it is not always easy to accord priority to gender issues. Even where a few of the more glaring gender issues are suitably dealt with, it is almost impossible to gain a real commitment from
the progressive unions to fighting all aspects of gender discrimination in the same way in which there is a real commitment to combating all aspects of race discrimination. Paradoxically, the level of gender sensitivity is often even lower in unions with a high proportion of women members than in those with very few women members.

The emancipation of women in South Africa requires national liberation, the transformation of gender relations and an end to exploitation. According to (Horn, 1991) this can only be addressed as part of a total revolutionary transformation of South African social and economic relations. “National liberation does not automatically guarantee the emancipation of women” (South Africa. African National Congress Programme of Action, 1990). The document just cited further articulated that the emancipation of women concerns the right to participate fully and on a basis of equality in all decision making. This is of crucial importance for post apartheid South Africa, but needs to be implemented within the ANC and the mass democratic movement: here the absence of women at decision and policy making levels is glaring and makes nonsense of any theoretical commitment to emancipation. This confirms that gender empowerment issues are a national issue that need to be dealt with on the Government level.

The argument that women need to be developed is no more valid than when it was used by colonialists to deny Africans their right to self-determination. While acknowledging that women have been disadvantaged in education, and often lack experience and skills, there is a tremendous under-utilisation of the many capable women in the liberation movement. Since the research problem’s theme is workplace inclined, a need to start by defining legislation relevant to the study is important in order to understand the fit of the industry in question as regards compliance with legislation.

- Legislation and policy which impacts on women in mining

Section 9 of the South African constitution precludes discrimination based on gender. With the adoption of the Mine Health and Safety Act in 1996, restrictions on women working on mines, including underground, were lifted.
Current South African legislation on women and mining is more progressive than existing international norms and practices.

According to the International Labour Organisation (no date), no female should be employed underground on any mine, but it does allow for national laws to provide for exemptions. The assumption behind the ILO ban on women working underground is the perceived danger to them. According to the National Union of Mine Workers (NUM) this argument is outdated. According to the South African Medical Research Council (SAMRC) they possess no information that would support a blanket ban on women working underground. To date, most mines in South Africa do not allow pregnant women to work underground due to potential health risks.

South Africa’s Employment Equity Act aims at "implementing positive measures to redress the disadvantages in employment experienced by black people, women and people with disabilities, in order to ensure their equitable representation in all occupational categories and levels in the workforce" and requires an employment equity plan (Section 17) and monitoring thereof (Section 21).

This Act is aimed at redressing apartheid labour discrimination. Women’s incomes are lower than men’s in SA, but the average income of a black man is less than that of a white woman (International Labour Organisation, no date). The surveys of the mining houses, available from the DME, advised that women and men were paid equally for equal work as per South African labour legislation.

Implications of the Employment Equity Act for the mining industry include the need for training opportunities to be extended more proactively to women, and the active promotion of qualified women within the mining hierarchy. Implementation of the Act to the mining industry will ensure over time that the mining industry will gradually be transformed from a male dominated sphere into one which is more gender inclusive. It is however important that the mining industry recognise the social and economic value of employing women. It would be unfortunate if the industry only employed women to comply with labour legislation.
The **Labour Relations Act** is concerned primarily with the rights and obligations of organised workers. Only 26.3% of economically active women are members of trade unions (O’Regan and Thompson, 1993) as cited in Wentzel et al., MEPC (1999). Only 2% of NUM’s members are women. (South Africa. National Union of Mine Workers, Gender Policy Document, 1998).

The purpose of the **Skills Development Act no 97 of 1998** is to “provide an institutional framework to devise and implement national, sector and workplace strategies; to develop and improve the skills of the South African workforce; to integrate those strategies within the National Qualifications Framework contemplated in the South African Qualifications Authority Act, 1995; to provide for learnerships that lead to recognised occupational qualifications; to provide for the financing of skills development by means of a levy-grant scheme and a National Skills Fund; to provide for and regulate employment services; and to provide for matters connected therewith” [http://www.dol.gov.za](http://www.dol.gov.za).

This act will assist in evaluating the learning and developments initiatives and ensuring that these initiatives accord priority to Previously Disadvantaged Individuals as a way of skills transfer, talent development and promotion of a more informed and confident workforce. These Acts and all other relevant theory will be used throughout the literature review to form a solid base for the argument.

I have noted in official documents of government and the unions that there is generally an acknowledgement that the issue of women in mining needs to be addressed. In policy documents there is often one line which notes this, but I have not found much evidence of translating the commitment into practice, except as guided by the Mining Charter. This could point to a lack of capacity to implement gender-specific initiatives within the mining industry; a further study could attest to this assertion and establish how the commitments are being translated into practice.
3.2.3 Industry Perspective

It can be said that mining was and is the foundation of the South African economy.

As mentioned, South Africa is one of the world’s and Africa’s most important mining countries in terms of the variety and quantity of minerals produced. It is the leading source of nearly all of Africa’s metals and minerals production apart from diamonds (Botswana and the DRC), uranium (Niger), copper and cobalt (Zambia and the DRC) and phosphates (Morocco). [http://www.jse.com](http://www.jse.com). Only crude oil and bauxite are not found here.

The objective of this report, as has been stated, is to investigate women advancement barriers within South Africa’s Platinum mining sector with a view to develop strategies to overcome these in future. This study focuses on the South African experience as it is the one country in the Southern African Development Countries region where, due to constitutional changes securing gender equality, policy and legislation have been amended on an ongoing basis.

There is not much recorded involvement of women’s participation in the formal South African Platinum mining industry. The mining industry, as was pointed out, has been called the ‘last bastion of exclusive male employment’, with women’s participation in the industry limited to administrative staff.

Over the past few years with changes in government policy and legislation, this situation has gradually begun to change. For at least the last fifteen years, the South African mining industry has been a job-shedding industry; hence the enabling policy and legislation allowing women to participate in mining, has not been matched by job-creation opportunities in the sector.

Compared to other employment sectors, women’s integration into mining has been slow, and while some progress has been made, women working underground are very much a novelty in South Africa, with images of women mineworkers occupying headline news. This sector is often associated with unsafe working conditions, a historically unregulated policy environment and a
lack of appropriate mining technology. Women enter small scale mining primarily as a means of survival (South Africa. Women in Mining Association, 2005).

Mining continues to support and stimulate growth and development in the country. Mining companies contribute extensively to South Africa’s tax base; rail, road and port development is more often than not spurred on by the development of new and extended mining operations; new towns are established in mineral rich areas; it attracts new investment into the economy; it leads the way in empowerment, skills development and transformation; and it injects over R40-billion into the economy via wages (South Africa. Chamber of Mines, 2008).

Historically, there have been few women in the mining industry and none in management positions. SA society is characterised by a state of flux in which the new imperatives of sustainability increasingly influence the way in which we live and work. The mining industry is not immune from this and is probably more deeply affected by these changes than other sectors of the economy. This is evidenced by the extensive support given by mining companies, governments, organised labour and academia to the mining, minerals and sustainable development as indicated in chapter 2 under stakeholder analysis above.

3.2.4 Platinum Sector Perspective
There is no academic literature covering the topic at a sector level, as has been mentioned.

According to the Department of Minerals and Energy (no date): only about 5% of employees in the formal mining sector are women, most of whom hold clerical positions, while about 32% are working as clerks, with service workers accounting for 11%, and technicians for 12%. Seventeen percent are labourers, with professional services accounting for 7%, and senior managers or owners accounting for only 3%. This source (South Africa. Department of Minerals and Energy, no date) further alluded to the fact that this is amongst other factors perpetuated by the fact that large-scale mining
companies enter into negotiations only with the men or traditional leaders of communities, making women neither party to negotiations nor beneficiaries of the royalties or compensation.

In an interview with *South Africa. Mining Week*, Sonjica (no date) said the 10% female employment suggested in the Mining Charter should serve to create an opportunity for women to compete on an equal footing with their male counterparts. Sonjica (no date) perceives non-sexism as a constitutional obligation, and adds that attaining it is also about opening up opportunities in all sectors of society for women to participate. But in the process of doing this, one needs to ensure that the environment is enabling.

The biggest challenge that “Sonjica” (no date) identified as a weakness is that there are currently no regulations in place to enforce compliance with the Mining Charter. According to the Department of Trade and Industry (no date), quotas are expected to guide the way that it regulates all sectors. The matter of gender equity in mining should be looked upon as part of what government envisages for the country and society as a whole as it contributes towards the ideal of a non-sexist society. For instance, the adoption of a mining “empowerment charter” in 2002 that pledged 25 percent of the industry to blacks in 2015 has led to the formation of the Women in Oil and Energy South Africa (Woesa) with 396-member “black empowerment” companies seeking to take advantage of the opportunities created by the government-mediated charter (Mail & Guardian, 2002).

There have been many positive deals which are Black Economic Empowered; amongst other reasons these deals were intended to improve the current state of women’s empowerment in mining as per the DTI quotas. Commenting on these deals, Anglo American Chief Executive Officer in South Africa (Cynthia Carroll, no date) said: “This is a truly historic BEE transaction that will fundamentally transform the South African platinum mining industry through the creation of two major independent HDSA managed and controlled producers”. Carroll (no date) mentioned that the sale of mining assets by Anglo Platinum will achieve meaningful, sustainable and broad-based
empowerment through the participation of communities, employees and women.

An organisation such as Anglo American is strongly committed to the equitable and sustainable development of the countries and communities in which Anglo American operates. Carroll (no date) regards this as a step forward in the empowerment of Anglo American South African operations, but warns that transformation is likely to take several years as there is a great deal that still needs to be done to improve the situation, and that is changing a life-long legacy of patriarchy.

Studies carried out by the United Nations Development Fund for Women (2005) through the SADC Gender Programme in Zambia, Tanzania and Zimbabwe found that a general lack of know-how and technical skills, working in a haphazard manner in dangerous conditions, a lack of mineral beneficiation knowledge, and most important, a lack of financial resources to invest in mining operations, were the main barriers to women entering the industry [http://www.sawima.co.za](http://www.sawima.co.za).

- In South Africa, the SADC Women in Mining Trust approached the Department of Minerals and Energy to form a women in mining branch. Women from all the nine provinces in South Africa were mobilized and the South African Women In Mining Association was launched in December 1999, with the following objectives:
  - To assist informal mining groups to obtain mineral rights and run mining businesses/operations and
  - To promote female empowerment in the mining sector in accordance with provisions of the Mining Charter.

Despite a scattering of women fighting their way into the mining industry over the years since then (Anonymous, 2007), the increase in the number of women working in non-clerical or non-support services in the industry has been slow. While the underground environment is a very much a social environment that can be hostile to women who often fear and also experience
sexual harassment or intimidation or even assault, it is also a harsh physical working environment which emphasizes the physiological differences between men and women.

There are four categories of physical constraints. These are aerobic capacity, heat tolerance, and functional strength and body dimensions. Aerobic capacity is the ability to perform work in which the body uses oxygen; and a woman’s maximum aerobic capacity is 15% to 30% less than man’s. Women are also less tolerant of heat than men and possess less functional body strength than men. Equipment in the industry is also designed for the body dimensions of men, who are often taller than women. However, this does not mean women should not work underground. It also does not mean that because women are physically different, they cannot work underground.

These issues can all be addressed by management and technology. Impala Platinum has proved this. Since 2004, when its female workforce was 2.6%, it has increased the proportion of the female contingent of its workforce to 5.6%. One of the initiatives that have assisted in this is the mining company’s pre-employment induction programme that takes the women through medical tests for fitness, heat tolerance screening and underground visits. In this way women have an idea of what is in store for them if they sign up [link to website].

Because of the South African government’s constitutional commitment to ensuring gender equality, as Broece (1999) indicates a number of laws have been passed to aid this process. The legislative and policy environment is now an enabling one to ensure that women advance in the mining sector. Also, both the Minister and Deputy Minister of Minerals and Energy are women. Whether gender issues have received more attention than if there had been male ministers, is hard to predict. However, the fact that women were appointed into ministerial positions, covering traditionally male sectors, also speaks to a commitment to changing the face of the industry.

In assessing the above factors, in researching the topic it was imperative to further understand the body of knowledge covering leadership, which consists
of organizational leadership and transformational leadership and their effects, since leadership plays a key role in transformation. A discussion of transformational leadership is also considered to advance sound arguments in an attempt to support the umbrella approach in Figure 3.1, above, since the umbrella approach cannot take place in the vacuum, but only within a subsystem that comprises people, processes, and finances and so on.

### 3.3 Leadership Approach

Leadership is a multifaceted subject that has long excited interest among people. It has been defined in terms of traits, behaviours, influence, interaction patterns, role relationships, and occupation of a senior administrative position. There are almost as many definitions of leadership as there are persons who have attempted to define the concept.

Definitions of leadership date back many decades: Bass began with Burns’s (1978) definition of a transformational leader as an individual who raises his/her followers’ level of consciousness about the importance and value of designated outcomes and ways of reaching them; causes them to transcend their own self-interests for the sake of the team, organization, or larger polity; and raises their level of need from lower-level concerns for safety and security to higher-level needs for achievement and self-actualization.

Yukl (2002) defines leadership as the process of influencing others to know what they have to do and how it can be done effectively and the process of facilitating people to pursue their common and shared objectives.

The following are some of the representative definitions presented over the past 50 years:

- Leadership is “the behaviour of an individual…directing the activities of a group toward a shared goal” (Hemphill & Coons, 1957, p. 7).
• Leadership is “the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organisation…” (House et al., 1999, p.184).

• Leadership is the process of influencing others to understand and to agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives (Yukl, 2005, p. 8).

3.3.1 The Theory of leadership

Almost all leadership theory is based on the relative importance assigned to the leader versus the follower in mission accomplishment. However, one questions what effect this has on employee attitudes and behaviour. Although there are many factors affecting these, research to date implies that these are influenced to some extent by leadership style.

Because leadership conveys so many different meanings to different people, some theorists question whether it is even useful as a scientific construct (e.g. Alvesson & Sveningsson, 2003; Milner, 1975). Nevertheless, most behavioural scientists and practitioners seem to believe leadership is a real phenomenon that is important for the effectiveness of the organizations.

Most definitions of leadership focus on behaviors' used to directly influence followers. Most theories and empirical studies deal with such influence on immediate subordinates, but a middle manager can also directly influence lower-level employees, peers, bosses, or outsiders such as clients and customers. Some theorists make a distinction between direct and indirect leadership (Hunt, 1991; Lord and Mhar, 1991, Yukl and Lepsinger, 2004). Indirect leadership can take different forms, some of which provide an opportunity to exert a stronger, more lasting influence than is possible with direct leadership. Direct and indirect leadership are not mutually exclusive, and they can be used together in a consistent way to amplify their effects. The
transformational leadership approach attempts to address the inherent limitations of previous leadership theories, such as their inherent generality.

### 3.3.2 Transformational leadership

Transformational or charismatic leadership is usually contrasted with transactional leadership. By defining the need for change, creating new visions, and mobilizing commitment to these visions, leaders can ultimately transform organizations.

Shiraz (2008) developed a model for theories of effective leadership. He named it the Developmental Leadership Model. According to Shiraz this model is inspired by the transformational and functionalistic leadership approaches. It consists of three factors: the **exemplary model**, **individualized consideration** and **inspiration and motivation**.

![Figure 3-2: Development Leadership Model (Shiraz, 2008)](image-url)
The model ultimately reveals the positive correlation between organisational results and individual development. Whilst all other conventional leadership processes are being followed, this is the ultimate goal. Various leadership theories were considered in the developmental phase as they exert direct influences on this model. Some of the theories that contributed to this model are as follows.

a) **Path-goal theory**
This was developed to explain how the behaviour of a leader influences the satisfaction, motivation and performance of subordinates. It has made a significant contribution to the study of leadership by providing a conceptual framework to guide researchers in identifying potentially relevant situational variables despite its limitations.

Leadership aims to increase subordinates’ effort and satisfaction by increasing self-confidence, lowering anxiety, and minimizing unpleasant aspects of the work. The path goal theory of leadership examines how aspects of leader behaviour influence subordinates’ *satisfaction and motivation*.

b) **Situational leadership theory**
Identified the appropriate mix of task and relations behaviour for the leader which depends on the confidence and skill of a subordinate in relation to the task.

c) **Leadership substitute’s theory**
Reemphasized the role of formal leaders by showing how their influence can be replaced by work design, reward systems, informal peer leadership, and self-management.

The importance of leadership to the change management process is underscored by the fact that change, by definition, requires creating a new system and then institutionalizing the new approaches (Kotter, 1995).
To effectively adapt to change, most established organizations have a daunting task ahead of them in a variety of operational and procedural areas. Business processes must be redefined, redesigned and adapted to specific geographical and cultural settings. The workforce needs to be retrained to be ready for changes in how work is done, what skills and knowledge is needed, and how to relate to global collaborators and customers (Kaminski, 2000).

On the other hand, Weber (2006) has defined key leadership characteristics as follows:

**Focus of Attention**
Behaviours and actions by management clearly identified the major priorities, interests, and commitments of management to the centrality of these priorities.

**Goal-Directed Activity**
Management sets a process in place for the orderly and systematic monitoring and assessment of progress in those areas that were the focus of attention; organizational and individual goals were clearly derived from the overall mission of the organization.

**Modelling of Positive Behaviour**
Typical activities of managers modelled the particular behaviours necessary to meet the goals and fulfill the mission of the organization.

**Emphasis on Human Resources**
Management placed an emphasis on staff empowerment, and sophisticated staff development processes.

The more competent the leadership of an organisation the more effectively it can bring about employee engagement. Such engagement and an engaging organisational culture is a strategic imperative to maintain or grow a competitive advantage [www.talentline.co.za](http://www.talentline.co.za).

Research has indicated that a key cause of a lack of employee engagement may indeed be a lack of leadership competence to create this engaging environment. One study (Talentline, 2008) has revealed that, in almost all of
the companies where the development centre was deployed the average levels of competence displayed by South African leaders for each of the three competency clusters are as follows:

- Transactional competencies range from 60% to 90% competence levels;
- Transformational competencies range from 30% to 70% competence levels; and
- Transcendental competencies range from 10% to 60% competence levels.

![Figure 3-3: South African Leadership Competencies (Talentline, 2008)](image)

This result suggests that for the three leadership competence clusters, 80% competence is more than acceptable. The findings clearly show that transformational and transcendental leadership competencies in particular may require development. Lack of sufficient competence with respect to transformational and transcendental leadership could be a key variable in explaining the lower levels of engagement with respect to the factors of “belonging” and “growth.”
It is my assumption that South African Platinum mining companies must pay attention to their Human Resources Development strategies in order to progress, given the scenario above. In order for the mines to achieve results while transforming themselves, it will probably be worthwhile to apply the Developmental Leadership Model, employ the characteristics above and finally develop the transformational and transcendental leadership style to progress, develop and offer support to women entering the industry. The effectiveness of this model will be tested through the questionnaires in terms of four of the objectives:

- To establish if SA Platinum mining companies recognize women’s advancement as a business imperative.
- To establish if women can advance in these companies.
- To establish if women need support to do so.
- To establish if the leadership of such companies embraces women’s talent.

As success in the transitional context of change is experienced, comfort and preparedness are enhanced, equipping the organization’s members with capabilities to deal with even greater change. Change has become the name of the game, and the wise leader embraces it with open arms.

According to Kets de Vries (2003), when leaders fail to look within themselves, acknowledging their weaknesses and their defence mechanisms, they contribute to dysfunctional behaviour within the group and organisations that they lead. Leaders are often reluctant to face up to the negative consequences of their behaviour. Dysfunctional behaviours are likely to arise from the use of socialised forms of power.

### 3.3.3 Elevating Power of Leadership

Transformational leaders throw themselves into a dynamic relationship with followers who will feel elevated by it and become more active themselves, thereby creating new cadres of leaders. Such leadership alters and elevates
the motives, values and goals of followers through exercising the vital
teaching role of leadership, enabling leaders and followers to be united in the
pursuit of higher goals.

An anonymous source (2003) indicated that transformation initiatives such as
diversity, gain support and participation only if senior managers drive them.
Diversity issues need to be clearly articulated and driven by the line
organisation. In the same vein Daily and Dalton (2003) indicates that
boardroom diversity is a reality as opposed to a goal and confirm that women
in the boardroom makes business sense.

The integration of women into leadership roles is not a matter of “fitting in” to
the traditional models but “giving in” to furnishing the opportunities for them to
practise their own leadership styles (Trinidard and Normone, 2005). Cultural
ideals provide a yardstick to distinguish between authentic and pseudo
transformational leadership. Authentic transformational leadership brings to
the conscious what is in the unconscious of followers. It attempts to express
the ideals of followers in a manner which they could not do by themselves.

Thomas, Bierema and Landau (2004) hold the view that women’s career
development is certainly a social issue. Patriarchal segregation and
discrimination characterise the social context. The usual organisational culture
tends to benefit men more readily than women and rewards behaviour that is
more aligned to male dominated leadership. Nonetheless, many new
leadership styles have emerged in recent years. Renowned leadership
theorists have completed extensive research in the field. As a result a new
theory, termed transformational leadership, has been identified as the most
appropriate style of leadership in contemporary organisations.
Transformational leadership theory will indicate how change can be applied
effectively in this context.
3.4 Conclusion

The ability to harness female talent in the scientific community will be critical to driving not only scientific advancement but also business growth in the future. The advancement of women in science will contribute to overthrowing the myth of differences that pervades the popular media and which is holding women back in non-scientific fields. According to (Mathur-Helm, 2005), irrespective of the tremendous strides that South African platinum mining companies have made in the past few years in promoting and advancing women in the workplace, women are still under represented in the hard core technical mining field and in top management.

There is a growing body of literature that has spanned the last three decades regarding the issue of gender discrimination against women in corporate management (Mihail, 2006). While there is not enough literature covering the topic at hand the conclusion thus far is that barriers in the South African platinum industry still exists.
Chapter 3
LITERATURE REVIEW
Chapter 3 evaluated the critical analysis and body of knowledge about the chosen topic. Various academic arguments were debated on the global, country, industry and sector level. Data was gathered for questionnaire design purposes, so as to form a basis for logical questions to test the constructs and the theory adequately.

The Next Chapter :4
RESEARCH METHODOLOGY
Explain the methodologies available to the researcher. It will explain the philosophy behind each methodology, identify each methodology’s strength and weaknesses and justify the selection of the best methodology applicable for this specific research.

This chapter explains how the data was gathered.
4 CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction
The previous chapter discussed various aspects of literature relevant to the title of this report project. In this chapter I intend to explain the methods and procedures used in this study, that is, sampling design, research design, data collection, data analysis, limitation of the study, delimitations of the study and ethical considerations. The research methodology outlines the way in which the study is conducted and the manner in which ethical standards are maintained. The methodology is summarised in the following steps:

- Analysing and synthesising the literature review
- Developing a questionnaire
- Conducting a questionnaire pilot
- Distributing the questionnaire to various participants
- Analysing findings
- Presenting data in tables and graphs
- Compiling a report.

4.2 Research Design

4.2.1 Research Type
(i) Qualitative Method
“Qualitative research uses qualifying words and descriptions to record aspects about the world through qualitative data, such as interviews, documents and participant observation, to understand and explain social phenomena” (Myers, 1997). According to Bless and Higson-Smith (2000) this methodology is sensitive to understanding and analysing the perspectives of human experience through a process of description that is expressive and persuasive in language. This research study adopts the following definition of qualitative research.

“Qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or
human problem. The researcher builds a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting.” (Creswell, 1998: 15)

Leedy and Ormrod (2005) hold the following views about qualitative research: “To answer some research, we cannot skim across the surface. We must dig to get a complete understanding of the phenomena we are studying. In qualitative research, we do indeed dig deep: we collect numerous forms of data and examine them from various angles to construct a rich and meaningful picture of a complex situation.”

The strengths of the qualitative method include:
- Obtaining a more realistic feel of the world that cannot be experienced in the numerical data and statistical analysis used in quantitative research
- Flexible ways to perform data collection, subsequent analysis and interpretation of collected information
- Providing a holistic view of the phenomena under investigation (Bogdan and Taylor, 1975)
- Ability to interact with the research subjects in their own language and on their own terms (Kirk and Miller, 1986)
- Descriptive capability based on primary and unstructured data.

The weaknesses of the qualitative method include:
- Departing from the original objectives of the research in response to the changing nature of the context (Cassell and Symon, 1994)
- Arriving at different conclusions based on the same information depending on the personal characteristics of the researcher
- Inability to investigate causality between different research phenomena
- Difficulty in explaining the difference in the quality and quantity of information obtained from different respondents and arriving at different, non-consistent conclusions
- Requiring a high level of experience from the researcher to obtain the desired information from the respondent
• Lacking consistency and reliability because the researcher can employ different probing techniques and the respondent can choose to tell particular stories and ignore others.

(ii) Quantitative Method

The functional or positivist paradigm that guides the quantitative mode of inquiry is based on the assumption that social reality has an objective ontological structure and that individuals are responding agents to this objective environment (Morgan and Smircich, 1980). Quantitative research involves counting and measuring of events and performing the statistical analysis of a body of numerical data (Smith, 1988). The assumption behind the positivist paradigm is that there is an objective truth existing in the world that can be measured and explained scientifically. The main concerns of the quantitative paradigm are that measurement is reliable and valid in its prediction of cause and effect (Cassell and Symon, 1994).

Being deductive and particularistic, quantitative research is based upon formulating the research hypotheses and verifying them empirically on a specific set of data (Frankfort-Nachmias and Nachmias, 1992). Scientific hypotheses are regarded as value-free. The researcher's own values, biases, and subjective preferences have no place in the quantitative approach. Researchers can view the communication process as concrete and tangible and can analyse it without contacting the actual people involved in communication (Ting-Toomey, 1984).

The strengths of the quantitative method include:

• Stating the research problem in very specific and set terms (Frankfort-Nachmias and Nachmias, 1992)
• Clearly and precisely specifying both the independent and the dependent variables under investigation
• Following firmly the original set of research goals, arriving at more objective conclusions, testing hypotheses, determining the issues of causality
• Achieving high levels of reliability of gathered data due to controlled observations, laboratory experiments, mass surveys, or other forms of research manipulations (Balsley, 1970)
• Eliminating or minimising subjectivity of judgment (Kealey and Protheroe, 1996)
• Allowing for longitudinal measures of subsequent performance of research subjects.

The weaknesses of the quantitative method include:
• Failure to provide the researcher with information on the context of the situation where the studied phenomenon occurs
• Inability to control the environment where the respondents provide the answers to the questions in the survey
• Limiting outcomes to only those outlined in the original research proposal due to closed type questions and the structured format
• Not encouraging the evolving and continuous investigation of a research phenomenon.

(iii) The Research Method used in this Dissertation

Based on the strengths and weaknesses of both research types discussed above, a qualitative research methodology using a research questionnaire and interviews has been adopted to answer the research questions discussed in chapter 1.

The reason why the qualitative method was preferred to the quantitative method is that it:
• Offered In-depth examination of the phenomena
• Was not limited to rigidly definable variables
• Examined complex questions that might be impossible to investigate with the quantitative methods
• Deals with value-laden questions
• Explores new areas of research
• Constructs new theories http://www.okstate.edu.
4.2.2 Instrumentation

Selection of an appropriate instrument plays a key role in data collection and the obtaining of reliable and valid results. Incorrect selection of instruments can compromise the validity of the study and present invalid conclusions about the topic being investigated. Below are the various types of interviews available for research purposes.

Interviews

An interview is a conversation between two or more people (the interviewer and the interviewee) where questions are asked by the interviewer to obtain information from the interviewee. Various types of interview include:

- Face-to-face interviews have the distinct advantage of enabling the researcher to establish rapport with potential participants and gaining their cooperation. These interviews yield the highest response rates in survey research. They also allow the researcher to clarify ambiguous answers and, when appropriate, seek follow-up information. Disadvantages include impracticality when large samples are involved and the method can be time-consuming and expensive (Leedy and Ormrod, 2005).

Leedy and Ormrod (2005) also state that telephone interviews are less time-consuming and less expensive and the researcher has ready access to anyone on the planet that uses a telephone. A disadvantage is that the response rate is not as high as the face-to-face interview, but it is considerably higher than the mailed questionnaire. The sample may be biased to the extent that people without phones are part of the population about whom the researcher wants to draw inferences.

- Computer Assisted Personal Interviewing (CAPI) is a form of personal interviewing, in which, instead of completing a questionnaire, the interviewer brings along a laptop or hand-held computer to enter the information directly onto the database. This method saves time involved in processing data, as well as saving the interviewer from carrying around hundreds of
questionnaires. However, this type of data collection method can be expensive to set up and requires that interviewers have computer and typing skills (Leedy and Ormrod, 2005).

**Questionnaires**

**Paper-pencil-questionnaires** can be sent to a large number of people and save the researcher time and money. Because their responses are anonymous, people are more truthful when responding to the questionnaires, in particular with regard to controversial issues. The technique however also has its own drawbacks. The majority of people who receive questionnaires do not return them, and those who do, might not be representative of the originally selected sample (Leedy and Ormrod, 2005).

**Web-based questionnaires:** A new and inevitably growing methodology is the use of internet-based research. This would mean receiving an email on which you would click on an address that would take you to a secure website to fill in a questionnaire. This type of research is often quicker and less detailed. Some disadvantages of this method include the exclusion of people who do not possess a computer or who are unable to access one. Also the validity of such surveys is in question as people might be in a hurry to complete it and so might not give accurate responses (Canada. National Statistics Agency, 2006).

**4.3 Sampling**

Annexure 1 below indicates the geographical location of South Africa’s platinum mines. The platinum mines in South Africa are categorised into three groups, that is:
- Existing ones
- Developing ones and
- Potential ones.

For the purpose of this study existing mines are considered as part of the population where the sample was to be drawn. These are the big players in the Platinum Group Metals industry, forming part of the big players such as
Anglo Platinum, Impala and Lonmin. It is important to note that even though the sample will be drawn from the existing mines, in total there are eight existing platinum mines which are actively producing. These big players however have entered into joint ventures with some of the developing and potential mines.

The table below indicate the sample grouping using the guideline in Annexure 1, with regards to existing mines. These mines are the members of the Chamber in relation to the bargaining council, except for Lonmin. Though it is not a member it has subscribed to the South African Chamber of Mines in relation to certain specific committees. What makes Lonmin part of the sample is the fact that it is one of the existing mines as in Annexure 1.

### EXISTING SOUTH AFRICAN MINES

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<th>Anglo Platinum</th>
<th>Lonmin</th>
<th>Impala</th>
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<td></td>
</tr>
<tr>
<td>• PPRust</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-1: Sample Grouping

Sampling for this study was not an easy exercise, with the mining industry currently undergoing restructuring and massive large scale retrenchments. This has made it impossible to work on accurate figures in terms of staff complement per mine to identify a meaningful and accurate sample: although the sample was still relevant as it was drawn from the said industry, this made it difficult to determine the representation accurately.

Using annexure 1 as indicated above, assuming each mine employs 1500 people on a permanent basis, this yields an overall total of 12 000 permanent
members of the joint staff complement after the restructuring and retrenchments. According to Leedy and Ormrod (2005), when sampling beyond a certain point (at about 5,000 units or more) the population size is almost irrelevant, and a sample of 400 should be adequate.

The sampling method used in this research was adopted from the Custominsight.com survey excel sampling method guidelines. It was estimated that approximately 107 questionnaires has to be completed by each participating existing platinum mines as identified in table 4.2. In order to obtain an estimated response rate of 60%, 857 questionnaires were distributed to a total of 600 respondents who were targeted to complete the survey. Annexure 3 set out the formulae used in deciding on the sampling method, confidence level and estimate of error www.custominsight.com.

4.3.1 Sampling Technique
In order to overcome the challenges of random sampling, where one stands a chance of missing out a particular group in the sample, a stratified design sampling technique was used. This sampling method assisted in forming the population into groups, and in drawing a sample from each group (a stratum) to make sure that the sample is representative, with respect to males, females, grading levels, educational background, experience, occupations and union affiliation. Stratified sampling is commonly used probability method that is superior to random sampling because it reduces sampling error. A stratum is a subset of the population that shares at least one common characteristic www.statpac.com.

Simple random sampling was used in strata, since the stratifying variables are straightforward to work with, easy to observe and closely related to the topic of the survey. The use of this method is also encouraged by the fact that responses are more likely to vary in one group than another, for example, males and females, unions and management, employees and management, old employees and new employees, baby boomers and generation X/Y for instance. Given the nature of the study a thorough stratification was performed, since an indication of bias had already been encountered through the pilot study.
### 4.3.2 Sampling Process
Table 4-2 outlines the sampling process followed in this thesis.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population definition</td>
<td>The target population consists of employees from the platinum mining sector who are members of the Chamber Of Mines, as per table 4.2.</td>
</tr>
<tr>
<td>Sampling frame</td>
<td>Questionnaires were sent to the identified mining houses as per table 4.2.</td>
</tr>
<tr>
<td>Sampling method</td>
<td>A list was obtained from the Chamber of Mines, as a guideline; an additional mine, Lonmin was identified, even though it is not a member. The selection of Lonmin was motivated by the fact that the mine in question is an existing one. Annexure 1 was the key determining factor to decide on population and subsequent sampling method.</td>
</tr>
<tr>
<td>Sample size</td>
<td>Due to the heterogeneous nature of the population levels, sufficient surveys were dispatched. In this case it was determined that approximately 857 surveys should be sent out, at approximately 107 per existing mine as identified in sampling grouping table 4.2.</td>
</tr>
</tbody>
</table>
| Drawing the sample and collecting data | • Participants were situated at C3 grade and above, in the Patterson Grading System, which is a widely used one in the mining sector.  
• A request was made, initially telephonically, via HR Directors or Managers as well as Transformation Managers as per the list obtained from the Chamber of Mines and Annexure 1 guidelines. Additional details were obtained from the Department of Minerals and Energy.  
• HR Managers and Transformation Managers were requested to provide guidance in the most practical way, that of questionnaire distribution to their respective operations.  
• Participants were reminded weekly to return their questionnaires.  
• On receipt of the questionnaire, a thank you note was sent to the respondents |

**Table 4-2: Sampling Process**
4.4 Data Collection

Typical qualitative data gathering strategies include interviews, group discussions, observations, reflection, field notes, various texts, pictures and other materials. Data collection is an important aspect of any type of research study. Inaccurate data collection can affect the results of a study and ultimately lead to invalid results. Since this research study is based on the qualitative research method, the focus will fall only on the qualitative data collection methods, which is: the questionnaire and the open-ended question at the end of the questionnaire, to test each objective adequately.

The table 4-3 below outlines the process that was followed for data collection.

4.4.1 Data Collection Process

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispatch questionnaire to pilot the study at African Rainbow Minerals</td>
<td>19 May 2009</td>
</tr>
<tr>
<td>Analyze pilot results</td>
<td>20 May 2009</td>
</tr>
<tr>
<td>Re-administer pilot, subsequent to feedback</td>
<td>23 May 2009</td>
</tr>
<tr>
<td>Analyze final pilot results as per the redesigned questionnaire</td>
<td>25 May 2009</td>
</tr>
<tr>
<td>Contact participants telephonically and via e-mail, as per sample grouping and list from the Chamber of Mines</td>
<td>25 May 2009</td>
</tr>
<tr>
<td>Distribute letter and questionnaire (Refer to Appendices I and V)</td>
<td>2 June 2009</td>
</tr>
<tr>
<td>Send out reminder letter (Appendix III)</td>
<td>09 June 2009</td>
</tr>
<tr>
<td>Start with data analysis planning</td>
<td>On-going</td>
</tr>
<tr>
<td>Repeat reminder letter (Appendix III)</td>
<td>16 June 2009</td>
</tr>
<tr>
<td>Begin with data analysis</td>
<td>1 July 2009</td>
</tr>
<tr>
<td>Dispatch another reminder letter (Appendix III)</td>
<td>23 June 2009</td>
</tr>
<tr>
<td>Continue with data analysis</td>
<td>30 June 2009</td>
</tr>
<tr>
<td>Send out thank you letter to all participants, organizations and the Chamber of Mines (Appendix IV)</td>
<td>10 August 2009</td>
</tr>
<tr>
<td>Continue with data analysis</td>
<td>31 August 2009</td>
</tr>
<tr>
<td>Complete data analysis</td>
<td>05 September 2009</td>
</tr>
<tr>
<td>Incorporate all input for data analysis</td>
<td>10 September 2009</td>
</tr>
<tr>
<td>Finalize draft report</td>
<td>15 September 2009</td>
</tr>
</tbody>
</table>

Table 4-3: Data Collection Process
The questionnaire was drawn up with key dimensions being grouped together into various themes to establish the objectives as outlined in Chapter 1. Below is the questionnaire outline table, that is, Table 4.4.

Various types of correspondence were prepared for the respondents to request the opportunity to conduct research in their workplace and to obtain the necessary consent. These range from appendix I to appendix V, that is:

- **APPENDIX I** - Request to conduct research in your organisation
- **APPENDIX II** - Request to complete questionnaire
- **APPENDIX III** - Reminder
- **APPENDIX IV** - Thank you letter
- **APPENDIX V** - Research questionnaire

The first part of questionnaire consists of Part A: Survey, which is divided into 6 sections. **Section 1** is aimed at gathering biographical data, whilst **section 2** is aimed at gathering information on respondents' qualifications and experiences. **Sections 3 to 6** comprise the actual questionnaire, with a set of 5 questions per sections; all similar themes are grouped together. A Likert-type 5 scale rating system is used, ranging from 0 to 5, where: 0= no opinion, 1 = strongly agree, 2=disagree, 3= agree and 4=strongly agree. Each theme or objective is further followed by a qualitative section of descriptive comments at the end of the survey, where open-ended questions are asked, per theme, to solicit underlying information that may not have been covered in the questionnaire. Due to the location of the mines being spread all over South Africa, it was challenging for the researcher to conduct interviews.

### 4.5 Reliability and Validity

The real difference between reliability and validity is mostly a matter of definition. Reliability estimates the consistency of measurement, or more simply the degree to which an instrument measures the same way each time it is used in under the same conditions with the same subjects.
Validity, on the other hand, involves the degree to which the measure is measuring what it is supposed to, more simply, the accuracy of measurement \[\text{http://www.socialresearchmethods.net}\].

For the purpose of this thesis the \textbf{reliability} was estimated after the pilot phase as well as during the actual research data analysis process. Here the revised questionnaire with the same content as regards the questions, administered to the same candidates, yielded the same results (test-retest): this was also estimated through determining internal consistency, where the re-design of the questionnaire assisted in re-structuring and regrouping similar items together in the survey, as well as with the open-ended questions. The same measure of consistency in terms of the objectives was estimated. Implementation of the re-designed questionnaire on 19 and 23 May 2009 as well as 4 June 2009 respectively assumes that there is no change in the underlying condition or trait that was being measured between pilot phase 1, 2 and 3. Although some or the questions were removed, no new questions were piloted: the only result was that through the pilot the respondents assisted in restructuring the questions and refocusing the revised questionnaire (Refer to Appendix V). The final questionnaire was guided by the same principles.

The research questionnaire did indeed accurately measure what it was suppose to measure (\textbf{validity}) as one can arrive at an informed conclusion about the topic under study and its objectives.

It is my belief that validity is more important than reliability because if an instrument does not accurately measure what it is supposed to, there is no reason to use it even if it measures consistently (reliably). The measurement instrument yielded the same results on both the pre-test and the post-test. The determination of validity during research data gathering and data analysis did not reveal any threats to the instrument chosen.
The questionnaire was used primarily to evaluate the topic. The questionnaire outline follows in table 4-4

<table>
<thead>
<tr>
<th>PART A</th>
<th>SURVEY QUESTIONNAIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td>Questions 1.1 to 1.3</td>
</tr>
<tr>
<td>To establish the background of each selected employee (age, gender and designation)</td>
<td></td>
</tr>
<tr>
<td>Section 2</td>
<td>Questions 2.1 to 2.6</td>
</tr>
<tr>
<td>To establish the background of employees (general qualifications and experience)</td>
<td></td>
</tr>
<tr>
<td>Section 3</td>
<td>Questions 3.1 to 3.5</td>
</tr>
<tr>
<td>TRANSFORMATION AS A BUSINESS IMPERATIVE</td>
<td></td>
</tr>
<tr>
<td>Section 4</td>
<td>Questions 4.1 to 4.5</td>
</tr>
<tr>
<td>CAREER ADVANCEMENT</td>
<td></td>
</tr>
<tr>
<td>Section 5</td>
<td>Questions 5.1 to 5.5</td>
</tr>
<tr>
<td>SUPPORT SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>Section 6</td>
<td>Questions 6.1 to 6.5</td>
</tr>
<tr>
<td>TALENT MANAGEMENT</td>
<td></td>
</tr>
</tbody>
</table>

PART B | DESCRIPTIVE COMMENTS |

Table 4-4: Questionnaire Outline
4.6 Ethical Considerations

This section aims to explain various ethical issues taken into consideration at the time of conducting the research.

The purpose of this was to ensure that the researcher did not cross certain boundaries or parameters that could be harmful to respondents and have a negative effect on the study through ignorance and ethical compromise which could damage each individual participant’s career, both as regards the researcher as well as the chosen participants.

The following key points were considered from an ethical and socially responsible base.

- Obtain permission through the relevant authority to use the sample inputs for the study.
- A covering letter, explaining the purpose of the research and how the results will be used, and whether the results will be anonymous or not, will be attached to participant’s questionnaire.
- Consent was obtained through HR Managers and Transformation Managers.
- This research did not touch on personal issues that could compromise participants’ values, morals, and beliefs nor did it apply unfair judgments in testing the hypothesis.
- This study did not cause physical harm or danger to respondents, and the topic did not require any experiments.
- The wording used in the questionnaires was carefully selected, simple to understand, unambiguous, sensitive with adequate consideration towards respondents, readers and the School of Business Leadership.
- The formulation of the research problem, literature review, interview questions, selection of measuring tools and reporting was carried out as objectively as possible in an effort to eliminate personal or group biases and opinions.
• The respondents were selected on the basis of what would benefit the study in terms of inputs, lessons to be learnt and recommendations in line with the significance of the study.
• The results obtained were reported accurately based on respondents’ responses.
• This study was conducted within a university setting; the topic was approved by the supervisor. The research was limited to the approved topic.
• All communication with respondents was treated in the strictest confidence and participation (or non-participation) and/or participant responses was not revealed to any external parties.
• Participation in the survey was entirely voluntary and all e-mails related to the survey contained a clear narrative description of the purpose of the study, as well as a guarantee that the information provided would not be used for any purpose other than had been stated.

4.7 Limitations of the Research
• The expected response rate dropped from 60% to 57.4%.
• Some respondents showed an unwillingness to participate in the study.
• The unavailability of certain employees who could have added value to the study.
• The impact of the political and socio-economic climate in the country, as well as the effects of the global economic crisis.
• The effect of landscape of South African politics, including the new changes in the Cabinet’s structure.
• The splitting up of the Department of Minerals and Energy since the topic investigated was guided jointly by the Mining Charter and the said Department.
• Limited literature on the subject matter.

4.8 Conclusion
This chapter discussed research design and methodology. The study’s scope, instrumentation, research type, population and sample, sampling methods, data-gathering techniques, data analysis and the computer programmes
used, are considered from a theoretical perspective. A practical discussion on
the research information gathering process, its results as well as the
influence that it exerted was also provided, including how these factors were
applied in this study. Justifications for the choices made were also furnished.

CHAPTER 4
RESEARCH METHODOLOGY
Chapter four described the research methodology adopted to investigate
the topic within the said industry using certain research survey tools i.e. a
questionnaire and descriptive analysis.

The next chapter:5
RESEARCH RESULTS
presents the research project results, analysis and interpretation.
CHAPTER 5 RESEARCH RESULTS

5.1 Introduction
This chapter gives an overview of the research project’s results, their analysis and interpretation.

A sample of 857 questionnaires was distributed, as noted. A total of 513 questionnaires were received back. Of these, 21 questionnaires contained one or more errors, ranging from inadequate completion, omitted sections, to some sections not being attempted at all. Five questions were asked per objective followed by descriptive comments on each section to obtain more data on the objective being investigated. The completion of each questionnaire, excluding the descriptive comments, was estimated to take 20 minutes; the descriptive comments occupied approximately 12-15 minutes, averaging around three to four minutes per objective. The entire questionnaire took approximately 35 minutes to complete.

5.2 Biographic Data
This section highlights the overview of the respondents from a stratified sampling perspective. Participants represented a mix of gender, race, occupational grading levels (C3 and higher), experience, qualifications and unionised/non unionised status.

5.2.1 Age of Respondents

<table>
<thead>
<tr>
<th>Ages (in years)</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20 years</td>
<td>0</td>
</tr>
<tr>
<td>21 – 30</td>
<td>213</td>
</tr>
<tr>
<td>31 – 40</td>
<td>153</td>
</tr>
<tr>
<td>41 – 50</td>
<td>102</td>
</tr>
<tr>
<td>51 – 60</td>
<td>24</td>
</tr>
</tbody>
</table>

Table 5-1: Age of Respondents
As indicated in Table 5.1 and Figure 5.2 most respondents (n=213 or 43.29%) were in the age group ranging from 21 to 30 years, while (n=153 or 31.10%) were between 31 and 40 years; (n=102 or 20.73%) respondents were between 41 and 50 years and (n=24 or 4.8%) were between 51 and 60 years. No respondents were younger than 20 years (n=0 or 0%).

This is a true reflection of mining industry dynamics; the dot com generation is not represented. Baby-boomers were not interested in the study. This has a large impact on the results as most of these individuals are already occupying Executive and Board level positions and have direct influence on the leadership and experience levels in relation to the study.

### 5.2.2 Gender of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>159</td>
</tr>
<tr>
<td>Males</td>
<td>333</td>
</tr>
</tbody>
</table>

Table 5-2: Gender of Respondents
As indicated in Table 5-2 and Figure 5-2, 21 (n=159 or 32.3%) of the respondents were females, while (n=333 or 67.7%) of the respondents were males. This is a true reflection of the industry gender demographics being dominated by men.

**Respondents’ Designations**

<table>
<thead>
<tr>
<th>Respondent’s designation</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Members: FL</td>
<td>0</td>
</tr>
<tr>
<td>Executive Managers: EU</td>
<td>16</td>
</tr>
<tr>
<td>Senior Managers: EL</td>
<td>29</td>
</tr>
<tr>
<td>Middle Management: DL – DU</td>
<td>80</td>
</tr>
<tr>
<td>Specialist : C4/5</td>
<td>91</td>
</tr>
<tr>
<td>Junior Management /Supervisor : C3</td>
<td>276</td>
</tr>
</tbody>
</table>

*Table 5-3 Respondents’ Designation*
Figure 5-3 Graphical Illustration of Respondents Designations

As indicated in Table 5-3 and Figure 5-3, most respondents (n=276 or 56.1 %) hold the designation of Junior/ Supervisory Management (C3), while (n=91 or 18.5%) are Specialists (C4), (n=80 or 16.3%) are in Middle Management (DL-DU); (n=29 or 5.9%) are Senior Management and (n=16 or 3.3%) are Executive Managers. No responses were obtained from the Board Members.

5.3 Qualifications and Job Experience

This section shows the relationship between qualification and respondents’ experience within the mines.

5.3.1 Highest Educational Qualification of Respondents

<table>
<thead>
<tr>
<th>Highest educational qualification</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below Grade 12</td>
<td>0</td>
</tr>
<tr>
<td>Grade 12</td>
<td>118</td>
</tr>
<tr>
<td>One year post-matric qualification</td>
<td>96</td>
</tr>
<tr>
<td>Degree</td>
<td>47</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>231</td>
</tr>
</tbody>
</table>

Table 5-4: Highest Educational Qualification
As indicated in Table 5.4 and Figure 5.5, none of the respondents possessed a qualification below Grade12. (n=118 or 24.0%) of the respondents had passed Grade 12 and were promoted through the ranks, whereas (n= 96 or 19.5%) possessed a one year post-matriculation qualification and have been studying for self-advancement. (n=47 or 9.6%) of the respondents had degrees while most of the respondents, (n=231 or 47.0%) boast postgraduate degrees.

The mining industry, although generally highly labour intensive, also makes use of a number of legally related appointments, which encourages people to develop their skills. This has brought about transformation in this industry with skills being the key priority. The high number of postgraduates is also influenced by the fact that most roles within the core business shoulder legal responsibilities such as occupational health and safety, or engineering with a government ticket and certificate, to name but a few, thus resulting in a positive influence on individual academic backgrounds.
5.3.2 Experience in Mining Industry

<table>
<thead>
<tr>
<th>General job experience (in years)</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td>72</td>
</tr>
<tr>
<td>1 – 2</td>
<td>128</td>
</tr>
<tr>
<td>3 – 5</td>
<td>69</td>
</tr>
<tr>
<td>6 – 10</td>
<td>97</td>
</tr>
<tr>
<td>&gt; 10 years</td>
<td>126</td>
</tr>
</tbody>
</table>

Table 5-5: Experience in Mining Industry

As indicated in Table 5.4 and Figure 5.6, (n=72 or 14.6%) of the respondents had been working for less than a year, (n=128 or 26%) of the respondents had been in the industry for between 1 and 2 years, while (n=69 or 14.0%) of the respondents had been working there for 3 to 5 years. Most of the respondents, that is (n=97 or 19.7%), had been working between 6 and 10 years, whilst (n=126 or 25.6%) have been employed for more than 10 years.
5.3.3 Acquisition of Platinum Mining Skills

<table>
<thead>
<tr>
<th>Acquisition of Platinum Mining Skills</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risen through the ranks</td>
<td>102</td>
</tr>
<tr>
<td>Internal promotion</td>
<td>76</td>
</tr>
<tr>
<td>Formal education</td>
<td>67</td>
</tr>
<tr>
<td>On-the-job training</td>
<td>164</td>
</tr>
<tr>
<td>Self study</td>
<td>59</td>
</tr>
<tr>
<td>Aptitude and ability</td>
<td>24</td>
</tr>
</tbody>
</table>

Table 5-6: Acquisition of Platinum Mining Skills

As indicated in Table 5.5 and Figure 5.7 (n=102 or 20.7%) of the respondents acquired platinum mining experience by rising through the ranks, another (n=76 or 15.4%) were promoted internally, (n=67 or 13.6 %) gained experience through formal education, while five (n=164 or 33.3%) of the respondents acquired their skills through on-the-job training. (n=59 or 12%) acquired these skills through self study whereas (n=24 or 4.9 %) acquired these through aptitude and ability.
5.3.4 Union Affiliation

<table>
<thead>
<tr>
<th>Union Membership Status</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union Members</td>
<td>249</td>
</tr>
<tr>
<td>Non-Union Members</td>
<td>243</td>
</tr>
</tbody>
</table>

Table 5-7: Union Affiliation

As indicated in Table 5.7 and Figure 5.8 (n=249 or 51%) of the respondents are union members, whilst (n=243 or 49%) hold union membership. This was quite an interesting observation with almost a 50% split of the sample being unionised and the other split being not unionised, considering that the sample is made up of different mines.

The section above offered an overview of the respondents' biographical data. The next section is aimed at highlighting the actual responses regarding the objectives being investigated. The overall results indicate that the latter are to a large extent not being addressed in the organisation. A summary of the sample results is highlighted hereunder:
5.4 Sample Results Analysis

As mentioned, a sample of 857 participants was drawn, where 513 of the respondents returned the questionnaires, giving a total of 59.9% of the total sampling. Of the 513 questionnaire received (n=21 or 2.5%) questionnaires contained errors, yielding an error rate of 2.5%, resulting between 90% and 95% confidence. In total (n=492 or 57.4%) questionnaires were adequately completed. The results analysis is based on this 57.4% of the total population.

The tables below analyse the different views, perceptions and opinions of respondents. A total of 20 questions were answered by each of 492 respondents in the questionnaire. All questions were measured on a Likert 5-point scale (Strongly Disagree, Disagree, Agree, Strongly Agree, and No Opinion). All 492 respondents answered all 20 questions, and this resulted in a total of 9,840 responses. Not all responded adequately with respect to Part B; however the responses that were given provided useful insight.

Table 5.6 and Figure 5.9 below illustrate the aggregate achieved on a scale of responses, for each research objective investigated.

5.4.1 Summary of results

A total of 9,840 observations were noted. The standard deviation for the total number of observations per scale item over each research objective and sample mean is also calculated. The standard deviation measures the spread of the observations. A low standard deviation result indicates that the observations are close together, whilst a large standard result indicates the observations are spread out, over a large range of values. The mean average calculates the total number of responses per research objective divided by the number of items in the list, in which case this will be the rating scale of 5. As this is derived from a sample it is safe to say the mean in question is the sample’s mean.

Table 5.8 furnishes the summary of data responses and standard deviation there from. The standard deviation for the total number of observations per
scale item over each research objective is calculated using the standard deviation formula i.e.

**Standard Deviation**

\[ s = \sqrt{\frac{\sum(X-M)^2}{n-1}} \]

**Formulae 1: Standard Deviation** (http://www.wikkipedia.co.za.)

Where  
\( \Sigma \) = Sum of  
\( X \) = Individual score  
\( M \) = Mean of all scores  
\( N \) = Sample size (Number of scores).

Table 5.9 is the summary of results data percentages, per construct. The average mean indicates the number of respondents per research objective, on a Likert-type 5 scale.

<table>
<thead>
<tr>
<th>Research Objectives</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>No Opinion</th>
<th>TOTAL</th>
<th>Std Deviation</th>
<th>Sample Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO1</td>
<td>1430</td>
<td>460</td>
<td>349</td>
<td>270</td>
<td>60</td>
<td>2569</td>
<td>532.65</td>
<td>513.8</td>
</tr>
<tr>
<td>RO2</td>
<td>1110</td>
<td>664</td>
<td>320</td>
<td>302</td>
<td>70</td>
<td>2466</td>
<td>404.74</td>
<td>493.2</td>
</tr>
<tr>
<td>RO3</td>
<td>979</td>
<td>968</td>
<td>478</td>
<td>210</td>
<td>89</td>
<td>2724</td>
<td>415.91</td>
<td>544.8</td>
</tr>
<tr>
<td>RO4</td>
<td>962</td>
<td>469</td>
<td>318</td>
<td>269</td>
<td>63</td>
<td>2081</td>
<td>337.92</td>
<td>416.2</td>
</tr>
</tbody>
</table>

**Table 5-8: Summary of Data Responses – Standard Deviation**

<table>
<thead>
<tr>
<th>Research Objectives</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>No opinion</th>
<th>TOTAL</th>
<th>Std Deviation</th>
<th>Sample Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td>RO1</td>
<td>Transformation as a business imperative</td>
<td>55.7%</td>
<td>17.9%</td>
<td>13.9%</td>
<td>10.5%</td>
<td>2.3%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Section 2</td>
<td>RO2</td>
<td>Career advancement</td>
<td>45.0%</td>
<td>26.9%</td>
<td>12.9%</td>
<td>12.2%</td>
<td>2.8%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Section 3</td>
<td>RO3</td>
<td>Support system</td>
<td>35.9%</td>
<td>35.5%</td>
<td>17.5%</td>
<td>7.7%</td>
<td>3.3%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Section 4</td>
<td>RO4</td>
<td>Talent management</td>
<td>46.2%</td>
<td>22.5%</td>
<td>11.7%</td>
<td>12.9%</td>
<td>3.0%</td>
<td>100.00%</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td>45.7%</td>
<td>25.7%</td>
<td>14%</td>
<td>10.8%</td>
<td>2.9%</td>
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**Table 5-9: Summary of Results in Percentages**
(71.4%) strongly disagree and disagree, while only a small percentage of (24.8%) suggested that the organisation is addressing the objectives, and (2.9%) had no opinion.

It can be deduced from figure 5 above that there is a positive relationship amongst the objectives being investigated. **Career advancement and talent management recorded very close scores.**

**Career management reported (45.0% and 26.9%) who disagree, with 12.9% and 12.2% agreeing, and 2.8% expressing no opinion, whilst talent management reported a score of (46.2% and 22.5%) who disagree, 11% 7% and 12.9% disagree and 3.0%, no opinion.** This indicates the positive correlation of the two objectives as they; in essence, complement each other within the Human Resources Development model. This is a most interesting observation that potentially creates a topic for future research.

Whilst there is no strong correlation between objective 1, transformation as a business imperative and support system, on disagreement, there is still a very positive relationship on agreement and no opinion with 13% and 10 %, 2.3% respectively and 17%, 7.7% and 3.3% respectively. This is directly linked to the leadership and the influence that it exercises on gender equality: it is a
reflection of a not fully transformed industry in relation to the topic being investigated. The relatively low scores on agreement with the research objectives constitute a sign of non-conformity by the South African platinum mining companies with the objectives being researched, which is the reason for this study. It suffices to say that in terms of this analysis, South African platinum mining companies are still considerably untransformed, hence the said results.

5.5 Analysis of Descriptive Results

Detailed responses were mixed and the resulting observations are discussed in Table 5.10 below. This offers a largely verbatim summary of the feedback obtained from the 492 complete responses. A biographical summary of the respondents is provided and analysed above. Table 5.6 will only highlight the descriptive comments regarding perceptions of the objectives being studied in the form of notes.

<table>
<thead>
<tr>
<th>RESEARCH OBJECTIVE :ONE</th>
<th>To establish if SA Platinum mining companies recognize women’s advancement as a business imperative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Male respondents confirmed that transformation is a slow and daunting process. There is a general statement that this is a business imperative, not necessarily the right thing for the business if the organisations need to grow. Most men in leadership feel that they cannot take the blame of underperforming because of women, and lose investment opportunities. The respondents feel mining houses are trying to comply as government is forcing them to, however this is easier said than done, hence limited efforts. They view this whole issue of women and transformation as a “non-starter”: wrote one man in his comments, “good male with talent, do not get opportunities and are discriminated on basis of their skin colour”. Men, particularly white men, know mining and this is a “fact”, commented one employee. Evident is the argument that this research objective is not easily achievable even though respondents see this as a business imperative: it all lies in the “bottom line”. There is a feeling that this is forced upon people who need to drive it, and thus lose opportunity to implement it fully.</td>
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</table>
| Female                  | Female respondents consider that management is supporting the initiative due to compliance, but it is not something that the platinum sector is passionate about; the sector is driving it because it has been legislated and for the purposes of the Social Labour Plan commitments made. Most respondents believe that the organisation can do much more in terms of addressing the research objectives, within the workplace. In general, the power still lies with white males. The platinum sector like any other mining sector is faced with the same challenges. Leadership has not embraced transformation as the national agenda. Management feels that its territory is being invaded and find it difficult to support transformation. It is generally assumed that, like all other corporate, the mining industry is transforming: this is not true, since the platinum sector has a long way to go, prior to achieving transformation. Some of the respondents believe that the corporate goals of the divisions are not aligned with the overall corporate strategy, making it difficult for the operations to
## RESEARCH OBJECTIVE: ONE

<table>
<thead>
<tr>
<th>Male</th>
<th>To establish if SA Platinum mining companies recognize women’s advancement as a business imperative</th>
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<tr>
<td>Respondents feel that investment pressures are not in line with the general business pressures. “The effect of the stock market does not care about whether is a male or female doing the job, is all about delivery”. Men do not support this objective fully; they regard this as stressful since women do not necessarily possess the skills to do the job. They say mining is hard core business and is not for the faint hearted. They feel strongly that even though transformation is important to the business, it cannot be achieved at the expense of competency levels. They would like to be seen as supporting transformation and feel it is necessary but the timing of transformation poses a challenge in mining. The general feeling is that even though women are entering the industry, there is little readiness for them to face the brutality of the mining industry. They feel that women will continue to cause stress to the business and all its processes in attempts to achieve transformation. Future studies may ascertain the impact of this objective in relation to business success and societal acceptance. These males feel that addressing gender inequality is also an economic imperative. One senior manager alluded to the fact that this problem cannot be dealt with currently; he felt that gender inequality dates back to when women were deprived of quality education and should not be expected to be resolved in one day. He said this background resulted in a decrease in human capital resources, lowering the quality of human capital and imposing limits to the income generating capability of a substantial portion of the population. In general, men feel that women cannot lead in an area where they do not specialise, this is a drawback for the industry: “Mining houses will continue to fail with this Women- In Mining”, commented another male respondent.</td>
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<tr>
<td>Female</td>
<td>manage the issues at hand. There is a feeling that there is no commitment towards transformation and special accommodation for women. Respondents feel that more and more women generally make a good combination with men, as a result of their emotional intelligence. Companies need a softer, more sensitive and emotionally intelligent approach in boardrooms for diverse thinking. It is the right thing for business to do. Some of the women’s written comments were as follows: “We have to constantly remind them of our existence, I feels like one has to dress up in a dark suite, shave bold and have all the masculine features” “Maybe we are to blame, we try to shut them out - maybe we need to see the opportunity of working alongside with them to gain support” “I look forward to the day when we don’t have women in business groups- but just bodies as business people, for more acceptance and support- wish this thing can just go away”. “There is a shift of focus, instead of taking this serious; men want all the reasons why we cannot be empowered”. “It feels like you have to be in theirs social network for them to start recognising us”. Another female respondent feels it is important that women should acknowledge that as the status of women rises, men who have not economically kept up with their womenfolk are seized by envy, jealousy and anger, while some of the women are just bloated with arrogance – she feels that the problem is dual. Some of the respondents believe that their organisation is headed in the right direction; however it lacks the drive to transform. They believe management is missing opportunities for transformation. Overall they do not believe that the research objectives are being</td>
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**RESEARCH OBJECTIVE :ONE**

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RESEARCH OBJECTIVE : TWO

To establish if women can advance in SA Platinum mining companies

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<tr>
<td>Male respondents feel that there are limited opportunities for women’s career advancement given the nature of the mining environment. It does not matter what managements do; women are operating very poorly and will never make it in mining. These respondents are aware of women in management and other key positions but do not perceive the real benefit from them. Most women are at a graduate level, and do not really advance quickly. There is no progress in advancement of women. Respondents feel that many people are really interested in women’s advancement; however, women have to play their part. Women should stand up for themselves and stop blaming others for their own lack of development. “The mining industry is not going to change to accommodate them, instantly. It is a dual responsibility” writes one male.</td>
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<tr>
<td>Respondents feel that there apprehension and scepticism as regards women’s advancement in the sector still exist. Some believe that management is doing too little to address transformational challenges. There is a belief that over-promising and under-delivery by the leadership exist. Although women have the potential to advance, males are making it impossible for women to achieve this. Management is viewed as paying lip-service to this concept. Women feel that a man with a weak character man grapples with his own hostility to successful women. This may explain the rising tide of abuse of women in the workplace. Women fail to gain support since they are viewed as threats. Women feel that the sight of successful women merely increases their irrationality as far as men are concerned.</td>
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<td>One respondent shared his experiences that as he does financial modelling of the new mines, at the feasibility level, the engineering lay-out does not display any infrastructural adjustments towards gender sensitivity. He feels that the environment is “male-chauvinist” driven and has a long way to go before it changes. “Promotions, career advancements are based on merits of individual performance” not on gender?” said one man. “It is our world women have to earn their respect”, he writes. “This does not happen in a vacuum; women have to work hard”. He concludes. There is a general view that management drives transformation, because it’s a performance indicator, not that it is important for them to do so. Most reported having a full range of programmes to help facilitate issues concerning women’s advancement. Some workshops facilitated quarterly or bi-annually to address women-in-mining, and these programmes help through coaching and mentoring. “Women have to grab the opportunities that the Company grant” writes a union member.</td>
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<td>Some of the respondents’ comments were: “when women are being fasted tracked, they are being put under pressure to fail, so this looses the entire focus on support”. Some women feel that while they are being fast tracked it just takes a long time for them to catch up and advance. Hence the implementation of the succession plan has not yet reaped results in most mining houses. There is a general resistance to supporting the succession plan amongst male counterparts. Statements are made verbally without any contractual obligations, and women feel that there is no commitment. Women feel that they can make it underground; men just need to give them a chance and not create more frustration for them. They need to feel that they belong, without necessarily reminding men of their existence. Men make it impossible for them to cope, while their use of language is also a problem for women, “there is a lot of “f” and “s” used and this creates discomfort to some of us” commented other respondents.</td>
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<tr>
<td>One comment was that a lot of time is wasted trying to fast track women with no success on tangible business results. “Some of women deserve to be promoted but the majority is merely a paper exercise” remarked one male.</td>
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<tr>
<td>One comment was that a lot of time is wasted trying to fast track women with no success on tangible business results. “Some of women deserve to be promoted but the majority is merely a paper exercise” remarked one male.</td>
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impossible for women to believe in them since such managers continue to tell them that they will fail.

<table>
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<tr>
<th>RESEARCH OBJECTIVE : THREE</th>
<th>To establish if women need support to advance in SA Platinum mining companies.</th>
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<tr>
<td><strong>Male</strong></td>
<td><strong>Female</strong></td>
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<tr>
<td>The comments displayed that there are no support structures to assist women, “there is a huge outcry of systems that needs to drive and support women advancement in mining, however women are not grabbing the opportunities and yet quick to point fingers on others” wrote one man. Top management will try to achieve certain results but this can only be done once women understand what they need to do: it is a two way street approach, “women do not have the sense of the demands for our environment” observed one male furiously. A further comment was that management in shafts get tired of trying to coach and mentor people who are not adding value in the business. “Even though efforts are made women still fails, irrespective of the amount men spend on their training, is not lack of training, is just that women are not good in mining” as another male wrote. Male union members believe that they do not mind offering support within reasonable time frames; they say it takes time to develop anybody in mining. They believe women can do it over a period of time. They are concerned, though, as women need to take time off for maternity leave, child rearing etc. and argue that women have to adjust their timing in terms of family planning before they consider mining as a career. They also believe that women need to earn their positions, “if they have the right attitude, knowledge and ability- I don’t think why they should not be considered- its just that they do not have what it takes” as one union member commented. Much blame is shifted onto the South African Constitution and legislation, which in the eyes of the respondents means that the Government has unrealistic expectations which are not practical. Some men indicated that they are not even sure if the programmes in place succeed or if there are any, in their organisations. “Women should be patient and take baby steps, Rome was not built in one day” commented another man. Women are not ready to take key roles</td>
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<td>Women feel that the mining world is one where “dog eats dog”: nobody cares about the other. People are there for their own individual benefit; as a result if women are not strong they will tend to fail as they will think they have lost support. There is a very strong view that women still feel that their advancement depends on many other factors such as access to paid maternity leave, maternity leave, family responsibilities, breast feeding and a crèche on site unless or an alternative location for their babies, as this will enhance their ability to cope with pressures. Other mining houses have obtained commitment from the Unions through certain interventions, such as where the National Union of Mine Workers negotiated terms in their collective agreement that underground female workers are to be moved to the surface when pregnant: this has led to positive results and uplifted the morale of female counterparts. In this respect some women feel that their mines should also supply reasonable accommodation when they become pregnant while working at the mine, providing them with the option of appropriate alternate employment during pregnancy and early motherhood that does not expose them to hazardous substances and dangerous work. Women mine workers feel that they should be allowed the option to participate in the development and implementation of mining company policies, and internal monitoring, evaluation, and verification systems to ensure that mine managers and other mine employees protect and promote women’s rights and equality. The company should put in place accountability, verification and incentive mechanisms to encourage and enforce these policies and systems Some of the views are that at the national level companies should encourage governments to develop the appropriate capacity, allocate sufficient resources, and foster the political will necessary to advance</td>
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**RESEARCH OBJECTIVE : THREE**

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<td>in the sector. “We had a resignation of a top women miner, it was a blow to our organisation, we thought we were on track”, reported one Senior Manager. Men feel that they sometimes don’t know what to do to retain and keep women excited in their jobs. “Mining is a tough industry”. A certain general manager felt they have done well in his organisation to support women: it is the perceptions that create a problem. He feels that they need to manage these perceptions as they destroy the goodwill of the work done.</td>
<td>women. Women do need this support and while some managers are good at this they later use it against women. There are events that are beyond one’s control such as planning and starting a family, getting married, being a mother etc, and yet male counterparts use these for a career limiting purpose.</td>
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**RESEARCH OBJECTIVE : 4**

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<td>Leadership needs to change its behaviour and try to offer positive reinforcement towards women; leaders must be positive and encourage all who want to grow. “As men we must try to catch women doing the right thing and tell others of the good performance.” commented another man. Men feel that their company does embrace women’s talent: there is a succession plan, even though women do not qualify for it owing to lack of readiness. Candidates are identified through a talent pool and this forms part of their career advancement. Women in mining have no key role to play as most of them are deployed in areas which are not influential” observes one man. They view the lack of a retention strategy as a cause of resignations since the women leave after obtaining qualifications, “this is a waste of Company resources” commented another.</td>
<td>Respondents feel that they could climb the corporate ladder faster than before, if given fair opportunity to do so. Women suspect that more often than not they are used as fronting. They feel top management does not realise what is happening underground: the kind of treatment they receive underground from their male counterparts causes them to wonder if management sees this initiative as a business imperative. They are always reminded that they will fail. They are very aware of the Graduate Development Programme, but feel it is very early to comment on its achievements. The current succession plan is not visible and is not clearly articulated.</td>
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There is a trend in the industry concerning Women-in-Mining; this initiative spells out the expectations of how such an organisation can bring women to the top. However, there is very little that men can do in this regard, which is not as easy as it sounds. “Women need to understand that not everybody will be part of talent pool” writes one Senior Manager. Another remarks, “Career advancement is encouraged throughout the organisation, we have few women who...” | Respondents also feel that mining companies should encourage and provide employment training opportunities for them in the formal mining sector in all areas of work, including underground mining and blasting, not just in traditional clerical positions. They argue that in order to monitor this, such companies should also provide training and jobs for women in monitoring of the social and environmental impact of mining. They feel the Companies are spending time in investing in robust advancement programmes. There are opportunities for improvement especially at the operational level and with the graduate development... |
RESEARCH OBJECTIVE : 4

To establish if leadership of SA Platinum mining companies embraces women’s talent.

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<tr>
<td>are studying, to better themselves, and reality is it’s not just theoretical they need to have the practical’s”.</td>
<td>Other respondents commended their Human Capital departments for making efforts to develop strategies that encourage development of women’s talent, as this is a concerted effort on the part of the employer and should yield very positive results.</td>
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<tr>
<td>Most respondents’ views were that the current development programmes are sufficient as they cover all aspects of women’s development: at the end of the day it boils down to the individual. Some people do not see any value as they feel that women are over qualified, and feel the training should be at the Learner Official phase where people do not have an academic background. “The fact that there are women in E and D-band does not mean that there is advancement- is just window dressing” asserted one man.</td>
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<tr>
<td>One comment was that those organisations are trying their best; it is just that it is difficult for women to cope, while leadership in the operations is good. There is a talent pool; however, most women do not work hard enough to be part of it, and they also do not wish to give the organisation a chance. They are quick to blame it. The mentorship programme seems to have worked in the past, but does not do so any longer, since most women are negative towards the issues of transformation.</td>
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5.6 Research Findings

The findings of this research are that transformational barriers to the advancement of women in South African platinum mines are rife. Women feel that they need to be afforded an opportunity to prove that they can advance and add value. The leadership of the mining houses is not fully recognising programme. They consider that women will play a meaningful role in South Africa’s transformation if the corporate also support their initiative of taking responsibility in gender-conscious associations and networks. The graduate programme is dictated by corporate offices, who do not really understand the needs for the mining operations: women respondents argue that there is a need for such a programme to be operationally based so that they can have full control. Some women suspect that the issue all boils down to competencies, and have cited examples of people who were promoted due to competency levels irrespective of their gender. Some also suggest that the retention and succession policies should be revisited as these are not attractive enough to employees: they find the sector creating and driving retention on the basis of a share scheme, which is not necessarily the right strategy. They feel they need to have that sense of belonging and want to be there – without being obliged considering other employers. Most women appreciate that they have earned the position on merit, not based on their gender. They acknowledge and appreciate their employers’ support but do not want to feel as if they are receiving hand- outs; they need to earn their stripes and lead with confidence. They further commented that they stay longer in their organisation when they feel they can add value and are respected.
transformation as a business imperative; hence the lack of support, career management and retention as regards women’s talent.

5.7 General Discussion
This section aims to provide an overall overview of the results analysis. Across all aspects of the workplace and in the labour market women continue to be under-represented. Women are the most affected by unemployment and under-employment; they dominate the least remunerative, less skilled jobs and find themselves more and more often being employed as casual workers.

5.7.1 Mixed Responses
Whilst overall the trend can be observed that there was disagreement (71.9%) that the objectives being investigated were not being addressed in the organisation, the responses at an individual level were also in support of this, achieving a high level of consistency, between the two measuring scales. Respondents irrespective of gender, race, occupational levels, qualification background, experience and union affiliation accorded more or less similar ratings to the objectives investigated. The general belief is that the said companies are not doing enough in addressing issues of transformation. These results have been confined to those responses reflecting the (57.4%) complete response rate, subsequent to estimating error. Further investigation is warranted to examine the impact of the respondent’s level in the organisation on the objectives.

5.7.2 Racial Impact
The issue of race is an important one in the South African context. The shift of power from the white males who have traditionally held it to previously disadvantaged groups is a national phenomenon that is applicable to the South African mining industry in general. The target audience comprised of a mix of respondents. Interestingly, the rudimentary empirical analysis and free form commentary did not appear to exhibit any correlation between the differing results as regards agreement and disagreement or the race as well as the gender of the respondents. This topic warrants further research: hence
the application of stratification to the sampling method should reveal a very intriguing phenomenon for future research, albeit the study is not racially motivated at all.

5.7.3 Impact on Occupancy Levels
Interestingly, management level did not impact on the consistency level of results; respondents are by definition all in management except that some managers are in operational areas whilst certain others are tactical and still others strategic. The percentage of agreement was not influenced by the seniority of respondents; it was, rather, influenced by gender. This is an intuitively understandable statement and in the absence of organisational policies and procedures on transformation issues these managers would tend to rely on their intuition and experience to manage their respective departments.

5.7.4 Transparency
It was also noted that there might be a lack of transparency in the application of objectives as the anticipated scores would have been higher than average: some employees seem to be more aware of these issues than others. This was expected to be gender specific driven and yet it is not the case. South African platinum mining companies, like any other mining houses in South Africa, are dominated by union activists; it surprised the researcher that this did not influence the results in any way. This is also a reflection of a more transformed organised labour force, whose level of maturity is beyond radicalism and is more strategically aligned towards a sound and progressive business ideology.

5.7.5 Gender Perspective
In general, there was a considerable difference between numbers of male and female respondents with 359 and 133 respectively. Interestingly, even males, who are in the majority, acknowledged that the objectives under study are not being met in the given companies. Women suspect that they are being dominated and that it is as if they are non-existent, whilst males say they are not even aware that they treat their female counterparts differently. “It's all about delivery and competency”, says one manager. The results are still very
revealing: that these constructs are not being addressed. Male respondents tend to have contributed to this conclusion by giving the same input as their female counterparts. This proves that there is little or no bias in the results on the foundations of gender perceptions, opinions, interests and views.

### 5.8 Conclusion

The overall conclusion to be drawn from the research is that whilst the workplace understanding of the transformation issues being studied is interpreted differently from the academic definitions, the members of the sample do appreciate the importance of transformation and the impact that their leadership exerts on the success of implementation, whilst on the contrary the leadership feels that it is challenged to formulate strategies that combine financial goals with the core ideology and envisioned future of the organisation.

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**Chapter 5**

Discussed the research findings, provided analyses and interpretations of data.

The next Chapter: 6

**DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

Follows up on the discussion findings, draws conclusions, provides the recommendations and also makes recommendations for further research.
6 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter concludes the overall research investigations. The conclusion and contributions of the research are presented, after which areas for future research are proposed.

6.2 Overall findings

The overall findings of this study are highlighted in Table 6.1 hereunder:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Description</th>
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<tbody>
<tr>
<td>Chapter 1</td>
<td><strong>Orientation</strong> - I explained the background of the study and why I embarked on it. I am really concerned about the fact that South African democracy, has not fully translated into workplace transformation, with specific reference to mining.</td>
</tr>
<tr>
<td>Chapter 2</td>
<td><strong>Foundation of the Study</strong> – In this chapter I discussed the context in which the mining industry operates in relation to the environment influencing its attractiveness, sustainability and human resources, for the purpose of effective stakeholders’ management relations, since change does not happen in a vacuum and its success or failure is influenced by the stakeholder as the catalyst and drivers of the change process.</td>
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<tr>
<td>Chapter 3</td>
<td><strong>Literature review</strong> – In chapter three I presented a review of the literature that surrounds the transformational barriers within the global, country, industry and sector level. I provided a brief description of the South African situation so as to highlight legislation in support of transformation. Following this I described some of the leadership theories with specific reference to transformational leadership models that influence change in the workplace as well as a further analysis of South African leadership competencies for employee engagement, in order to see how transformational leadership can translate into employee engagement.</td>
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<td>Chapter 4</td>
<td><strong>Research Methodology</strong> – This chapter outlined the approach and methods used to carry out this study. I described the tools I used to gather the data, namely a survey using a questionnaire and open-ended descriptive questions to elicit issues of transformational barriers in South African platinum mining companies. I also explained how I managed to maintain a valid, reliable ethical and rigorous method whilst carrying out the study.</td>
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<tr>
<td>Chapter 5</td>
<td><strong>Research Results</strong> – This chapter is a narrative presentation of the data as it was collected through the research process. The results are largely presented visually so as to make it easier for the reader to understand some of the processes taking place. The data included the presentation of biographical information, highest educational qualification, general job experience, acquisition of mining skills, union affiliation, gender, sampling results and descriptive analysis. I provided comments after each section of data analysis which assisted in providing a more comprehensive understanding of the research objectives being investigated.</td>
</tr>
<tr>
<td>Chapter 6</td>
<td><strong>Discussion, Recommendations and Conclusion</strong> – This chapter discussed critical and key factors drawn from the study, made recommendations on what can be done to address issues of transformational barriers to women’s advancement in the said companies, proposes further research and concludes on the basis of the previous chapter’s results.</td>
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</table>

**Table 6-1: Overall Findings**

### 6.3 Discussion

The previous chapters discussed the given barriers and contextualised these within the constraints of the research objectives which attempt to clarify the pressing issues which the companies investigated are challenged by. It is not clear how the mining sector goes about recruiting and supporting female miners, or how women are faring as mine workers, especially in leadership positions. Women’s participation in the formal mining sector and the effects of this impact is not well documented in South Africa and elsewhere.
Within mining, low levels of formal education, lack of technical education specifically, unsupportive work cultures, the absence of role models and mentors, the absence of facilities for women in the workplace, and poor attention to ergonomics in mining, are cited as factors which hold women back. Environmental damage and social upheaval, which often accompany mining, are believed to affect women especially, raising questions about how women can participate more effectively in decision-making from the inception phase until the end of the life of a mine and regarding how women can share equally in the benefits arising from mining. The general outcry from women affected by mining is related to issues such as health and education, economic empowerment, social empowerment and safety and security, it is the view of this thesis that the workplace should on a broader scale address these issues in relation to the research objectives.

### 6.4 Further Research Areas

While I have focused on some of the issues facing women’s advancement in South African platinum mining companies, it is also important to note that some of the issues were not fully investigated due to the limited scope of the research, time constraints, the location of the mines, and the availability and willingness of respondents to participate.

Further research is suggested as regards the advancement and empowerment of women in relation to graduates entering the mining industries, women artisans in the mines, women-in-business procuring services for the mines and women within the mining communities.

### 6.5 Recommendations

The subject of gender stereotypes and discrimination in the workplace is manifested by the metaphorical barrier to high-level advancement known as the “glass ceiling.” Holleran (2009) holds the view that this has long provoked controversy in business and academia. Despite steady progress in cracking
the ceiling, research indicates a woman’s route to a leadership role is often still beset by subtle and sometimes blatant obstacles.

This research study should contribute towards the body of knowledge in the South African Mining Industry: although the study is platinum specific, the dynamics in mining generally are very similar. The recommendations are outlined as research objectives to gain a clear sense of the study’s outcomes. They begin with the practical aim of objective 5.

- **Objective 5:** is aimed at recommending actions required in addressing the issues of transformational barriers to women’s advancement in SA platinum mining companies.

- **Objective 1:** To establish if SA Platinum mining companies recognize women advancement as a business imperative?

Table 2 above contains the analysis of stakeholders: these will need to adopt some of the strategies in the future. Companies should report their progress toward achieving concrete environmental and social goals through specific and measurable indicators that can be independently verified. Such information should be disaggregated at a project or site-specific level.

Such mines should provide broad support for more detailed and verifiable reporting so that stakeholders can assess progress toward achieving specific environmental and social goals. Corporate reporting in the mining sector has varied in quality and no common framework was in existence until the adoption of the mining charter.

South African government’s constitution has shown commitment in ensuring gender equality, by promulgating a number of laws to aid the process. The legislative and policy environment is an enabling one to ensure that women advance in the mining sector. Government’s new Cabinet has also appointed women, to convey a message regarding the importance of the issue. These recommendations suggest that national issues should be translated into other institutions including the workplace.
• **Objective 2: To establish if women can advance in SA Platinum mining companies**

Women are recruited for underground positions which were traditionally occupied by men. Companies should initially engage with organised labour, and identify certain underground positions, largely in engineering and in development, which are suitable for women. However with the introduction of physical capability testing as part of the selection process, it can be agreed that all occupations, without exception, should be open to women provided they meet the necessary criteria.

• **Objective 3: To establish if women need support to advance in SA Platinum mining companies**

Women should be encouraged to participate and face challenges in mining. Mining companies need to devise development plans for women linked with company and governmental policies such as the Employment Equity and Skills Development Act. These policies should be translated into practice, and assist in establishing career paths, discussed with women in order to offer them opportunities to nominate their career path preference. Advice should be provided on the development initiatives required in order to pursue this career path. This should also be discussed with key stakeholders such as unions and management and should constitute a combined effort amongst all. There should be platforms to address matters such as sexual harassment, discrimination and facilities for women. Women in Mining should be the regular agenda item in all key committees and forums. Companies should set cultural diversity training in place, with gender issues forming an integral part of the content. Management should demonstrate its support for diversity initiatives.

• **Objective 4: To establish if the leadership of SA Platinum mining companies embraces women talent**

These companies should put succession plan programs in place where women are identified to take key roles for retention strategy reasons. This plan needs to be discussed and commitment from Board level. Companies should encourage women to develop critical business skills like those of their
male counterparts. The former should develop strategies that will include measures to support the advancement of women in the industry. Further investigation needs to be conducted into how paper commitments are being translated into practice and how progress is measured, especially when examining all the commitments in the form of a policy.

Leadership in these mining operations should assess the internal and external environments to identify internal strengths that meet the market’s needs and give the mining houses a comparative advantage in the marketplace, differentiating themselves from their competitors. Such companies should leverage their distinctive competencies in strategy development. This will enhance their uniqueness as regards capabilities by investing in people, reinforcing abilities and expertise, training, communication and ultimately retention.

6.6 Conclusion
In summary, the extent to which women are positively or negatively affected by mining largely depends on issues of equity. As inequities are challenged, gender roles will inevitably evolve, and women in mining will be better equipped to support sustainability in the communities where the challenges occur. The more the problem is brought to the public domain, fully researched and debated; the more the leadership in the said companies will be open to constructive criticism and consequently embrace the phenomenon of women’s advancement. Women’s capability to work in mining will open more opportunities, leading to increased confidence levels in the industry regarding their employment and promoting diversity in support of the country’s government. This should create a sustainable business model that will both encourage and retain women as employees and managers within their respective operations.
7 LIST OF REFERENCES


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APPENDICES AND ANNEXURES

ANNEXURE 1: GEOGRAPHICAL LOCATION OF SOUTH AFRICA’S PLATINUM MINES
ANNEXURE 2: CHAMBER OF MINES SA - PLATINUM MINES MEMBERS

<table>
<thead>
<tr>
<th>PLATINUM MEMBERS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANGLO AMERICAN PLATINUM CORPORATION LIMITED (AMPLATS)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JCI House, 28 Harrison Street, Johannesburg, 2001</td>
<td>(011) 373-6111</td>
<td>(011) 373-5111</td>
</tr>
<tr>
<td><strong>BAFOKENG RASIMONE PLATINUM, P O BOX 4971, RUSTENBURG, 0300</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potgietersrust Platinum Limited, Private Bag X2463, Potgietersrust, 0600</td>
<td>(015) 418-2000</td>
<td>(015) 418-2018</td>
</tr>
<tr>
<td>Lebowa Platinum Mines Limited, P O Box 1, Atok, 0749</td>
<td>(015) 619-0044</td>
<td>(015) 619-0010</td>
</tr>
<tr>
<td><strong>RUSTENBURG PLATINUM MINES LIMITED</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amandelbult Section, P O Box 2, Chromite, 0362</td>
<td>(014) 784-1111</td>
<td>(014) 784-1230</td>
</tr>
<tr>
<td>Union Section, Private Bag X351, Swartklip, 0370</td>
<td>(014) 786-1000</td>
<td>(014) 786-0223</td>
</tr>
<tr>
<td>Rustenburg Section East/West Mine, P O Box 8208. Rustenburg 0300</td>
<td>(014) 598-9111</td>
<td>(014) 567-1383</td>
</tr>
<tr>
<td><strong>IMPALA PLATINUM LIMITED</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P O Box 5683, Rustenburg, 0300</td>
<td>(014) 569-0000</td>
<td>(014) 569-6548</td>
</tr>
</tbody>
</table>

ANNEXURE 3 SURVEY RANDOM SAMPLE CALCULATOR

- How many survey respondents do you need?

Specify your desired error level and population size below and click calculate. The numbers next to each confidence level indicate how many people need to complete your survey to achieve the specified error level.

How much error are you willing to tolerate? If you are not sure, try somewhere between 3% and 6%

How many people are in your population?

<table>
<thead>
<tr>
<th>Confidence Level</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%</td>
<td>207</td>
</tr>
<tr>
<td>95%</td>
<td>265</td>
</tr>
<tr>
<td>99%</td>
<td>374</td>
</tr>
</tbody>
</table>
- How many people do you need to send the survey to?

How many people need to complete the survey?  
From Calculator #1 above

What is your estimated response rate?  
What % of people do you expect to complete the survey?  
\[59.9\%\]

Send the survey to  
\[856\] people

- How accurate are your survey results?

How many people are in your population?  
\[857\]

How many people completed your survey?  
\[513\]

<table>
<thead>
<tr>
<th>Error Level</th>
<th>90% Confidence</th>
<th>95% Confidence</th>
<th>99% Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.3 %</td>
<td>2.7 %</td>
<td>3.6 %</td>
</tr>
</tbody>
</table>

**ANNEXURE 4 PILOT STUDY RESULTS**

**Pilot study**
The preferred research instrument utilised in this research study, was an electronic questionnaire, administered through an email facility. Prior to sending out the questionnaire for data collection, it was anticipated that some measure of sensitivity would occur. Hence, the questionnaire was piloted with the objective being to detect misunderstandings, incorrect questioning and any sensitivity. In the act of piloting the questionnaire, copies of the questionnaire were sent to fifty colleagues within African Rainbow Minerals who did not belong to the chosen sample. For the type of study and the objectives, there was a general agreement that the approach and instrumentation were acceptable.
In order to improve contact rates, and as a result, response rates, the original email was to be followed by a number of reminders (refer to Appendix III), sent at two-week intervals. The researcher was targeting a response rate of 60%. Pilot study findings are set as annexure at the t

**Pilot Study Findings**

The pilot study was used as a template to pre-test the qualitative methods of data collection as well as to determine the understanding of issues that affect the advancement of women in South African platinum mining companies in relation to participant’s observations, perceptions, opinions and experiences of working in the mines.

Results of the pilot study were found to encourage an in-depth analysis, in which case they inform a need for both a questionnaire and open-ended questions to be administered in order to gain a realistic view of the topic under study.

Further, as the mining industry is increasingly challenged to transform, respondents felt very strongly that they wanted to express the following views regarding the finalisation of the questionnaire, which provided further input to the study:

- Eliminate duplication, as some questions are testing the same dimension.
- Reduce number of questions to avoid laborious and lengthy questions, which could decrease respondent’s interest in participation.
- Questionnaire and open-ended questions should be separated as to obtain a commentary view of each objective meaningfully.
- Respondents felt men would be biased against the study, and that the questionnaire should be administered to women only.

The general finding was that there were indeed barriers in this regard.
Summary of pilot results

A total of 140 observations were noted (phase I of piloting). This total is derived from 35 questions multiplied by 4 respondents. The second phase of piloting was conducted with 80 observations: 20 multiplied by 4 participants. The third phase of piloting was conducted with 50 respondents, where only 36 respondents returned their questionnaires, making it a 72% response rate. The standard deviation for the total number of observations per scale item over each research objective is also calculated. The standard deviation measures the spread of the observations. A low standard deviation indicates that the observations are close together, whilst a large standard result indicates the observations are spread out, over a large range of values. The table below furnishes an overview of the respondents’ observations and overall perceptions. Figure below is a graphical illustration thereof. The standard deviation for the total number of observations per scale item over each research objective is calculated.

Summary of Pilot Study Data Responses – Standard Deviation

<table>
<thead>
<tr>
<th>SCALE</th>
<th>strongly disagree</th>
<th>disagree</th>
<th>Agree</th>
<th>strongly agree</th>
<th>no opinion</th>
<th>TOTAL</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO1</td>
<td>Transformation as a business imperative</td>
<td>97</td>
<td>62</td>
<td>22</td>
<td>18</td>
<td>5</td>
<td>204</td>
</tr>
<tr>
<td>RO2</td>
<td>Career advancement</td>
<td>84</td>
<td>64</td>
<td>8</td>
<td>12</td>
<td>0</td>
<td>168</td>
</tr>
<tr>
<td>RO3</td>
<td>Support system</td>
<td>38</td>
<td>46</td>
<td>18</td>
<td>10</td>
<td>0</td>
<td>112</td>
</tr>
<tr>
<td>RO4</td>
<td>Talent management</td>
<td>68</td>
<td>42</td>
<td>28</td>
<td>69</td>
<td>29</td>
<td>236</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>287</td>
<td>214</td>
<td>76</td>
<td>109</td>
<td>34</td>
<td>720</td>
</tr>
</tbody>
</table>
Pilot study graphical illustration standard deviation. Further to this a descriptive narrative of open ended questions suggested that platinum mines in South Africa have a lot of work to do in addressing women’s advancement issues in certain areas. From the analysis of the above results it became evident that the recommendations which would address the fifth objective under study would be derived from the questionnaire and open ended questions.
APPENDIX I: REQUEST TO CONDUCT RESEARCH IN THE RESPONDENT COMPANY

Human Resources Director
(Title, Name and Surname)

My name is Busisiwe Mashiane, a third year student of Masters in Business Leadership at UNISA, School of Business Leadership.

I am currently conducting research on the following topic: “Transformational barriers against women advancement in South African Platinum Mining Companies”, and would like to request you to participate in my research.

In this survey my purpose is to find out what you think are the issues affecting women’s advancement in South African Platinum Mining Companies in relation to your observations, perceptions, opinions and experiences.

Please be advised that all responses will be kept highly confidential for the purpose of this study. Under no circumstances will the names of the respondents be disclosed and no information will be divulged to other individuals except to the School of Business Leadership and University Management.

I would appreciate it if you could send me a list of possible respondents on C3 level and above, whom I will contact directly with your permission.

Kind Regards,

Busisiwe Mashiane
Human Resources Manager
African Rainbow Minerals
Tel (011) 779-1239
Fax (011) 770-1038
(Cell) 082-370-2591
e-mail: busi.mashiane@arm.co.za
APPENDIX II: REQUEST TO COMPLETE A QUESTIONNAIRE

Dear Respondent

Thank you for your willingness to participate in my survey.

Please note that all communication will be treated in the strictest confidence and participation (or non-participation) and/or participant responses will not be revealed to any external parties.

Participation in the survey will be entirely voluntary; information provided will not be used for any purpose other than stated.

It will take about 20 minutes to complete the questionnaire. I would appreciate it if I could have the completed questionnaire by (date)

Regards

Busisiwe Mashiane
Human Resources Manager
African Rainbow Minerals
Tel: (011) 779-1239
Fax: (011) 779-1038
Cell: 082-379-2590
e-mail: busi.mashiane@arm.co.za
APPENDIX III: REMINDER

Dear Respondent

This is a friendly reminder to please complete the questionnaire and email it back to me by (date)…………….

Thanking you in anticipation

Busisiwe Mashiane
Human Resources Manager
Tel: (011) 779-1239
Fax: (011)779-1038
Cell: 082 -370-2591
Email: busi.mashiane@arm.co.za
### APPENDIX IV: THANK YOU LETTER

<table>
<thead>
<tr>
<th>Dear Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thank you for taking time to participate in my research project by completing the questionnaire; your help is highly appreciated.</td>
</tr>
<tr>
<td>Should you need to obtain the results of the study, please do not hesitate to contact me.</td>
</tr>
<tr>
<td>Kind Regards</td>
</tr>
</tbody>
</table>

**Busisiwe Mashiane**  
**Human Resources Manager**  
**Tel:** (011) 779-1239  
**Fax:** (011) 779-1038  
**Cell:** 082 -370-2591  
**Email:** busi.mashiane@arm.co.za
Dear Participant

My name is Busisiwe Mashiane, a third year student pursuing a Masters in Business Leadership at UNISA School of Business Leadership. I am currently conducting research on the following topic: “Transformational barriers against women advancement in South African Platinum Mining Companies”.

In this survey my purpose is to find out what you think are the issues that affect women’s advancement in South African Mining Companies in relation to your observation, perceptions, opinions and experiences.

People have very different opinions about these issues, ranging from very positive to very negative. Whether you agree or disagree with my statements, I would like to know what you think.

Please be advised that your response will be kept highly confidential for the purpose of this study. Under no circumstances will this information be divulged to other individuals except to the School of Business Leadership and University Management.

Kind Regards,

Busisiwe Mashiane  
Human Resources Manager  
Tel: (011) 779-1239  
Fax: (011)779-1038  
Cell: 082 -370-2591  
Email: busi.mashiane@arm.co.za
PART A: QUESTIONNAIRE

SECTION 1: BIOGRAPHICAL DATA

In order to help us with analysis, I need the following background information.

Please be assured that your confidentiality will be protected, and that this form will only be used for statistics purposes.

Please circle the appropriate numbers and complete where necessary.

<table>
<thead>
<tr>
<th>1.1 Please indicate your age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20 yrs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.2 Please indicate your gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.3 Please indicate your designation in Patterson Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3</td>
</tr>
<tr>
<td>Junior Management/Supervisory</td>
</tr>
</tbody>
</table>
SECTION 2: QUALIFICATIONS AND JOB EXPERIENCE

2.1 Please indicate your highest educational qualification (use equivalents where necessary)

<table>
<thead>
<tr>
<th>Below Grade 12</th>
<th>Grade 12</th>
<th>Degree/Diploma</th>
<th>Postgraduate degree</th>
<th>Other (Please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2 Please indicate your current role

<table>
<thead>
<tr>
<th>Graduate/Learner Official</th>
<th>Miner</th>
<th>Shift Boss or Mine Overseer</th>
<th>Manager Mining</th>
<th>Other (Please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.3 Please indicate your experience in the Mining Industry

<table>
<thead>
<tr>
<th>&lt; 1 year</th>
<th>1 – &lt; 2 years</th>
<th>3 – &lt; 5 years</th>
<th>6 – &lt; 10 years</th>
<th>&gt; 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.4 What is your total experience in Platinum Sector

<table>
<thead>
<tr>
<th>&lt; 1 year</th>
<th>1 – &lt; 2 years</th>
<th>3 – &lt; 5 years</th>
<th>6 – &lt; 10 years</th>
<th>&gt; 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.5 How did you acquire mining skills?

<table>
<thead>
<tr>
<th>Risen through the ranks</th>
<th>Internal Promotion</th>
<th>Formal Education</th>
<th>On-the-job training</th>
<th>Self Study</th>
<th>Aptitude and Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.6 Do you affiliate to a union

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 3: TRANSFORMATION AS A BUSINESS IMPERATIVE

In this section you are required to circle one number only for each statement.

The following are the selections and their description:
1= strongly disagree
2= disagree
3= agree
4= strongly agree
5 = no opinion

| 3.1 In your organisation transformation is on top of the agenda |
|---|---|---|---|---|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |

| 3.2 In my organisation we have a transformation committee with a clear mandate to women empowerment |
|---|---|---|---|---|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |

| 3.3 In my organisation Top Management encourages all employees to embrace diversity |
|---|---|---|---|---|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |

| 3.4 Top management always reminds us about the important contribution that women make in our business |
|---|---|---|---|---|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |

| 3.5 In my organisation we have an equal number of men and women |
|---|---|---|---|---|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |
# SECTION 4: CAREER ADVANCEMENT

In this section you are required to circle one number only for each statement.

The following are the selections and their description:

1 = strongly disagree
2 = disagree
3 = agree
4 = strongly agree
5 = no opinion

| 4.1 My Manager supports women in our department |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |

| 4.2 In my organisation there are programmes that address the skills gap between women and men |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |

| 4.3 In my organisation leadership supports the acquisition of new skills irrespective of gender. |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |

| 4.4 In my organisation leadership involves women employees in decision making |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |

| 4.5 My managers and leadership keep a track of women’s career progression |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| strongly disagree | disagree | agree | strongly agree | no opinion |
| 1 | 2 | 3 | 4 | 5 |
SECTION 5: SUPPORT SYSTEM

In this section you are required to circle one number only for each statement.

The following are the selections and their description:
1 = strongly disagree
2 = disagree
3 = agree
4 = strongly agree
5 = no opinion

5.1 Our organisation has a well defined, documented set of procedures that can effectively apply to handle human resource issues related to women's issues

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>agree</th>
<th>strongly agree</th>
<th>no opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5.2 In my organisation, women are given fair opportunities for self development

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>agree</th>
<th>strongly agree</th>
<th>no opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5.3 Women generally trust they can count on their male counterparts for support

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>agree</th>
<th>strongly agree</th>
<th>no opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5.4 Women feel that they are rewarded for their input

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>agree</th>
<th>strongly agree</th>
<th>no opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5.5 In my organisation, men are threatened by women in mining

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>agree</th>
<th>strongly agree</th>
<th>no opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
SECTION 6: TALENT MANAGEMENT

In this section you are required to circle one number only for each statement.

The following are the selections and their description:
1= strongly disagree
2= disagree
3= agree
4= strongly agree
5= no opinion

6.1 In my organisation we have a talent pool management within our Human Resources

6.2 Most women are part of this talent pool for career advancement

6.3 Leadership in my organisation encourages women to work hard in order to be recognised as part of the talent pool

6.4 In my organisation women are free to speak up in meetings, make operational input and give suggestions for business improvement

6.5 Most women are geared for fast tracking in my organisation.
PART B: COMMENTS SECTION

In this section you are required to give comments in the space provided below.

SECTION 3: TRANSFORMATION AS A BUSINESS IMPERATIVE

1. What are your views of transformation in your organisation?

2. In your opinion, do you think management is in support of transformation?

3. In your view, do you feel women are ready to take key roles in the mining industry?

SECTION 4: CAREER ADVANCEMENT

4. What are your views of career advancement towards women in your organisation?

5. Please comment on women’s advancement programmes in your organisation

6. Please give your opinion, on the number of women’s promotions in your organisation
SECTION 5: SUPPORT SYSTEMS

7. Please comment on the support systems, structures and processes that are available to support advancement of women in mining

8. What is your opinion of Top Management support towards women’s advancement?

9. Do you feel Top Management influences employees positively to support women in your mine?

SECTION 6: TALENT MANAGEMENT

10. Please comment on succession planning and retention strategy of your organisation in relation to women’s advancement

11. To what extent is your organisation developing women to hold technical positions?
12. Please comment on your graduate development programme

Thank you for taking the time to complete this survey