A STRATEGIC ANALYSIS OF INTERNATIONAL GUI RESOURCES CORP.- A JUNIOR MINERAL EXPLORATION COMPANY

by

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ABSTRACT

This project is a strategic analysis of a mineral exploration company, International GUI Resources Corp. (GUI). The project describes and evaluates GUI’s external environment and identifies the company’s strategic threats and opportunities. GUI’s strategic threat is related to the extreme bargaining power suppliers of exploration services have in the mineral exploration industry. The project suggests and investigates three potential strategic alternatives to mitigate this threat. It then evaluates these alternatives against GUI’s internal capabilities to identify the alternative consistent with GUI’s competencies and strategic assets and most aligned with its management. The project concludes that GUI should enter the geophysical surveying sector and closes with a suggestion on how to implement this strategic alternative.

Keywords: exploration, drilling, geophysical surveying

Subject Terms: mineral exploration, mineral exploration service industry
DEDICATION

To my fiancé, Scott Andrew MacLean, who supported me through my studies, encouraging me when I could not see the light at the end of the tunnel.

Mai vangu, Eutropia Molly Mazviwha, vakandipa zwese zwaviaikwanisa kuti ndiende kuchikoro ndidzidze, ivo vachisara vasina chekubhata.

Kuna Mbuya vangu, VamaNyathi, muzorore mumaoko aMari.
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TABLE OF CONTENTS

Approval ........................................................................................................... ii
Abstract .......................................................................................................... iii
Dedication....................................................................................................... iv
Acknowledgements ......................................................................................... v
Table of Contents .......................................................................................... vi
List of Figures ................................................................................................ xi
List of Tables .................................................................................................. xii
Glossary .......................................................................................................... xiii

1.0 ANALYSIS of GUI'S CURRENT SITUATION .............................................. 1
   1.1 Introduction .......................................................................................... 1
   1.2 Description of GUI's Strategic Issue .................................................. 2
   1.3 The Importance of This Strategic Analysis ......................................... 2
   1.4 The Mineral Exploration Industry ....................................................... 3
       1.4.1 Boundaries of the Mineral Exploration Industry ......................... 4
       1.4.2 Junior Resources' Involvement in the Mineral Exploration Industry 4
       1.4.3 The Value of Junior Resources in the Mineral Exploration Industry 5
       1.4.4 The Role of Junior Resources in the Mineral Exploration Industry 7
       1.4.5 The Number of Junior Resources Companies Operating in Canada 9
       1.4.6 Cyclic Nature of the Mineral Exploration Industry .................... 10
       1.4.7 Effect of Increased Exploration Activity on the Exploration Industry 15
       1.4.8 Limited Number of Skilled Workers and Professionals in the Exploration Industry 16
   1.5 International GUI Resources Corp ....................................................... 18
       1.5.1 History and Company Overview ................................................. 18
       1.5.2 Internal Characteristics of GUI/ Context of GUI's Business ....... 18
       1.5.3 GUI's Ownership ...................................................................... 19
       1.5.4 Location of GUI's Mineral Properties ....................................... 19
       1.5.5 Where GUI Fits in the Exploration Industry ............................... 20
       1.5.6 GUI's Current Strategy ............................................................... 21
       1.5.7 Problems Related to GUI's Current Strategy ............................... 21
2.0 SIX FORCES ANALYSIS OF INDUSTRY .................................................................................27

2.1 Introduction..................................................................................................................27

2.2 GUI’s External Analysis Using Porter’s 5 Forces Plus 1 (Government)..........................28

2.3 Power of Barriers to Entry in the Mineral Exploration Industry (Low to Medium)........28

2.3.1 Forms of Barriers to Entry in the Exploration Industry ........................................29

2.3.2 Barrier to Entry: Capital for Operations and Exploration Activities .......................30

2.3.3 Barrier to Entry: Rights to Interests in Mineral Properties ......................................31

2.3.4 Barrier to Entry: Network of Relationships ..............................................................32

2.3.5 Barrier to Entry: Large Companies Have Economies of Scale ...............................33

2.3.6 Barrier to Entry: Long Learning Curves ..................................................................34

2.3.7 Summary of KSFs Related to the Barriers to Entry ................................................34

2.4 Power of Buyers in the Mineral Exploration Industry (Low) .......................................35

2.4.1 Price Sensitivity of Buyers in the Exploration Industry ...........................................35

2.4.2 Buyers Require a Significant Amount of Information on the Deposit .......................36

2.4.3 Importance of Information Quality and Its Standardization ....................................36

2.4.4 Summary of KSFs Related to the Bargaining Power of Buyers ...............................37

2.5 Power of Substitutes in the Mineral Exploration Industry (Low) ..................................38

2.5.1 Mineral Exploration by Major Mining Companies as Substitutes to Mineral Exploration by Juniors ..........................................................39

2.5.2 Mineral Exploration by Prospectors as Substitutes to Mineral Exploration by Juniors .........................................................................................41

2.5.3 Summary of KSFs Related to the Power of Substitutes ...........................................41

2.6 Power of Suppliers in the Mineral Exploration Industry (Very Strong) .........................42

2.6.1 Suppliers in the Exploration Industry are Unique and in Short Supply ....................42

2.6.2 Costs of Switching Suppliers in the Mineral Exploration Industry ..........................43

2.6.3 Significance of Business from Junior Resource Companies to Suppliers ................43

2.6.4 Summary of KSFs Related to the Power of Suppliers ............................................44

2.7 Power of Government in the Mineral Exploration Industry (Low) ...............................47

2.7.1 Regulation on the Mineral Exploration Industry .......................................................47

2.7.2 Government Policy on Mineral Exploration ............................................................48

2.7.3 Current Regulations on the Mineral Exploration Industry ......................................49

2.7.4 Effect of Yukon Regulation on the Mineral Exploration Industry ............................49

2.8 Rivalry in the Industry Mineral Exploration (High) ......................................................51

2.9 Summary of the Six Forces Analysis .........................................................................54

2.10 Mineral Exploration Industry Attractiveness ..........................................................55
2.11 Summary of KSFs in the Mineral Exploration Industry .............................................. 56
2.12 GUI's Industry Competitive Analysis ........................................................................... 57
2.12.1 GUI's Main Competitors ......................................................................................... 58
2.12.2 GUI's Competitor: Lagoon Resources Corp .......................................................... 58
2.12.3 GUI's Competitor: Kashe Minerals Inc ................................................................. 59
2.13 Rating GUI and its Competitors on the Mineral Exploration Industry's KSF .................. 61
2.13.1 Scoring Criteria of GUI and Its Competitors ......................................................... 61
2.13.2 GUI and Its Competitors' KSFs with Suppliers: Relationships Allowing Access to Suppliers and Technical Experts .................................................... 62
2.13.3 GUI and Its Competitors' KSFs with Suppliers: Relationships Allowing Access to Suppliers of Grass-roots Properties with Significant Potential for Deposits .................................................................. 63
2.13.4 GUI and Its Competitors' KSFs: Relationships Allowing Access to Suppliers of Equity Financing .......................................................... 64
2.14 Summary of GUI's Strategic Threats and Opportunities ............................................ 65
2.15 Possible Strategic Alternatives for GUI ...................................................................... 66
2.16 GUI's Strategic Alternatives #1, 2, and 3: Integrating into Diamond Drilling and/or Geophysical Surveying Sectors .......................................................... 66
2.16.1 Background on Upstream Vertical Integration into the Geophysical Surveying and Diamond Drilling Sectors .......................................................... 67
2.16.2 Limitations of Vertical Integration into the Geophysical Surveying and Diamond Drilling Sectors .............................................................................. 68
2.16.3 Summary Results of Vertically Integrating into the Mineral Exploration Service Industry ........................................................................................................ 69
2.17 The Mineral Exploration Service Industry ................................................................. 69
2.18 Five Forces Analysis of the Mineral Exploration Services Industry ................................ 70
2.18.1 Power of Barriers to Entry in the Mineral Exploration Service Industry (Low to Medium) ...................................................................................... 71
2.18.2 Power of Buyers in the Mineral Exploration Services Industry: Junior Exploration Companies (Low) .............................................................. 73
2.18.3 Threat of Substitutes in the Service Industry (Low) .............................................. 74
2.18.4 Bargaining Power of Suppliers of the Service Industry (Medium) ......................... 74
2.18.5 Rivalry among Existing Companies in the Service Industry (Low) ......................... 75
2.19 Mineral Exploration Service Industry Attractiveness .................................................. 76
2.20 GUI's Strategic Alternative # 4: Status Quo ............................................................... 77

3.0 DIAMOND FRAMEWORK ANALYSIS OF GUI's INTERNAL CAPABILITIES .......................................................... 78
3.1 Introduction .................................................................................................................. 78
3.2 Expected Effect of GUI Entering the Exploration Service Industry ............................. 79
3.3 GUI's Strategy-Environment Linkage ......................................................................... 80
3.4 GUI's Strategy-Management Preference Linkage ....................................................... 80
3.5 GUI's Goals ................................................................. 80
  3.5.1 Current Goals ......................................................... 81
  3.5.2 Goals Required For Successful Vertical Integration .......... 81
  3.5.3 Gap Analysis for Goals ............................................. 81
3.6 GUI's Product/Service Market Focus .................................. 82
  3.6.1 Current Product/Service Market Focus ......................... 82
  3.6.2 Product/Service Market Focus Required For Successful Vertical Integration .......... 82
  3.6.3 Gap Analysis for Product/Service Market Focus .............. 82
3.7 GUI's Value Proposition ................................................ 83
  3.7.1 Current Value Proposition ........................................ 83
  3.7.2 Value Proposition Required For Successful Vertical Integration .......... 84
  3.7.3 Gap Analysis for Value Proposition ........................... 84
3.8 GUI's Core Activities ................................................... 85
  3.8.1 GUI's Current Core Activities .................................... 85
  3.8.2 Core Activities Required For Successful Vertical Integration .......... 85
  3.8.3 Gap Analysis for Core Activities ............................... 86
3.9 GUI's Capabilities and Preferences of Managers Critical to the Implementation Process .................................................. 86
  3.9.1 Current Capabilities and Preferences of Managers Critical to the Implementation Process .................................................. 86
  3.9.2 Required Capabilities and Preferences of Managers Critical to the Implementation Process .................................................. 87
  3.9.3 Gap Analysis Capabilities and Preferences of Managers ........ 87
3.10 GUI's Strategy-Organization Linkage .................................. 88
3.11 GUI's Corporate Culture ................................................ 89
  3.11.1 Current Corporate Culture ....................................... 89
  3.11.2 Required Corporate Culture for Successful Vertical Integration .......... 89
  3.11.3 Gap Analysis of GUI's Culture .................................. 89
3.12 GUI's Structure .......................................................... 90
  3.12.1 Current Structure .................................................. 91
  3.12.2 Required Structure for Successful Vertical Integration .......... 91
  3.12.3 Gap Analysis of GUI's Structure ............................... 92
3.13 GUI's Management Processes/Systems .................................. 93
  3.13.1 Current Management Systems .................................... 93
  3.13.2 Required Management Systems for Successful Vertical Integration .......... 93
  3.13.3 Gap Analysis of GUI's Management Systems ................. 95
3.14 GUI's Strategy-Resources Linkage ...................................... 95
3.15 GUI's Human Resources .................................................. 96
  3.15.1 Current Human Resources ....................................... 96
  3.15.2 Required Human Resources for Successful Vertical Integration .......... 96
  3.15.3 Gap Analysis in GUI's Human Resources ....................... 97
LIST OF FIGURES

Figure 1: Illustration of the Symbiotic Relationship between Juniors and Majors - How Junior Resources Add Value to the Mining Industry........8

Figure 2: Illustration of the Cyclic Nature of the Mineral Exploration Industry - Peaks and Valleys of the Cycle Pointed Out.................13

Figure 3: Graph Illustrating GUI Stock Price between August 2006 and January 2007 Showing the 40 percent Drop After the Announcement.................................................................24

Figure 4: GUI's Current Organizational Chart .........................................................91

Figure 5: GUI's Required Organizational Chart.....................................................92
LIST OF TABLES

Table 1: Ratio of GUI's Expenditures to Overall Expenditures and Growth in the Mineral Property Assets as Indicator of Increasing Exploration.................................................................53

Table 2: The Effect Porter's Forces Have on the Mineral Exploration Industry Attractiveness.................................................................55

Table 3: Rating GUI and its Competitors' Scores on the Mineral Exploration Industry's KSF.................................................................62

Table 4: The Effect Porter's Forces Have on the Mineral Exploration Service Industry Attractiveness.................................................................76

Table 5: Discounted Cash Flow Calculations - Showing Positive Net Present Value..................................................................................104

Table 6: List of Geophysical Equipment GUI will Purchase to Enter the Geophysical Survey Industry- Showing the estimated cost of each item ..................................................................................112
GLOSSARY

<table>
<thead>
<tr>
<th>Definitions Terms</th>
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<tbody>
<tr>
<td><strong>APGO</strong></td>
</tr>
<tr>
<td>Association of Professional Geoscientists of Ontario</td>
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<tr>
<td><strong>BCSC</strong></td>
</tr>
<tr>
<td>British Columbia Securities Commission</td>
</tr>
<tr>
<td><strong>CEO</strong></td>
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<tr>
<td>Chief Executive Officer</td>
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<td><strong>CIPF</strong></td>
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<tr>
<td>Canadian Investor Protection Fund</td>
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<tr>
<td><strong>CSA</strong></td>
</tr>
<tr>
<td>Canadian Securities Administrators</td>
</tr>
<tr>
<td><strong>deposit</strong></td>
</tr>
<tr>
<td>A mineralized body which has been physically delineated by sufficient drilling and found to contain a sufficient average grade of metals to warrant development expenditures. A deposit qualifies as economic and mineable if legal, technical, and economic factors are resolved.</td>
</tr>
<tr>
<td><strong>drilling</strong></td>
</tr>
<tr>
<td>A drilling method where a rock is drilled with a diamond impregnated hollow drilling bit and produces a continuous, in-situ record of the rock mass intersected in the form of cylinders of rock referred to as core.</td>
</tr>
<tr>
<td><strong>diamond</strong></td>
</tr>
<tr>
<td><strong>electro-magnetic survey</strong></td>
</tr>
<tr>
<td>Survey testing the magnetic fields associated with currents artificially or naturally maintained in the sub-surface of the earth.</td>
</tr>
<tr>
<td><strong>feasibility study</strong></td>
</tr>
<tr>
<td>A definitive engineering estimate of all costs, revenues, equipment requirements, and production levels likely to be achieved if a mine is developed. The study is used to define the economic viability of a project and to support the search for project financing.</td>
</tr>
<tr>
<td><strong>free miner’s certificate</strong></td>
</tr>
<tr>
<td>A registration with the provincial government that allows individuals to act as prospectors and acquire properties with mineral interest</td>
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<tr>
<td>Term</td>
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<td>-----------------------------</td>
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<tr>
<td>geochemical analysis</td>
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<tr>
<td>geophysical surveying</td>
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<td>grass roots property</td>
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<tr>
<td>HOD</td>
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<td>GUI</td>
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<tr>
<td>ITCE</td>
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<td>NRC</td>
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<td>NSR</td>
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<td>property option agreement</td>
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<td>prospector</td>
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<tr>
<td>RC</td>
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<tr>
<td>rock sampling</td>
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<td>SEDAR</td>
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<td>soil sampling</td>
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<tr>
<td>staking</td>
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<tr>
<td>TSX-V</td>
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YESAB  Yukon Environmental and Socio-economic Assessment Board-
the Act sets out a process to assess effects of projects in the
Yukon

Yukon  Yukon Territory
1.0 ANALYSIS OF GUI’S CURRENT SITUATION

1.1 Introduction

This paper evaluates International GUI Resources Corp.’s strategic alternatives while addressing the strategic issues presented by its current external environment. International GUI Resources Corp. (GUI) is a junior mineral exploration company exploring for gold, copper, and uranium in the Yukon Territory (Yukon). GUI’s current environment is influenced by the recent building boom in Asia. The development created a severe gap between the demand for copper and uranium and the current global supplies. In response to this shortage, mineral exploration increased substantially in an attempt to increase the number of copper and uranium-producing mines to increase supply and try to satisfy demand.

The high levels of exploration activities in turn fuelled the demand for providers of mineral exploration services. There are only a few suppliers of these services to go around. This shortage raised suppliers’ bargaining power in the industry, thus enabling suppliers to set prices well above what it costs to provide the services at marginal cost. The purpose of this project is to analyze how GUI can mitigate the effect of suppliers’ extreme bargaining power, and hopefully develop a competitive advantage in the current environment.

In the following sections of this chapter, the current situation analysis provides a description of GUI, the problem the company currently faces, and the
industry in which it operates. This chapter first describes GUI’s strategy and strategic issues; then analyzes its industry. A brief discussion of GUI’s recent history; ownership and control; and current strategy closes the chapter.

1.2 Description of GUI’s Strategic Issue

GUI faces several key problems in the current mineral exploration industry. These problems all originate from one source -- suppliers of exploration services' bargaining power. This analysis concentrates exclusively on the effect that the significant negotiating power of suppliers has on GUI, how to reduce it, and how to increase GUI’s ability to compete. There are two main types of suppliers/contractors in the mineral exploration industry: suppliers of diamond drilling and suppliers of geophysical surveying. Drilling and surveying are the most significant components of mineral exploration. The high demand, coupled with a shortage of suppliers, has increased the cost of exploration services for GUI as mark-ups on services rise. These high costs are slowing down GUI’s exploration progress, and preventing the company from fully evaluating its mineral properties in a timely manner of 3 years or less.

1.3 The Importance of This Strategic Analysis

Environmental changes made GUI’s strategy obsolete (Crossan et al, 2006). If GUI continues with its current strategy, the limited availability of contractors and the extremely high diamond drilling and geophysical surveying costs will cause delays in evaluating the mineral potential of its properties. These delays might present a severe threat for GUI. They present a constraint that
affects GUI’s ability to achieve its goal (Baye, 2006). They may cause the investing community to stop perceiving GUI as a lucrative investment opportunity, thereby making it difficult for GUI to raise equity financing to fund future operations. Delays may also prevent GUI from fully benefiting from the current high global demand for metals in a dynamic market. GUI’s problems will increase as the levels of the exploration activities continue to increase.

A strategic analysis focusing on the suppliers’ significant power, and developing a strategy that decreases its effect on GUI, might provide a strategic opportunity and competitive advantage for the company in the current and future exploration environments.

1.4 The Mineral Exploration Industry

This analysis is limited to the Canadian industry only because GUI is a Canadian mineral exploration, or junior resource company. The analysis covers junior resource companies (juniors) exploring for gold, copper and uranium. It does not include intermediate and major mining companies (majors). Companies in these two segments are usually involved in mineral extraction and generate revenues; however, intermediate companies are also involved in mineral exploration as well as mining (DFAIT, March 2003). The relationship between juniors and majors is symbiotic; both parties benefit mutually from each other. Juniors explore grass roots properties in search of an economic deposit that they can sell to the major with the highest bid.
Mineral exploration is concerned with the identification and delineation of economic mineral deposits (DFAIT, March 2003). It is the first phase of the mining cycle (Mining Information Kit for Aboriginal Communities, May 2007) leading to the discovery of an economic mineable deposit.

1.4.1 Boundaries of the Mineral Exploration Industry

Some research refers to mineral exploration as a segment of the mining industry. In this analysis, mineral exploration is clearly defined as an industry, not as a segment of an industry.

1.4.1.1 Market Constructions of the Mineral Exploration and Mining Industries

Though the mining and mineral exploration industries go through dynamic cycles, these industries are generally mature and technologically stable. Their industry boundaries are therefore clear, distinct, and easy to define (Vining et al, 2005). In less mature industries there may be great similarities between entities considered to be ‘competitors’ and those considered as ‘substitutes’ and boundaries are less defined (Boardman et al, 2004).

In the mineral exploration industry, rivals of junior resources companies are other juniors and no substitutes exist. However, in the mining industry, major and intermediate mining companies compete with each other, and junior resource companies are also their potential competitors. If a junior discovers an economic deposit, and makes a strategic business decision to mine the deposit instead of selling it to a major, this junior becomes an intermediate mining company. The definition of junior, intermediate, and major is based on size and
function. Juniors' core activity is exploration. The core activity of intermediates and majors is mining.

The juniors can compete with majors without taking on any risk by vertically integrating forward into the mineral extraction industry if the required funds are available. In order to compete with the juniors, majors would have to take on the significant risk associated with exploring grassroots properties. The industry boundaries are further defined as each industry has clearly defined buyers, sellers, and barriers to entry.

As GUI is not involved in the actual mine development and extraction of the deposit, this analysis does not take the producers industry (mining/extracting major companies) into account.

1.4.2 Junior Resources' Involvement in the Mineral Exploration Industry

Junior resources operate strictly in the mineral exploration industry. They acquire undeveloped/grass-roots mineral properties by staking, or by purchasing from prospectors through mineral property option agreements. Juniors then explore these grass-roots mineral properties through (1) geological mapping, (2) geochemical analysis of soil and rock chip sampling, (3) geophysical surveys, and (4) diamond drilling.

Characteristically, grass-roots properties have very limited, or no known geological information. They, therefore, have the lowest probability for the discovery of economic deposits, and are the most risky to explore. The Canadian government has estimated that only 1 in every 10,000 grassroots mineral
properties with a mineral showing actually develops and advances into an economic and mineable deposit (Mining Information Kit For Aboriginal Communities, May 2007).

Once a junior discovers an economic deposit, its shares can appreciate by over 1,000 percent. In May 2007, Golden Chalice Resources (GCR), a junior exploration company exploring in Ontario, announced that one of its diamond drill holes intersected a zone averaging 1.14 percent nickel over 72.50 meters of diamond drill core drilled. Based on this announcement alone, the company's share value on the TSX-V increased from CDN$0.28 per share to CDN$4.00 per share in three weeks (TSX-V website). If GCR confirms the discovery is economic to mine, the shares may appreciate by another 500 percent. Investors use this above average potential for share appreciation to justify investing in juniors. Investors are willing to take on the above average risk associated with juniors for the higher anticipated return on the investment. This is the risk-return trade fundamental to finance (Higgins, 2007).

Juniors can only sell confirmed and verified deposits to majors after independent, qualified, and registered geologists have conducted an extensive feasibility study. The presentation of the study's results is in a standardized format approved by the British Columbia Securities Commission (BCSC) and TSX-V. These institutions also verify the deposit's average grade. This extensive certification reduces information asymmetry (Baye, 2006) and guarantees that the major is purchasing an authentic economic deposit.
1.4.3 The Value of Junior Resources in the Mineral Exploration Industry

GUI’s exploration activity develops and evaluates the property’s mineral potential. It identifies properties with greater probability for economic mineral deposits, and, eventually, may lead to the discovery of a mineable and economically feasible deposit. The deposits and the information on these deposits are then sold to major exploration and mining companies such as BHP Billiton, TeckCominco, and Placer Dome Inc. for further development and extraction until the reserves are depleted. Figure 1 illustrates how junior resources companies add value to the mining industry.

As Majors are not willing to take on the risk associated with acquiring and exploring grassroots projects, juniors are bearing more and more risk and responsibility for discoveries of economic deposits in Canada (Info Bulletin, March 2007). So, without the activities of juniors, very few discoveries of new mines would occur.

Therefore, the federal and provincial governments provide junior resources companies with financial incentives to take on and explore the risky grassroots projects in remote, previously under explored areas. For example, the Yukon Mining Incentives Program issued CDN$1,009,000 to 63 junior companies operating in the Yukon in 2005 (Traynor, 2005). This is a significant amount to distribute for a provincial government such as the Yukon government.
1.4.4 The Role of Junior Resources in the Mineral Exploration Industry

Junior resource companies in the exploration and mining industries have become a considerable force in the revival of exploration activity since the last downturn of 1999. The importance of their role in the mining cycle continues to increase. Juniors spent US$141 million in 1999 (Info Bulletin, March 2007), and
juniors spent more on exploration in Canada than intermediates and majors did in 2004. They spent CDN$903 million, which is up 67.8 percent from the CDN$538 million spent in 2003 (Natural Resources Canada, 2006). In 2006 they spent CDN$1.1 billion (Info Bulletin, March 2007). This escalation was fuelled by the increasing demand for metals caused by the building boom in Asia. The junior industry suddenly had more funds available for exploration as more investors were drawn to the industry again (Young, 2007).

The general expectation is this trend will continue into the near future as long as the current conditions in the external environment prevail. The expectation for junior resources' spending on mineral exploration in 2007 is CDN$1.2 billion (Info Bulletin, March 2007). However, the elevated growth in activity is not sustainable, so expenditures may peak soon and the trend may turn abruptly. More investments will continue to go into mineral exploration as long as the following conditions are sustained: demand for metals exceed the current supply, only a few deposits are advanced to mines each year, and the market requires many more mines to meet the demand (Baye, 2006). Supply is unable to catch up with demand because only a few mineable deposits are discovered each year, and because developing a mine is a lengthy process. It takes 7 to 10 years from the time a discovery is made to the time the minerals are extracted (Mining Information Kit for Aboriginal Communities, 2007).

1.4.5 The Number of Junior Resources Companies Operating in Canada

There are approximately 1,050 junior resources entities trading on the TSX-V (TSX-V website, 2007). Canadian exploration makes up a significant
portion of the global exploration industry. It is estimated that more than half the world’s 2,300 mining and exploration companies are listed on Canadian stock exchanges (DFAIT, 2003).

1.4.6 Cyclic Nature of the Mineral Exploration Industry

The junior resources industry is highly cyclical. The fluctuations of the prices of metals and minerals mined drive these cycles. The demand for commodity metals on the global market generally determines the number of active junior resource entities, as well as the level of exploration activity as measured by the exploration expenditures. High commodity prices and potential rents attract large numbers of firms entering the market to reap a portion of these profits (Baye, 2006) and increases exploration activity. The reason for this positive correlation is that high commodity prices make the exploration industry attractive as an investment opportunity, thereby increasing the availability of equity financing. This is significant for junior resources because they are entirely dependent on equity financing (DFAIT, 2003). These exploration companies have no alternate sources of funds to support their operations because they have no revenues and no assets to pledge against debt financing. In 2000, Canada raised 44.3 percent of the US$3.2 billion equity financing raised worldwide (DFAIT, 2003).

1.4.6.1 Time Line of the Recent Cycles in the Mineral Exploration Industry

The Canadian mineral industry suffered a significant decline in the 1980s, causing a downward spiral of activities in the junior resources sector (Hibbitts,
The cycle started an upward trend and rapid growth in the mid 1990s. By 1995, high commodity prices and international demand for metals led to an increase in exploration activity in the industry (McAllister et al, 1997).

Activity in the exploration industry peaked in 1997 with expenditures by Canadian exploration companies reaching CDN$1.9 billion, which represents 35 percent of the global exploration expenditures. By 1998, the cycle had started to decline yet again. In 1999 and 2000, exploration in Canada fell to 27 percent of global spending (DFAIT, 2003).

Exploration activity was at a record low as investors turned to 'dot.com' companies at the expense of the resources sector in 2000 (Hibbitts, 2007). The falling commodity prices from the 1990s, and major corporate scandals, also made mineral exploration an unattractive venture (Ontario Prospectors Association, 2004). This further reduced the equity financing available to juniors - the only source of funding for exploration companies.

1.4.6.2 Current Up-Turn in the Cycle with Exponential Growth

The cycle took another upward turn in 2003, after the 'bubble burst'. The market began to respond to the building boom in China and India where 200 million people are expected to join the middle class (Mineral Fields, 2007). This increased the demand for metals, pushing the commodity metal prices up and fuelling mineral exploration (Hibbitts, 2007). This most recent upturn in the market continues - exploration spending in Canada increased by 32 percent in 2006 (Info Bulletin, March 2007).
1.4.6.3 Causes of Fluctuations in the Mineral Exploration Industry

Fluctuations in the mineral exploration industry are mainly caused by global commodity metal prices, factors influencing supply and demand of precious and base metals, tax credits, and government financial incentives promoting exploration. These factors are interrelated, and are therefore of equal importance. Figure 2 (on the next page) illustrates the cycle’s peaks and valleys observed between 1980 and 2007.

1.4.6.4 Changes in Global Commodity Metal Prices

The commodity precious and base mineral prices on the global market drive mineral exploration. There is, therefore, a positive direct correlation between these metal prices and the levels of exploration activity on global, regional, and national scales. When the precious and base prices are high, the level of exploration activities is also high. When the prices are low, exploration activities fall significantly. The cycle between 1980-1985 and 2006 to present illustrates this point. Since 2006, the price of nickel has increased by over 150 percent, zinc by 125 percent, uranium by nearly 100 percent, gold by nearly 20 percent, and silver by nearly 43 percent. However, GUI’s interest is in gold, copper, and uranium. During the same period, exploration activity has been at an all time high.
The expectation is that $1.9 billion will be spent on Canadian exploration this year (2007) (Info Bulletin, March 2007). This is CDN$700 million more than the expenditure the Canadian Mineral Exploration and Deposit Appraisal expects. This discrepancy may reflect the unique tax break advantages that investments in this sector generate.

1.4.6.5 Factors Influencing Supply and Demand of Precious and Base Metals

A number of events cause the fluctuation of precious and base mineral prices on the global market. The most influential of these events are those...
affecting global supply and demand for precious and base minerals. The sale and purchase of the precious and base minerals by central banks, financial institutions, and government affects the cycle. ‘Offloading’ inventory floods the market, thereby increasing the supply of metals while demand remains static. This tends to decrease the commodity metal prices on the global market. The political and economic conditions of major precious and base metal-producing countries in the world also can influence supply, again affecting the global market prices.

1.4.6.6 Tax Credits and Government Financial Incentives Promoting Exploration

The other events that contribute to the fluctuations of the metal prices are interest rates and tax credits to individual investors for participating in equity financings to fund exploration activities (Mineral Fields, 2007). The Investment Tax Credit for Exploration (ITCE) implemented in Canada in October 2000 increased exploration expenditures significantly. In British Columbia, the ITCE is responsible for increasing spending by 71 percent between 2001 and 2003. The overall increase in Canada was 25 percent (Ontario Prospectors Association, 2004).

1.4.6.7 Other Factors Causing Fluctuations in the Mineral Exploration Industry

The last four factors influencing the cycles are governments providing financial incentives, in addition to ITCE, to promote exploration (Tobin, 2003), exchange rates, inflation or deflation, and fluctuation in foreign currencies.
In the last 5 years, increasing demand for minerals in Asia, and the stagnant global supply, has been the main driving force for the high mineral prices. This has elevated exploration activities, with exploration in Canada increasing by 103 percent in 2004 (Resource World Magazine, 2005). The commodity prices continue to climb to new record highs on the world market in the current cycle upturn (Kitco website, June 2007).

1.4.7 Effect of Increased Exploration Activity on the Exploration Industry

High exploration activity, measured by expenditures of exploration companies, continues to increase the demand for services from suppliers of exploration activities. A significant number of these companies, such as geophysical surveying and diamond drill companies, either left the industry, or consolidated during the last downturn (DFAIT, 2003). The number of service providers has not increased significantly since the most recent upturn in the market. The general expectation has been that high demand for exploration services, and increasing profits would attract new entrants (Baye, 2006). But, to date, only a few new entrants have responded to the increase in exploration activity. This low response may be attributed to two possible reasons. The first reason for the low response from potential entrants is the uncertain duration of the current attractive market conditions. Uncertainty in a market impacts the efficient allocation of resources (Baye, 2006). Some of these potential entrants entered the industry in early 1990 as a response to market conditions similar to the present. In 1996 to 1998, it was clear that they had misread the environment, and the short duration of the favourable cycle caused strategic failure.
The second reason is the shortage of equipment used in mineral exploration services (Hibbits, 2007). The equipment is on back order as manufacturers are unable to meet demand. Manufacturing progress is hampered by a severe shortage of components, further crippling the industry.

The current demand for the exploration services far exceeds the supply of these services. As a result, service providers increased their mark-up, and now charge rates higher than the costs of producing the exploration services exceeding marginal cost (Baye, 2006). Most junior companies' willingness to pay for these services has also increased. Exploration costs have increased substantially and are currently at record highs.

The future expectation is that costs will continue to increase as long as exploration activities continue to increase, and as long as potential new suppliers continue to shy away from the industry, creating a suppliers' market.

1.4.8 Limited Number of Skilled Workers and Professionals in the Exploration Industry

The high exploration activity has also resulted in a shortage of diamond drillers, geologists and geophysicists. A significant number of incumbent skilled workers and professionals left the industry when there were not enough jobs to sustain them during the last industry downturn. Most technical professionals went into teaching. Very few new professionals entered the industry during this period. The exploration industry did not present attractive career opportunities, so only a few students enrolled in industry related programs. Increasing profits in an
industry generally bring resources. The volatile nature of the industry, however, slowed down resources' response to the increasing profits.

The current upturn in the mineral market is attracting more students into university programs related to mineral exploration. Since 2004, the BC Mineral Resource Education has been actively raising the awareness of career opportunities in the industry to secondary school students by inviting them as delegates to the Mineral Exploration Round-up (Round-up) (Mineral Resources Education Program of BC, 2004). The Round-up is one of North America's largest mineral exploration trade shows.

As these students graduate, the expectation is they may choose careers in the industry and the number of professionals will eventually increase, but it might be a few more years before these young professionals become experienced geologists. The number of professionals in the industry tends to lag approximately 4-5 years behind fluctuations and upward trends in the mineral prices. The lag is the time it takes to train a new geologist as potential students respond to the increasing demand for metals. Until then the mineral exploration industry has to deal with the labour shortage. In 2005, the Yukon government was working toward building a skilled labour force for the industry (Lang, 2005), however this process takes at least four years and so the final results will not be known for some time.
1.5 International GUI Resources Corp.

1.5.1 History and Company Overview

GUI's formation was on August 2, 1978. Since inception, the Company has been involved primarily in the acquisition and exploration of mineral properties in Canada. In 1978, GUI had active exploration projects in Europe and North America. In the 1990s, GUI sold its European interests. The strategic incentive was to allow GUI to concentrate on its mineral properties in Canada, and for it to decrease overhead expenses in a declining cycle. Exploration in Europe became increasingly expensive for Canadian juniors (Young, 2007).

At the end of the last industry downturn in 2002, GUI acquired mineral interests in the Yukon prospective for gold, copper, and uranium in response to increasing base and precious metal prices. Subsequently, the company has concentrated on evaluating these Yukon properties. Recently, GUI spun-off its mineral interests in Ontario into a new company. The intention of this strategic decision was to focus GUI’s resources into evaluating its properties in the Yukon (SEDI website, 2007).

1.5.2 Internal Characteristics of GUI/ Context of GUI’s Business

GUI is funded through equity financing. As previously stated, this is the company's primary source of funding. GUI has a secondary source of financing generated from the exercise of employees’ incentive stock options, as well as warrants issued to investors during equity financing.
1.5.3 GUI’s Ownership

GUI is a public-owned company listed on the TSX-V. The share ownership is widely dispersed with Directors, officers, and insiders owning 35 percent (SEDAR website) -- this means that no one besides management is in real control. The control of GUI might fall on a group of shareholders if they unite and initiate a takeover bid. This is a potential threat if GUI fails to fully evaluate its properties in the next 2 to 3 years. This threat may cause GUI’s strategy to fail. Ownership has important implications for strategy and goals: the primary goal of owners is to earn an attractive return on their investment (Boardman, et al, 2004).

GUI grants its employees incentive stock options to buy equity in the Company. Since GUI’s employees have an opportunity to earn shares in the Company, the principal-agent problems are minimal because ownership is not separated from control (Baye, 2006). Principal-agent problems are issues that typically arise between the owners of a company (principals) and their employees (agents). This occurs when the employees’ best interests and goals are not aligned with those of the owners, while the employees’ interests and efforts do not benefit the company. This presents a moral hazard. (Horngren et al, 2007). Incentive contracts reduce the principle-agent problems.

1.5.4 Location of GUI’s Mineral Properties

GUI’s head office is in Vancouver. When GUI first started its operations, it had mineral interests in Ontario and Europe. GUI explored these properties and fully evaluated their mineral potential. Based on the exploration results, the
Company either sold its interest in the properties, or abandoned them and wrote off the exploration costs (Young, 2007).

Now the Company only has mineral interests in the remote areas in Yukon. Most mineral exploration is concentrated in the rural and Northern regions of Canada (Ontario Prospectors Association, 2004). These areas are generally more expensive to work in. This is why the provincial and federal governments provide financial incentives to level the playing field.

1.5.5 Where GUI Fits in the Exploration Industry

As a junior exploration company, GUI’s sole activity is in mineral exploration. Its primary business goal is to fully evaluate the mineral potential of its mineral properties and find an economic mineable deposit. The company’s senior management strongly believes that GUI is not a mining company. It specializes in exploration only, and it is unlikely to develop into an intermediate company involved in mineral extraction (Young, 2007).

Once GUI finds a deposit, it would sell its interests in the deposit and all the information it has generated on the deposit to a major company instead of mining the deposit itself. The major would then mine the deposit (Young, 2007). GUI would retain a net smelter royalty (NSR). The company would therefore earn a percentage of the revenue generated by the major mining of the deposit that GUI discovered.
1.5.6 GUI's Current Strategy

Since GUI's acquisition in the Yukon, its strategy has focused on fully evaluating the mineral potential of these properties in the Yukon. GUI's current strategy is to focus its core activities on mineral exploration for gold, copper, and uranium in the Yukon, and it allocates its resources according to this strategy (Vining, 2007). Therefore, GUI's focus strategy may limit its scope to a narrower segment of the industry (Pearlson and Saunders, 2006). To hedge against the risks of such a focus, GUI should maintain a concurrent awareness of events and other juniors and entities in the exploration industry -- macro environment scanning (Crossan et al, 2006).

The primary goal of this focus strategy is to maximise shareholder value by fully evaluating GUI's mineral interests, and to discover a gold, copper, and/or uranium deposit. A discovery would cause significant share appreciation; generating a significant profit when the deposit is sold to a major. GUI's focus strategy suited the previous external environment when the levels of mineral exploration were low; however, the environment changed thereby rendering this strategy obsolete (Crossan et al, 2006). For this year's exploration season, GUI has planned an extensive exploration program to evaluate the potential of these properties.

1.5.7 Problems Related to GUI's Current Strategy

GUI, like other juniors in Canada, is positioned to benefit from the current growing global demand for metals (Info Bulletin, 2006). To benefit from this, GUI's internal capabilities must be consistent with the strategy (Crossan et al,
2006) thereby allowing the company to evaluate the mineral potential of its properties in a timely manner of 3 years or less. For this strategy to succeed, GUI must first retain contracts with diamond drilling and geophysical surveying companies -- the most crucial components of exploration. Second, these contracts must be priced competitively to allow GUI to maximise its exploration funds.

1.5.7.1 Shortage of Suppliers of Exploration Services

There is a serious shortage of suppliers of exploration services. GUI has succeeded in retaining contractors for all its exploration activities with the suppliers who survived the last industry downturn. GUI does not have an established network of relationships with these suppliers. Management is therefore not certain that GUI will continue to succeed in retaining these suppliers in the future without this intangible asset as the levels of exploration activities continue to rise.

As previously mentioned, GUI's suppliers have significant bargaining power. So, even if GUI succeeds to obtain contracts with the suppliers, their drilling and surveying fees may be prohibitively high. This will be discussed in detail in Chapter 2.

These increasing costs currently inhibit GUI's ability to conduct its core activities. GUI may try to pass these costs to investors during the exploration stage or to majors when properties are sold. Passing costs to investors presents an immediate solution, but it reduces GUI attractiveness as a potentially lucrative investment, thus decreasing its ability to compete with juniors who absorb these
costs. Majors are not price sensitive and their demand for deposits is inelastic as majors would buy the same number of deposits even if the cost of each deposit increased (Baye, 2006). Majors are therefore able to absorb these costs; however, GUI would bear the costs till it was ready to sell the deposit.

1.5.7.2 Significant Negotiation Power of the Diamond Drilling Companies

In 2006, the high drilling costs and scarcity of competent and experienced companies prevented GUI from completing its planned exploration program (Young, 2007). The company drilled only 1,600 meters out of the 15,000-meter diamond drill program originally planned (Young, 2007). This announcement saw GUI's stock price fall 40 percent in a few days (TSX-V). Figure 3 illustrates the falling stock price from September 12, 2006 to October 16, 2006.

The market response indicates that if GUI is not able to carry out its core activities, it may lose investor confidence. This would negatively affect GUI’s ability to raise equity financing to fund its operations causing strategic failure.

The high fees are also likely to limit the amount of diamond drilling and geophysical surveying GUI completes in 2007. For instance, currently GUI has budgeted CDN$1.5 million for diamond drilling in 2007. At the last year’s drill rates of CDN$70/meter, GUI would have drilled approximately 21,400 meters on this budget. GUI’s contract for 2007 states a drill rate of CDN$132/meter. At the 2007 rate, the company will only drill 11,400 meters. This means that GUI will drill 46.7 percent less on the 2007 budget. Increasing the budget is not an option for GUI at the company’s current low share prices. Increasing financial resources for the budget would mean raising more money through equity financing.
Figure 3: Graph Illustrating GUI Stock Price between August 2006 and January 2007 Showing the 40 percent Drop After the Announcement

SOURCE: JT Mazvihwa June 2007 (Raw data from TSX-V in Appendix 1). The graph shows a 40 percent drop in GUI’s share price in Sept/Oct 2006 after it released news on the amount of diamond drilling it conducted during the 2006 exploration season.

Equity funding at low share prices dilutes an entity’s share capital, reducing the value of its shares if the shares do not appreciate due to a discovery. GUI cannot increase its equity financing to allow it to increase its budget.

1.5.7.3 Significant Negotiation Power of the Geophysical Surveying Companies

In 2006 GUI paid approximately CDN$10/line kilometre for geophysical surveys. In February 2007, the company requested geophysical surveying companies to bid for its 2007 geophysical program. GUI received a bid of
CDN$1,500/line kilometre from Canada's largest international surveying company. This is a staggering 1,400 percent increase over 2006 geophysical survey costs. The suppliers of geophysical surveys cannot take on new business. Equipment used in this industry is on back order. Suppliers therefore do not have the resources to take on new business.

In April 2007, GUI sent out another call to tender to five separate geophysical companies for its 2007 program. Out of the five companies called to bid, only one responded. The response stated the surveying company was too busy to take on new business in 2007, and it had not been in a position to bid for new work since 2006 (Hibbitts, 2007). This confirms that there are not enough geophysical companies to meet the demand caused by the increasing exploration activities in the Yukon and Canada.

These high diamond drilling and geophysical surveying fees will inhibit GUI from completing its exploration program planned for 2007. Ultimately, these costs will slow down GUI's exploration progress, preventing GUI from fully evaluating its properties in a timely manner.

The analysis will be conducted as follows. In Chapter 2, GUI's external environment is analysed using Michael Porter's Five Forces Model, with the addition of government as a sixth factor. This analysis identifies GUI's strategic issues and its opportunities and threats in the current external environment. The chapter closes with a presentation of strategic alternatives addressing GUI's threat. Chapter 3 evaluates these strategic alternatives against GUI's internal capabilities. It tests which alternative the company is able to implement given its
internal capabilities. Finally, Chapter 4 discusses how the strategic alternative identified in Chapter 3 will be implemented.
2.0 SIX FORCES ANALYSIS OF INDUSTRY

2.1 Introduction

GUI's external environment was analyzed using Michael Porter's Five Forces Model to reveal whether it is attractive or not based on the level of competitiveness (Boardman et al, 2004). Government was added to the analysis as a sixth force following Porter (1990). According to this model, Porter's forces are: 1) Threat of new entrants; 2) Power of buyers; 3) Power of substitutes; 4) Power of suppliers; 5) Rivalry among competitors, and 6) Government. The government factor affects all the elements of the model in the mineral exploration industry.

The model helped derive the industry's key/critical success factors (KSF) related to each component of the forces (Crossan et al, 2006). The KSF suggests the required characteristics to succeed in the industry in which GUI operates. The analysis assessed whether GUI's focus strategy is still appropriate for the current external environment. The last part of this chapter identifies GUI's main competitors. The competitive analysis shows how GUI and its competitors perform on the industry KSFs. The analysis also identifies GUI's strategic threats and opportunities, and presents strategic alternatives to address GUI's threat. Analysing the external environment will produce a results-orientated strategy.

The exploration industry is dynamic, and the environment is constantly changing. Ways to win in the industry, referred to as KSFs, are therefore also
changing. Consequently, GUI should constantly conduct Porter's 6 Force analyses to identify GUI's new threats and opportunities in the changing environment. Michael Porter's model assumes that competitive advantages are sustainable because at the time the model was developed, changes in the industry were relatively slow and manageable (Pearlson and Saunders, 2006).

2.2 GUI's External Analysis Using Porter's 5 Forces Plus 1 (Government)

The 5 Forces of the mineral exploration industry were analyzed to determine their strength and effect on industry rivalry. In this particular analysis, the government influences all the components of the 5 Forces, and not just the barrier to entry force. It is therefore more appropriate to analyze the effect government has on the competition in the industry as the sixth force following Porter (1990). Though GUI is not an international company, the industry analysis is on a global basis because of the international nature of rivals, suppliers, and buyers.

The subsections that follow discuss the components of the 6 Forces in turn. At the end of the analysis of each element of the 6 Forces, the chapter summarizes the key success factors identified in each of these 6 Forces.

2.3 Power of Barriers to Entry in the Mineral Exploration Industry (Low to Medium)

The threat of new entrants is low to medium and unfavourable for incumbents of the industry. In the past, high barriers of entry existed; however, these barriers are no longer prohibitive in the current environment of high metal
prices, increased exploration activity, and superior profits (Baye, 2006). The number of new companies exploring for uranium increased from a handful to over 473 in the last two years in Canada (PDAC website) as new entrants were attracted to potential superior profits. Over the last three years, the number of companies exploring for uranium increased by approximately 250 percent (Hibbitts, 2007). There are currently about 1,050 junior companies trading on the TSX-V (TSX website, 2007).

2.3.1 Forms of Barriers to Entry in the Exploration Industry

The barriers to entry exist in the mineral exploration industry in the form of mineral rights, high sunk capital costs, a shortage of technical expertise, reputation with retail investors, network of relationships between providers of equity financing, diamond drillers, geophysical surveyors, and prospectors. Intangible assets, e.g. relationships with equity financiers, ensure the availability of funds for operations. Similar networks with other stakeholders ensure contracts with drilling and surveying companies, and guarantee first pick of higher quality grassroots properties. The high demand for, and stagnant supply of metals, increased the global metal prices and made the mineral exploration industry more attractive (Young, 2007).

Barriers to entry into the mineral exploration service industry are relevant to barriers to entry into the mineral exploration industry. This influence is reviewed briefly here, and in more detail in the sections to follow. Though the demand for services in the mineral exploration industry continues to increase, there are a few entrants to the service industry prepared to reap the potential
superior rents readily available to both incumbent and new suppliers. The main barrier is the limited supply of equipment used in the service industry. Potential new entrants have to wait several months before receiving delivery of ordered equipment. Given the volatility of the exploration industry, the new entrants fear it may turn while waiting for sunk cost equipment, as occurred in 1995-1996 (Hibbitts, 2007). This further deters potential new suppliers from entering the industry.

Though barriers to entry exist in the mineral exploration industry, they are not prohibitive as the potential benefits of entering the exploration industry surpass the costs associated with these barriers. A large number of juniors entered the mineral exploration industry in response to the high metal prices, threatening the viability of incumbents. As a result, mineral exploration in Canada increased by 103 percent in 2004 (Resource World Magazine, May 2005).

2.3.2 Barrier to Entry: Capital for Operations and Exploration Activities

The mineral exploration industry is capital intensive. Significant amounts of funds are required to explore and fully evaluate the mineral potential of the property. In the past, new entrants have failed to acquire equity financing. These newcomers were generally considered an extremely risky investment as they did not develop relationships and established a proven track record with the investment community.

Prior to 2002, relationships with sources of equity funds and a successful track record were critical success factors as only junior exploration companies
with both factors were able to raise funds for their operations. Global metal prices reaching new record highs, reduced the significance of established relationships. It also minimized the risks associated with investing in new entrants with active exploration projects, but no proven exploration success record (Young, 2007). The slim probability of discovering an economic deposit is more attractive for investors in the revived market. This slightly improved the new entrants' access to capital.

The increased access to capital allowed the new entrants to obtain the necessary skilled labour such as geologists and diamond drillers, and other exploration services provided by diamond drilling and geophysical surveying companies.

2.3.3 Barrier to Entry: Rights to Interests in Mineral Properties

The mineral rights to explore mineral properties with high potential of hosting profitable deposits, a KSF in the industry, are also difficult to obtain and expensive to maintain. To own mineral property rights or interests in the Yukon, a company must have a free miner's certificate. To illustrate this point, maintaining these mineral interests in a 400-meter square property costs a junior CDN$400 in annual fees (Yukon Mining Recorder website, 2007). Only one out of 10,000 showings develops into an economic deposit. Juniors have to acquire multiple large land packages, up to 100 square kilometres in size, in order to increase their chances of finding an economic deposit (Resource World Magazine, May 2005). This makes it expensive to keep the claims in good standing.
The high metal prices have made the potential benefits associated with discovering an economic deposit higher than the costs of obtaining and maintaining interests to mineral properties. This has further lowered the entry barriers to the industry.

2.3.4 Barrier to Entry: Network of Relationships

New entrants to the mineral exploration industry typically have no existing network of relationships with suppliers or established reputation for successful exploration. Juniors form relationships with suppliers of equity funding by developing a successful track record of delivering a positive return on investments (ROI), which they provide to retail and institutional investors. Though new entrants do not have this relationship when they initially enter the industry, it is possible to build it by providing an attractive ROI.

It is extremely difficult, however, for new entrants to build similar relationships with suppliers of exploration services. Incumbents with this critical relationship in place built it during the industry’s last low turn by giving all their business to one supplier. The level of exploration activity was low during this period and there was very little demand for suppliers of exploration services and the market could not support the large number of suppliers (Baye, 2006).

With little business to go around, many suppliers went bankrupt and left the business. Only those suppliers who received all the business from a particular junior survived the downturn. This cemented relationships between certain juniors and suppliers. Both parties maintained this relationship, and now
the juniors are benefiting from it in the current market conditions as exploration activities have increased significantly, and revenue from one junior is insignificant to a supplier (Hibbitts, 2007).

Without the network of relationships with diamond drilling and geophysical surveying companies, a KSF in this industry, the new entrants are unable to secure contracts and conduct their core activities of mineral exploration in a timely manner -- another KSF. Delays in exploration slow down new entrants' efforts to evaluate the mineral potential of their properties, take advantage of the high metal prices, and deliver a positive ROI to its investors.

The new entrants have no control over these delays and they are not an indication of their performance. However, suppliers of equity financing view these delays as a sign of incompetence, and write off their first investment in the new entrants as failures. This makes it difficult for the new entrants to raise more equity funds for its operations and exploration activities.

2.3.5 Barrier to Entry: Large Companies Have Economies of Scale

An additional disadvantage to new entrants is that companies with a large number of mineral properties or large properties have cost and performance advantages. Size, as it relates to the number of mineral properties a junior holds, is therefore a KSF in the industry. The mobilization and de-mobilization expenses for large size projects are lower in proportion to the actual exploration expenses (Rake, 2007). The fixed costs associated with set up costs of exploration camps and support operations are low in relation to their variable exploration costs.
The probability of a junior exploration company discovering an economic deposit, increases as the number of mineral properties worked by the junior increases. This is because the probability of a showing on a grassroots property developing into an economic deposit is only 0.01 percent (Mining Information Kit for Aboriginal Communities, May 2007). New entrants will usually only work on a limited number of mineral properties at any given time -- either one or two. They therefore do not have the added benefit of the increased probability for success associated with evaluating multiple properties simultaneously. This is another indication of the importance of size as a KSF in the industry.

2.3.6 Barrier to Entry: Long Learning Curves

Mineral exploration has a steep learning curve acquired with years of mineral exploration. Incumbent juniors are usually over the learning curve and they benefit from the experience generated from years of mineral exploration. New entrants usually do not have the same level of experience. They still have to get over the learning curve.

2.3.7 Summary of KSFs Related to the Barriers to Entry

To win in this industry, juniors must have an existing network of relationships with suppliers, and an established reputation for successful exploration. The intangible asset, such as systems of relationships with suppliers of exploration services, enables juniors to secure tangible assets such as diamond drilling and geophysical survey contracts. This allows the juniors to
complete planned exploration programs on time, take advantage of the metal commodity cycle, and possibly develop a positive ROI.

An established reputation for successful exploration is a KSF in this sector as it induces investor confidence in the entity. This allows juniors to raise equity financing to fund exploration and operating activities -- another KSF. Prior to discovering an economic deposit, equity financing in junior companies is the primary source of funding. Connections with equity financers are therefore also a KSF in the industry. Other KSFs in the industry include size and the associated economies of scale, operating multiple properties simultaneously increases the probability of discovering an economic deposit, decreases the set-up costs and learning curves. Cost and performance advantages are also KSFs in the industry.

2.4 Power of Buyers in the Mineral Exploration Industry (Low)

Buyers have weak bargaining power. Once a junior mining company strikes gold, uranium, or copper, it sparks a bidding war amongst the major mining companies. There are relatively more buyers (major mining companies/majors) in relation to the product. The product is the information on the economically feasible and mineable deposits from junior exploration companies/juniors (Hibbitts, 2007).

2.4.1 Price Sensitivity of Buyers in the Exploration Industry

These buyers are price insensitive and have very limited bargaining power. This is favourable to the mineral exploration industry. Buyers are
fragmented. There is low concentration and little bargaining power because sellers (juniors) sell their discoveries to the buyers (majors) at a determined price. The estimated economic value of the discovery determines the juniors' price and the high drilling and surveying costs can be passed on to the majors. Given the high metal prices and increasing demand for metals in Asia, the major mining companies' businesses are extremely profitable. Though majors are not price sensitive, and their demand is inelastic, the discovery's estimated economic value influences their willingness to pay.

2.4.2 Buyers Require a Significant Amount of Information on the Deposit

These buyers require a significant amount of information on the mineral deposit. They dedicate months of research before purchasing a deposit. The size, geometry, and geochemical characteristics of the deposits determine the value of the deposit to the majors. Once the deposit is purchased, the company is committed to mining the deposit until it is depleted, and it is not easy to switch to another deposit. Acquiring an economic deposit is time consuming and expensive, so, generally, majors only invest in deposits for the long term as opposed to the short term with the intention of 'flipping'.

2.4.3 Importance of Information Quality and Its Standardization

Information quality in the exploration industry is extremely important. As part of the aftermath of the Bre-Ex Mineral Ltd. scandal in 1997, the government and Canadian Securities Administrators (CSA) continues to standardize and certify the quality of information produced on deposits sold to majors by juniors to
reduce information asymmetry and incomplete information that may lead to market failure (Weimer and Vining, 2005).

The government imposed a national instrument 43-101 (NI 43-101), in 1999. The instrument governs how juniors disclose scientific and technical information on their deposits to the public (APGO website, May 2007). The quality of the information is standard because the juniors have to describe their resources and reserves in specified terminology in a report prepared in a prescribed format. Only this information is allowed for distribution. Juniors are not permitted to enhance their reports with additional information. The rule requires that the disclosure be based on advice of a qualified and registered geologist who is independent to the junior company and the deposit (BCSC website, May, 2007). Again, this shows that the relationship with suppliers is a KSF. The above describes the full extent of the buyers influence in the mineral exploration industry.

2.4.4 Summary of KSFs Related to the Bargaining Power of Buyers

Access to independent geologists is a KSF in this industry. Juniors with this core competency perform better with buyers. There is a significant shortage of qualified geologists in the mineral exploration industry. Many geologists leaving the industry during the last downturn of the exploration and mining cycle resulted in the shortage. During this period, a career in mineral exploration and mining geology was not considered an attractive career option. As a result, few students studied geology. The shortage intensified as no new geologists entered
the industry to replace the experienced and qualified geologists who left the industry.

Juniors with access to qualified and government registered geologists, who are independent to their operations and exploration efforts, perform better with buyers. Though the buyers have limited bargaining power, majors prefer juniors to have information on their discoveries (products) validated by independent qualified geologists. Therefore, a 43-101 compliant report authored by a qualified geologist who is independent to the junior’s activities is a critical success factor in the industry. Juniors able to produce such a report on a discovery have a significant competitive advantage over competitors.

Trust between juniors, majors, and investors is an issue. It became an issue after the Bre-Ex Mineral Ltd. scam in 1997. The federal government set up a reporting system that verifies and validates the value of the deposits through registered, qualified and independent geologists to prevent market failure. Majors only count on this reporting system to protect all stakeholders.

2.5 Power of Substitutes in the Mineral Exploration Industry (Low)

The threat of substitutes is low in the mineral exploration industry. This situation is favourable for the junior resources companies operating in the industry and increasing profit potential (Vining, 2007). The grass-roots properties juniors operate on are typically associated with the greatest exploration risk and the lowest probability for a discovery of an economic deposit.
This is because grass-roots properties are usually previously unexplored and undeveloped, and so have no available information. At most, the grass-root property has a mineral showing justifying it as an exploration target. As mentioned earlier, only one in ten-thousand showings develop into a discovery of an economic mineable deposit (Mining Information Kit for Aboriginal Communities, 2007).

2.5.1 Mineral Exploration by Major Mining Companies as Substitutes to Mineral Exploration by Juniors

Major mining companies could vertically integrate (up-stream) and internalize juniors’ activities to explore mineable deposits. They have most of the internal capabilities required to acquire, develop, and evaluate grass-roots properties, and could develop the necessary and organizational capabilities. However, majors lack the ability to tolerate the risk associated with exploring grassroots mineral properties.

2.5.1.1 Internal Capabilities of Major Mining Companies and Mineral Exploration

Majors’ management preference is not aligned with vertically integrating up-stream into exploration of grass-roots properties. Managers prefer not to incur the risk associated with working on unexplored and undeveloped grass-roots properties with only 0.01 probability of discovering a mineable deposit. Major mining companies strategically seek to minimise risk, avoiding the risk associated with undeveloped grass-roots properties (Mining Information Kit for Aboriginal Communities, 2007). They actively seek explored and developed properties with identified economically feasible deposits from juniors, thus
eliminating the risk. Integrating upstream is therefore not a viable substitute because it does not provide a similar package of benefits (Crossan et al, 2005).

2.5.1.2 Shareholders of Major Mining Companies and the Risk of Mineral Exploration

Investors in the industry view majors as less risky investments than juniors. Majors therefore attract risk averse and risk neutral investors while juniors attract risk tolerant or risk loving investors. Shareholders of major mining companies pay a premium price for shares in the majors. While a relatively modest return can be expected, the investment risk is minimised. They do not expect to bear the risk associated with operating grass-roots properties. These investors, therefore, expect to benefit from the development of identified economic and mineable deposits (Hibbitts, 2007). These benefits include dividends paid out from positive incomes generated from the revenues of majors’ extraction operations.

Shareholders of juniors, however, are comfortable with these high risk investments. For these investors, the potential benefits of high returns of incurring this risk, including share price appreciation in the event of a discovery of a mineable deposit, surpasses the initial cost of the investment. This initial cost is low because the shares in junior companies are discounted for the risk they are associated with.

2.5.1.3 Mineral Exploration by Major Mining Companies Not A Viable Substitute

Vertical integration of majors is therefore not a truly viable substitute for junior operations as majors are not likely to use a substitute given that their
management preference is risk averse. The benefits of internalizing this function, including marginally lower cost of deposits, do not offset the costs of incurring the risk associated with grass-roots properties. Junior resource companies like GUI therefore play a vital part in the industry as they are the only source of new deposits for mining.

2.5.2 Mineral Exploration by Prospectors as Substitutes to Mineral Exploration by Juniors

The prospectors who sell grass-roots properties to junior mining companies do not have the resources, organizational capability, or management preferences to vertically integrate (down-stream), further explore, and develop the grass-roots properties themselves.

Prospectors are only capable of minimal exploration activities required to identify mineral showings on grass-roots properties such as soil sampling, low-level geological mapping, and scanning government produced regional maps. They then option the properties with showings to juniors to carry out extensive exploration. Prospectors therefore do not present a viable substitute in the industry.

2.5.3 Summary of KSFs Related to the Power of Substitutes

Juniors operating in the mineral exploration industry do not have a substitute. Therefore, the analysis predicts no key success factors related to this section of the 6 Forces.
2.6 Power of Suppliers in the Mineral Exploration Industry (Very Strong)

There are only a few suppliers of geological exploration services, and they have formidable bargaining power. This is extremely unfavourable to the industry, and may develop into a market failure. Here the search for private interest is not leading to an efficient use of society's resources (Weimer, 2005). The fluctuations in the exploration cycle influence the availability of suppliers.

Junior companies have to compete with each other to attract these limited suppliers which have great bargaining power. The availability of financial resources does not ensure contracts with suppliers. A network of relationships with suppliers is a critical success factor in the industry. Juniors with an established network of relationships with suppliers generally secure more contracts than juniors who do not. These relationships are formed based on mutual trust and repeat business between parties during the last industry downturn.

2.6.1 Suppliers in the Exploration Industry are Unique and in Short Supply

The mineral exploration industry inputs are generally unique rather than standard, and are not transferable for use in other related industries. Industry inputs such as labour, technical experts, field geologists, independent geologists who write technical reports, and suppliers of exploration service providers such as geophysical surveyors and diamond drillers are unique to exploration. These inputs are in short supply and are not easily used in industries other than the mineral exploration industry. This analysis only discusses these suppliers that
are the most important. Geophysical surveys and diamond drillers are the most critical bottlenecks.

2.6.2 Costs of Switching Suppliers in the Mineral Exploration Industry

Switching costs are expenses incurred to lure a customer to change (Vining, 2007). Given the shortage of mineral exploration industry suppliers, their unique services, and the significance of their proven competence, switching between suppliers is time consuming and expensive. It is difficult for juniors to secure contracts with new suppliers with which they have no existing relationship. When contracts with suppliers are secured, junior companies are usually subjected to high switching costs. In the event that the new suppliers are incompetent, juniors bear the costs associated with the suppliers' incompetence.

2.6.3 Significance of Business from Junior Resource Companies to Suppliers

The shortage of suppliers means GUI only has a choice of a few potential suppliers. GUI's business constitutes a minimal percentage of their business. For example, business from a junior similar to GUI contributes less than 2.5 percent of income to a medium sized supplier of geophysical surveys with an annual income of CDN$10 million (Young, 2007). Though this is true for all juniors, they have no supplier control, and it is unlikely they will unite, tactically collude, and join forces to increase their influence over suppliers. The business of GUI and other junior resources companies with similar operations is not important to the suppliers of mineral exploration.
However, as with all juniors, a significant portion of GUI's financing (70 percent) goes to these suppliers (refer to Table 1). Providers of equity funding to junior companies expect that at least 70 percent of their investments is spent on mineral exploration and the remaining 30 percent is spent on operations and overhead costs.

2.6.4 Summary of KSFs Related to the Power of Suppliers

The critical success factors related to the power of suppliers in the industry affects the negotiating power of two main types of suppliers in mineral exploration. These suppliers include providers of equity financing and mineral rights to properties with higher than average potential for an economic and mineable deposit. The second type of supplier provides mineral exploration services such as diamond drilling and geophysical surveying. The next few subsections summarize the KSF associated with each of the suppliers in turn.

2.6.4.1 KSF Related to the Power of Suppliers: Access to Equity Financing

The ability to raise equity financing and secure relationship networks with suppliers of equity funding is a critical success factor for companies in the mineral exploration industry. This is because they have no revenues and are not eligible for debt financing. The continuation of their operations is dependent on this ability. In the current market conditions, all juniors with or without a proven exploration track record for success are able to raise money through equity financing at least once. However, only juniors that have developed a reputation for consistently delivering a positive ROI are able to raise money time and time
again. Juniors that do not provide an attractive ROI on initial financings struggle to raise more money after their initial equity financing.

Companies successfully competing for funds maintain a consistent stream of adequate equity funding at prices that are not dilutive to the capital structure. They are able to explore and develop more properties, achieving economies of scale and learning curves, thereby increasing their chances of discovering an economically feasible deposit. These companies perform better than other companies with a limited ability to raise capital.

2.6.4.2 KSF Related to the Power of Suppliers: Access to Mineral Properties Rights with High Potential for Economic Discoveries:

Junior companies with the foresight and ability to acquire mineral properties with significant potential for economic deposits from prospectors have an above average success rate. Prospectors identify properties with significant potential for economic deposits by analysing regional and provincial maps for areas with structural indicators such as faults and folding. These structural activities generate planes or layers/strata where fluids carrying gold, copper, and uranium can settle, concentrate, and potentially form an economic deposit. Prospectors able to recognize these subtle indicators on government produced maps that are public goods are most successful. These maps, available on the Yukon government website, are non-rivalrous and non-excludable in consumption (Baye, 2006). Non-rivalrous means one prospector’s consumption does not affect another prospector’s consumption and the same information can be used by many prospectors at zero marginal cost. Non-excludable means
anyone who values this service has access to it and exclusion is difficult and costly (Vining, 2007).

Companies with this KSF are fast decision makers and usually are early movers proficient in macro and micro environment scanning (Crossan, 2006). They acquire properties in prolific areas such as the Athabasca Basin in Saskatchewan for uranium, and the Abitibi Greenstone Belt in Ontario for gold, by optioning from prospectors ahead of a staking rush. A staking rush occurs when the rest of the industry becomes aware of prolific areas and rush to acquire claims in the area (Young, 2007).

Established relationships with successful prospectors are a critical success factor in the industry. Juniors having established relationships with prospectors acquire more interests in mineral properties, and have a higher than average potential for an economic discovery. Repeat business and trust built relationships between juniors and prospectors.

2.6.4.3 KSF Related to the Power of Suppliers: Access to Suppliers of Exploration Services and Technical Expertise

The high level of exploration activity has increased the demand for contracts with suppliers of geological exploration services and skilled labour such as geologists. While juniors who have the relationships with suppliers and perform better in the industry do not have to compete for contracts with suppliers, juniors like GUI that lack these relationships have to pay a lot more for unreliable services. So money is less important than affiliations.
2.7 Power of Government in the Mineral Exploration Industry (Low)

While the following analysis will show the government has high power, these restrictions have a uniform effect on incumbents and new comers and therefore the overall power is considered low. Government activities constitute another force because they establish the rules of the game (Vining, 2007). Government influences all forces of the mineral exploration industry both positively and negatively. The regulations vary from jurisdiction to jurisdiction (country to country). In Canada, the regulations vary from province to province and Yukon has unique provincial regulations. Generally, they ensure a certain level of safety is maintained and the impact on the environment is minimized during mineral exploration and extraction operations. The federal and provincial safety policies are particularly stringent for underground mining operations.

2.7.1 Regulation on the Mineral Exploration Industry

The Canadian government regulates how grass-roots properties are staked and recorded. Also, all mineral property option agreements have to be approved by the TSX-V. The government and CIPF (Canadian Investor Protection Fund) regulate suppliers’ activities (assay labs) to prevent fraudulent practices similar to those carried out by BreEx in 1997. Once a deposit is discovered, its characteristics have to be compliant with the government definition of an economically feasible mineable reserve (National Instrument 43-101) (APGO website, May, 2007). This reduces occurrences of incomplete information and information asymmetry.
2.7.2 Government Policy on Mineral Exploration

In Canada the regulations are rigorous. This is an attempt to control the levels of mineral exploration and subsequently the environmental impact of exploration activities. The government has sufficient power to stop exploration operations damaging the environment such as trenching, extensive bulk sampling, heavy vehicles on the permafrost ground covering, and helicopter traffic disturbing the wildlife in remote locations (YESAB website, June 2007).

The government policy makes it difficult for juniors to explore for mineral deposits and majors to extract minerals in Canada. It takes seven to ten years of permitting with the provincial and federal governments before mining can commence (Mineral Field, 2007). Again, this is an attempt by the Canadian government to ensure that the proposed mining practices are sustainable and that the environment is protected.

To give the Yukon Territory regulation a global prospective, the following subsection briefly reviews government regulations of undeveloped countries affecting the industry such as Uganda, Zaire, and Zambia. Minimum regulation is desirable for mineral exploration, but it does not promote sustainable practices that protect the environment for future generations. In less developed nations, protecting the environment is usually low on the government's list of priorities. Though the minimum regulations in these countries present favourable exploration conditions, the geopolitical instability makes these nations risky and potentially violent environments in which to operate. Canada is not risky and has no potential for violent eruptions. However, potential political risk exists when
exploring Crown land near First Nations’ claim land, or areas of First Nation interest that is reserved and inaccessible for exploration (Mining Information Kit for Aboriginal Communities, 2007).

2.7.3 Current Regulations on the Mineral Exploration Industry

The level of regulation is increasing in the industry to prevent market failure. This increase is in response to the Bre-Ex Mineral Ltd. and Enron scandals that occurred in 1997 and 2002 respectively. Junior exploration companies have to comply with the internal accounting controls and disclosure controls in order to continue their operations in Canada. Non-compliance would lead to the companies being de-listed from the exchange.

2.7.4 Effect of Yukon Regulation on the Mineral Exploration Industry

The Canadian government policies also have a positive effect on the industry. The federal and provincial governments provide junior resources companies with financial incentives to explore risky grass-roots projects.

Equity financing, however, remains the primary source of funding for junior exploration companies because it constitutes approximately 95 percent of funds available to juniors for exploration. Funding from the government constitutes two to five percent of funds available to juniors. Equity financing is also more reliable and predictable than the government incentives which cannot be included in the exploration budget. The financial incentives from the government are a secondary and minor source of funding for juniors.
The primary objective of the financial incentives is to increase levels of exploration activity, and to maintain the high levels of exploration activity in the province. Provinces similar to the Yukon Territory prefer these conditions because they create jobs and promote development in the province.

As exploration activity increases consistently and stabilizes in response to the incentives, the government decreases the incentives. The financial incentive program has been very successful in the Yukon. The Yukon government has reached its targeted elevated exploration levels for the last five consecutive years. It is not certain how much longer the program will continue.

2.7.4.1 Effect of Provincial Governments' Financial Incentive on Exploration

The government also provides investors with incentives to participate in equity financing. These incentives come in the form of tax deductions for investments made to flow through financings (Traynor, 2005). As described in the first chapter, this incentive has been very successful.

2.7.4.2 KSF Related to the Government Regulation on the Exploration Industry

As previously mentioned, the KSF related to the government power is less important to GUI and its competitors in the Yukon province as they are under the same jurisdiction. The same regulations govern the companies, affecting them uniformly. The KSF related to government regulation is therefore not discussed in detail.

Companies exploring in jurisdictions with pro-mining regulations like the Yukon generally perform better than those exploring in jurisdictions with anti-
mining policies. Pro-mining regulations promote the acquisition and evaluation of mineral properties and extraction. Though the Yukon is considered a pro-mining province, a junior must apply for a permit from the Yukon Environmental Safety Board (YESB) before it can explore in this province. Before granting a permit, the application is presented to the communities for their reviews and comments. Juniors are only permitted to explore in the Yukon after extensive consultation with the communities.

Junior companies also generally perform well in jurisdictions such as undeveloped nations, where these policies are either relaxed or non-existent. In developed nations such as Canada, policies on environmental protection are stringent, and labour is more expensive, which negatively affect their performance. On the other hand, the more stable political environment found in developed nations does not pose the threat to operations that is present in undeveloped nations.

2.8 Rivalry in the Industry Mineral Exploration (High)

Rivalry within an industry refers to the degree and nature of competition (Vining, 2007). Competition in this industry is generally high and correlates directly with the metal commodity cycle. Porter’s other forces influence rivalry. The rivalry between companies is particularly high when the global demand for metals is high. The ‘building boom’ in China and India contributes to the current increasing global demand for uranium as a cleaner energy source and for copper as a building material (Mineral Fields, 2007). The reasons behind the increasing demand for gold are complex.
The following criteria were investigated for judging rivalry in the mineral exploration industry in order of priority: numerous or equally balanced competitors, lack of differentiation or switching costs, rapid industry growth, storage costs, capacity augments in large increments, diverse competitors, high strategic stakes, and high exit barriers. All of the other five forces feed into rivalry, as well. Each force’s influence on rivalry is discussed in its respective subsection.

The first three criteria were the most relevant to how juniors compete for survival and prosperity, and are investigated in detail. GUI has numerous competitors exploring for gold, copper, and uranium in the Yukon. These competitors are the same size as GUI, with approximately the same number of mineral properties, employees, financial resources, and equity. The competitors compete with GUI for resources such as diamond drillers, geophysical surveyors, mineral properties, and geologists. Accessing these resources is critical to the operation’s success (KSFs).

Juniors generally lack differentiation; they are very similar to each other. They have the same flat organizational structure, organic corporate culture, and decentralized control systems that facilitate fast decision making and rapid response to a volatile environment. Juniors also share the same entrepreneurial spirit. This similarity among competitors makes it difficult for potential investors to distinguish between investment opportunities. Differentiation is therefore a KSF (Pearlson and Saunders, 2006) and justifies GUI’s attempt to differentiate itself.
on rapid mineral property evaluation. Juniors can separate themselves from other juniors by diversifying any factor of Porter's forces.

The increasing demand for base and precious metals increased the exploration activity in Canada by 103 percent (2004), as discussed earlier. GUI increased its exploration activities by approximately 40 percent (2004) and 50 percent (2005), whereas one of GUI's competitors increased exploration activity by approximately 90 percent and 130 percent in 2004 and 2005 respectively. Table 1 shows GUI's expenditures on exploration in comparison to that of its competitors.

Table 1: Ratio of GUI's Expenditures to Overall Expenditures and Growth in the Mineral Property Assets as Indicator of Increasing Exploration Activity

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<tr>
<td>Operating Cost ($)</td>
<td>154,771</td>
<td>149,072</td>
<td>410,918</td>
<td>520,094</td>
<td>859,431</td>
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<td>Exploration Costs ($)</td>
<td>370,309</td>
<td>118,931</td>
<td>558,655</td>
<td>620,318</td>
<td>802,065</td>
<td>310,527</td>
<td>558,424</td>
<td>1,047,423</td>
<td>194,453</td>
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<tr>
<td>Total Costs ($)</td>
<td>525,080</td>
<td>268,903</td>
<td>969,573</td>
<td>1,140,412</td>
<td>1,661,496</td>
<td>412,431</td>
<td>706,043</td>
<td>1,618,632</td>
<td>699,111</td>
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<tr>
<td>% of Total Costs Spent on Exploration</td>
<td>71%</td>
<td>44%</td>
<td>58%</td>
<td>54%</td>
<td>48%</td>
<td>75%</td>
<td>79%</td>
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Growth in the Mineral Property Assets as Indicator of Increasing Exploration Activity

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<tr>
<td>Current Asset ($)</td>
<td>12,209</td>
<td>4,653</td>
<td>125,476</td>
<td>558,627</td>
<td>1,495,021</td>
<td>27,724</td>
<td>149,583</td>
<td>555,720</td>
<td>3,044,465</td>
<td>6,967,818</td>
<td>3,701,451</td>
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<tr>
<td>Long Term Asset (Equipment and Machinery) ($)</td>
<td>6,573</td>
<td>4,732</td>
<td>21,989</td>
<td>48,062</td>
<td>51,212</td>
<td>5,393</td>
<td>5,197</td>
<td>7,989</td>
<td>5,393</td>
<td>5,197</td>
<td>7,989</td>
</tr>
<tr>
<td>Mineral Property Asset ($)</td>
<td>1,909,467</td>
<td>2,035,883</td>
<td>2,005,538</td>
<td>3,148,356</td>
<td>4,023,276</td>
<td>338,469</td>
<td>558,424</td>
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<td>3,956,559</td>
<td>5,240,811</td>
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<td>Total Asset</td>
<td>1,928,249</td>
<td>2,045,468</td>
<td>2,753,033</td>
<td>3,755,045</td>
<td>5,659,009</td>
<td>371,806</td>
<td>713,204</td>
<td>1,611,132</td>
<td>7,063,024</td>
<td>11,848,429</td>
<td>10,635,220</td>
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<tr>
<td>% of Growth of Asset</td>
<td>6%</td>
<td>35%</td>
<td>36%</td>
<td>48%</td>
<td>92%</td>
<td>128%</td>
<td>43%</td>
<td>-10%</td>
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SOURCE: JT Mazvihiwa, April 2007
One of these competitors was ‘free riding’ on a related company so its
growth rate appears artificially high. Actual figures are expected to be similar to
those of GUI.

2.8.1.1 Summary of KSFs Related to Rivalry

To win against rivals, GUI must have access to diamond drillers,
geophysical surveyors, mineral properties, and geologists. This is the same KSF
associated with suppliers. Differentiation is the second KSF associated with
rivalry. Differentiating on any one aspect of Porter’s forces allows juniors to
distinguish themselves from other juniors in the market (Crossan et al, 2005).
This enables them to better attract investors.

2.9 Summary of the Six Forces Analysis

Low to medium barriers to entry exist in the mineral exploration industry.
Cyclicality of the industry, fuelled by mineral prices on the market, influences the
barriers of entry. This in turn affects rivalry in the industry.

There are many buyers going after a few economically feasible and
mineable discoveries. Buyers therefore have no bargaining power. There are no
true substitutes for GUI’s buyers. Both these forces are favourable to the
industry.

In the current environment, there are not enough suppliers to go around;
thus they have significant bargaining power, which is unfavourable to the
industry. Though rivalry is generally high among existing competitors, the overall
industry is attractive as the exploration activity in Canada continues to increase.
2.10 Mineral Exploration Industry Attractiveness

Industry attractiveness was determined by assessing the strength of Porter's forces. These strengths show that the mineral exploration industry is relatively attractive. As Table 2 illustrates, four out of Porter's six forces are extremely favourable to the industry; however, suppliers have great bargaining power which is unfavourable. The suppliers' high power influences rivalry in the industry, which is also high and unfavourable.

<table>
<thead>
<tr>
<th>Porter's Force</th>
<th>Force's Strength</th>
<th>Effect on Attractiveness of Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power of barriers to entry</td>
<td>Low to Medium</td>
<td>Favourable to industry</td>
</tr>
<tr>
<td>Power of buyers</td>
<td>Low</td>
<td>Favourable to industry</td>
</tr>
<tr>
<td>Power of substitutes</td>
<td>Low</td>
<td>Favourable to industry</td>
</tr>
<tr>
<td>Power of suppliers</td>
<td>High</td>
<td>Unfavourable to industry</td>
</tr>
<tr>
<td>Government</td>
<td>Low</td>
<td>Favourable to industry</td>
</tr>
<tr>
<td>Rivalry</td>
<td>High</td>
<td>Unfavourable to industry</td>
</tr>
</tbody>
</table>

SOURCE: JT Mazvihwa, June 2007

The growing number of mineral exploration companies is a clear indication that the mineral exploration industry is currently quite attractive. Growth in the industry is exponential and this rate is not sustainable as it is straining and depleting the industry's resources (Higgins, 2007). The number of uranium exploration companies alone has grown by 250 percent in the last three years (Hibbitts, 2007). The rising global demand for commodity metals and stagnant supply has made this industry even more attractive.
2.11 Summary of KSFs in the Mineral Exploration Industry

Key success factors are criteria required for competitive success in an industry. Industries usually have more than three and less than ten key success factors at a given time (Abramson, 2007) with varying measures of importance. Companies with more success factors perform better than companies with a few success factors. This applies to the mineral exploration industry.

In summary, the KSFs accumulated in each of the categories of the 6 Forces analysis presented in order of relative importance are as follows:

- The most important KSF in the industry is associated with suppliers; it is the relationship with (1) suppliers of exploration services such as diamond drilling, geophysical surveys successful prospectors and (2) access to equity financing.

- The significant KSF related to buyers is (3) access to independent geologists. This KSF is also extremely important in the industry.

- The KSF related to power of barriers to entry are (4) economies of scale and learning curve (5), reputation for exploration (6), and cost and performance advantages. These last two KSFs are important in the industry as they impact juniors’ access to equity. Economies of scale is a less important KSF.

- The KSF related to rivalry is (7) differentiation. The other KSFs related to access to resources are the same as those related to suppliers.
Though the 6 Forces analysis identifies seven KSFs in the industry, some of these KSFs are interdependent and discussed as one in the competitive analysis. Suppliers of exploration services and access to independent geologists (technical experts) are discussed in the competitive analysis as one KSF associated with the relationships allowing access to exploration services and technical experts. Access to equity financing and the reputation for exploration are related KSFs. They are discussed as relationships allowing access to equity financing in the competitive analysis. Economies of scale, the learning curve, cost and performance advantages are associated and discussed in terms of economies of scale and size as related to the number of mineral properties a junior owns. Juniors can diversify by customising any of the above KSFs. Differentiation is co-dependent on all the KSFs described in the competitive analysis.

2.12 GUI’s Industry Competitive Analysis

This chapter analyses GUI’s competition to evaluate how GUI and its competitors score on the industry’s KSFs. First the chapter analyses Lagoon and Kashes’ strategy and performance, then a competitive analysis is conducted to score GUI’s performance on the industry’s KSF against its competitors’ performance. Threats and opportunities were identified based on these comparative scores. Strategic alternatives were proposed to take advantage of GUI’s opportunities and mitigate its threat.
2.12.1 GUI's Main Competitors

GUI's main competitors are junior companies exploring for uranium, copper, and gold in the Yukon such as Lagoon Resources Corp. (Lagoon) and Kashe Minerals Inc. (Kashe) (as discussed in Table 1 on page 53). These companies seek services from the same skilled personnel and suppliers as GUI, and must compete for these services concurrently due to the seasonal nature of exploration in the Yukon.

2.12.2 GUI's Competitor: Lagoon Resources Corp.

Since its inception in 1978, Lagoon Resources has held interests in mineral properties in British Columbia and the Yukon (SEDAR website, 2007). Lagoon's sole source of funding is equity financing for the same reasons as GUI. This competitor is also a public traded company, listed on the TSX-Venture, and its share ownership is fairly widely dispersed between 400 and 500 shareholders.

2.12.2.1 Lagoon Resources' Current Strategy

Lagoon's flagship mineral properties are located in the Yukon. This is where Lagoon has concentrated its exploration activities since 2001. Lagoon's core business activity is mineral exploration. Its focus strategy is to fully evaluate the mineral potential of its priority properties in the Yukon.

To date, Lagoon has identified several gold and uranium targets on its properties. The company expects to fully assess these targets in the next two or three years. It is not yet certain if any of the identified targets will develop into economic and mineable deposits.
2.12.2 Lagoon Resources’ Performance in Current Industry Environment

Lagoon competes with GUI and other juniors in the Yukon for suppliers in the industry. This company has fairly established networks of relationships with suppliers. It has succeeded in securing contracts with suppliers of explorations functions and skilled labour for four exploration seasons out of the last five seasons. Lagoon also has gained interests in mineral properties with medium to high potential for economic and mineable deposits.

Lagoon’s relationship with suppliers of equity funding is not well established. The company is struggling to secure access to equity funding at share prices that are not dilutive to its share capital structure. Its ability to secure financing to complete evaluating its targets is not certain.

2.12.3 GUI’s Competitor: Kashe Minerals Inc.

Kashe is a new junior company formed in 2003. It recently listed on TSX-V in 2004, but its share ownership is still tightly held by 200 to 250 individuals. Kashe acquired five mineral interests in the Yukon. This is a higher than average number of properties that new juniors explore simultaneously. This company’s sole source of funding is also equity financing. As with GUI and Lagoon, Kashe’s primary operations do not generate any revenues, and it has no assets to pledge against debt.

2.12.3.1 Kashe Minerals’ Current Strategy

Kashe concentrates all its exploration activities in the Yukon. As with GUI, Kashe’s core business activities are acquiring and exploring mineral properties.
Its focus strategy is to acquire properties with high potential for economic deposits, and to fully evaluate the mineral potential of its priority properties in the Yukon.

Kashe's mineral properties have a higher than average potential for the discovery of an economic mineable deposit, but Kashe has yet to identify uranium targets. It has identified a gold target on one of its properties. Kashe's short-term goals are to diamond drill the identified gold target, to complete a geophysical survey over its other three properties, and to acquire a property with high potential for an economic deposit.

The objective of the geophysical survey is to identify anomalies that may develop into targets with further geochemical analysis. Kashe is new to the exploration industry and has barely started exploring its mineral properties. Its long-term goal is therefore to fully evaluate the mineral potential of its properties.

2.12.3.2 Kashe Minerals' Performance in Current Industry Environment

Kashe is new to the industry. It therefore has no established relationships with suppliers of equity funding and exploration services. However, it has developed a lucrative relationship with a successful prospector and acquired his best properties with above average mineral potential. Since Kashe's initial public offering financing in 2004, it has had a 60 percent success rate in raising equity funding to run its exploration activities.

Kashe competes with Lagoon, GUI, and other juniors in the Yukon for suppliers in the industry. Kashe has no relationships to rely on and to help secure
exploration service contracts. To date, the company only succeeded securing one contract with a geophysical surveyor in 2005. It has not yet succeeded in securing a diamond drilling and geophysical survey contract to conduct its planned exploration for the 2007 exploration season.

2.13 Rating GUI and its Competitors on the Mineral Exploration Industry’s KSF

GUI's performance and the performance of its competitors was analysed to evaluate how they measure up to the most important mineral exploration industry's KSFs. As identified in earlier analysis of the 6 Forces, the most important KSF addresses the extreme negotiating power of suppliers. These suppliers include providers of equity financing, mineral properties with high potential for economic discoveries, as well as suppliers of exploration activities and skilled labour. In evaluating the competitors' performance against a KSF of secondary importance for GUI, that being the economies of scale and size, Kashe, despite being new to the industry, has excelled in this KSF which presents a threat to GUI.

2.13.1 Scoring Criteria of GUI and Its Competitors

GUI's and its competitor's performance is ranked against these KSFs. The companies' performance for each of these KSFs was scored on a rating of one to five. A score of one represents the lowest possible rating; a major threat in the current environment. Five represents the highest possible score. A company ranking between four and five on the scale for a KSF is performing well on the KSF and the KSF is a competitive advantage for the entity in the current
environment. A company ranking below two on the scale for a KSF is not performing well and the KSF represents a threat to the entity. A summary of the rating is illustrated in Table 3.

Table 3: Rating GUI and its Competitors' Scores on the Mineral Exploration Industry’s KSF

<table>
<thead>
<tr>
<th>Porter’s Force</th>
<th>KSF</th>
<th>Performance Ranking on KSF</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addressing the extreme power of Suppliers</td>
<td>1. Relationships allowing access to suppliers and technical experts/skilled labour</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2. Relationships allowing access to equity financing</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3. Relationships allowing access to mineral properties with high potential for economic discoveries</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Barriers of entry</td>
<td>1. Economies of scale and size as related to the number of mineral properties a junior owns</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Note:

5- Highest possible score
3- Medium score
1- Lowest possible score

SOURCE: JT Mazvihwa, June 2007

2.13.2 GUI and Its Competitors’ KSFs with Suppliers: Relationships Allowing Access to Suppliers and Technical Experts

GUI ranked the lowest on this KSF which is a threat for the company. Juniors like Lagoon formed a network of relationships with suppliers of exploration services based on juniors historic business choices. Relationships with geologists and prospectors are not based on the past activities, but are based instead on more recent interactions and underlying trust between the
parties. All juniors have an equal opportunity to form and maintain these relationships with geologists and prospectors. The limited number of suppliers and their significant bargaining power in the industry is therefore a threat for GUI. To date, GUI has managed to retain suppliers to drill and survey its mineral property in the Yukon.

This is, however, becoming increasingly difficult to do as new entrants to the mineral exploration industry emerge, and as incumbents continue to increase their exploration activity in response to the rising demand for uranium, copper, and gold on the global market. Failing to retain the services of a diamond drilling company for a season would be devastating for GUI as the time it has to work in the Yukon is limited to four or five months each year.

2.13.3 GUI and Its Competitors' KSFs with Suppliers: Relationships Allowing Access to Suppliers of Grass-roots Properties with Significant Potential for Deposits

GUI has a perfect score for this KSF. It scores higher than its two competitors and therefore presents an opportunity. In 2002, GUI acquired a mineral property with significant potential for uranium, copper, and gold. It has a geological model similar to the Olympic Dam in Australia which is known for its rich uranium deposit. Even though exploration efforts have not yet identified an economically feasible deposit, several major mining companies (potential buyers) have already expressed interest in the property. The majors have gone as far as signing confidentiality agreements with GUI to enable them to investigate the data GUI has acquired on the property to date. Due to this, GUI has more to survey and drill than its competitors. By failing to gain control over suppliers, and
by not completing the drilling and surveying programs, GUI’s reputation with financiers would be hurt.

2.13.4 GUI and Its Competitors’ KSFs: Relationships Allowing Access to Suppliers of Equity Financing:

GUI’s KSF is the ability to attract suppliers of equity financing and to maintain relationships with them. This ability presents opportunities in the industry for GUI, as it has an established relationship with these suppliers. It has dealt with 70 percent of these suppliers for over 29 years (Young, 2007).

GUI’s long relationship with brokerage firms gives it the ability to raise equity financing to keep its operations going. Given companies that do not have revenues and do not qualify for debt financing, this is a KSF for the exploration industry. GUI scores 4, the highest score on this KSF. This ranking indicates this KSF is GUI’s competitive advantage, presenting an opportunity for the company. This is expected as GUI is well funded. Brokerage firms have financed GUI on numerous occasions since 1978, and have been rewarded by the company’s share appreciation on the market after each financing.

GUI has mitigated the bargaining power of suppliers of capital in the industry by earning a reputation of consistently delivering a positive return on their investment – the ROI being between five and fifteen percent. This ability is negatively affected by the failure to conduct surveying and drilling programs; therefore, GUI must alleviate the threat of limited suppliers of exploration services in order to maintain the ability to deliver a positive ROI in the future.
GUI's past ability to deliver a positive ROI provided the required financing, thereby mitigating the effect of suppliers' extreme bargaining power.

As indicated by the scores of GUI's competitors, a positive return on investment is not always possible to deliver given the volatility of the metal commodity market. Younger companies do not have the same track record for successful returns on investment by share appreciation as illustrated by Kashe, which was incorporated four years ago.

2.14 Summary of GUI's Strategic Threats and Opportunities

GUI's opportunities are contingent on the company handling its threat. GUI has the mineral rights to mineral properties with high potential for economically feasible deposits. The company could benefit from evaluating the properties while the demand for uranium, copper, and gold is still high; however, if GUI is not able to explore these properties in two to three years, it may hurt its reputation with financiers. This would make it extremely difficult for GUI to raise equity funding to continue its exploration operations. The company's current favourable financial situation coupled with the greater number of properties facilitates vertical integration.

GUI has a secondary threat in the current environment. GUI has three active exploration projects in the Yukon with higher than average potential for the discovery of an economic deposit. Kashe, its competitor, has five active projects with higher than average potential for discovering economic deposits. Kashe enjoys economies of scale, which is not typical for new entrants, and has a
higher probability of discovering an economic deposit on its five projects than
GUI has on its three projects. Kashe’s competitive advantage is linked to
identifying and acquiring first class mineral properties. This ability may be
attributed to a successful prospector who owns approximately five percent of the
Kashe stock. This prospector may influence which properties the company
acquires.

2.15 Possible Strategic Alternatives for GUI

To decrease the crippling bargaining power suppliers have, GUI may need
a more diverse strategy. It proposes three potential strategic alternatives: (1)
entering the diamond drill sector; (2) entering the geophysical surveying sector;
(3) entering both the diamond drill and geophysical surveying sectors
simultaneously; and (4) maintaining the status quo. Backward vertical integration
into the exploration service industry by purchasing diamond drilling, geophysical
equipment, or both would allow GUI to drill and/or fly its own radiometric surveys
on its properties in the Yukon. This would eliminate GUI’s dependency on the
suppliers of geophysical services, so it would not be at risk of not securing
contracts for the season. It would help GUI compete successfully in the industry
by protecting the two strategic advantages (financial access and more
properties), and by decreasing the suppliers’ bargaining power.

2.16 GUI’s Strategic Alternatives #1, 2, and 3: Integrating into
Diamond Drilling and/or Geophysical Surveying Sectors

This section investigates GUI’s first, second, and third strategic
alternatives. These alternatives include entering the diamond drilling and
geophysical surveying sectors, or entering both sectors simultaneously. Geophysical surveying and diamond drilling is core to GUI's operations. Continuing to outsource these operations in an uncertain environment where suppliers of both services have significant bargaining power may prove detrimental to GUI's operations. The aim of these strategic alternatives is to decrease the suppliers' power.

2.16.1 Background on Upstream Vertical Integration into the Geophysical Surveying and Diamond Drilling Sectors

The geophysical surveying sector is in extremely short supply and a few major players monopolize this sector. Barriers to entry, a lack of substitutes to the surveys, specialized inputs, increasing number of customers, back order of equipment, and steep learning curves currently increase these shortages. Management's expectation of differentiating in the service sector might provide GUI with a significant competitive advantage. This will allow GUI to appear unique in the marketplace (Pearlson and Saunders, 2006).

The diamond drilling sector is also in short supply. However, this sector is less specialized than the geophysical surveying sector, and it has a lower learning curve. But, as with surveying, diamond drilling has no real viable substitutes. Though a reverse circulation drill program may provide limited information on the lithological units close to the surface (200 meters or less), it is not a feasible alternative to diamond drilling as it does provide a similar package of benefits (Crossan, 2006).
GUI’s drilling program this year is targeting drill targets located close to the surface. The expectation is that the deepest hole will drill to 150 meters. GUI can test these near surface zones with diamond drilling, or substitute the diamond drilling with reverse circulation (RC) drilling, but the information generated from the RC drilling is inferior to that generated from diamond drilling (Hibbitts, 2007).

2.16.2 Limitations of Vertical Integration into the Geophysical Surveying and Diamond Drilling Sectors

However, bringing these functions in-house has limitations that GUI must address. The primary concern is the possible underutilization of both the diamond drill and geophysical survey equipment in a declining market. The expected time necessary to survey GUI’s properties is six to seven months. In the Yukon, GUI can only drill in the summer months from July to October. GUI can mitigate underutilization in a regressing market by actively marketing its services and contracting out its diamond drilling and geophysical surveying activities to other junior exploration companies unable to secure contracts with suppliers. Mitigating underutilization in a slow market may cause GUI’s second concern: retaliation from incumbent suppliers, particularly the surveyors.

Though the incumbent surveyors are currently not in a position to take on new contracts, and rivalry in the service industry is low, they may respond negatively and hold off their electro-magnetic surveys to a new entrant when market conditions change. In the future, when demand for radiometric surveys fall and GUI competes with incumbents for a portion of their market share, the incumbents may retaliate against GUI.
By providing diamond drilling and/or geophysical surveys in addition to its primary activities of mineral exploration, GUI would differentiate its strategy by operating in both the mineral exploration industry and the geological survey industry as a competitor. Since GUI is considering entering the mineral exploration service industry, it should evaluate this industry's external environment and determine its attractiveness.

2.16.3 Summary Results of Vertically Integrating into the Mineral Exploration Service Industry

Integrating into the mineral exploration service industry would ensure GUI's ability to complete diamond drill programs and geophysical surveys, and to evaluate targets in a timely manner. GUI would complete planned exploration programs on schedule. Consequently, discoveries would occur earlier on in the program, and would be sold to majors earlier than other juniors are capable of doing. This differentiation strategy may be more appropriate for the current environment (Crossan et al, 2006). Differentiating on the rapid and accurate evaluation of mineral properties and facilitating early deliveries of deposits are qualitative dimensions (Pearlson and Saunders, 2006) important to majors with depleted reserves – something they are willing to pay for.

2.17 The Mineral Exploration Service Industry

Diamond drilling companies are usually only involved in this one function, and there is minimal differentiation in the diamond drilling service. Companies operating in the geophysical surveying industry carry out surveys for the mineral exploration industry. There are three main types of geophysical surveys: electro-
magnetic, radiometric, and induced polarization geophysical surveys. Each survey analyzes a particular physical characteristic of the lithological units: the magnetic nature (electro-magnetic survey), the ability to conduct an electric current (induced polarization survey), and the radioactive nature (radiometric survey).

Only a few of the larger geophysical surveying companies in the Canadian industry can perform all three types of surveys. The medium and smaller sized companies usually perform one or two of these types of surveys. Companies conduct the surveys they specialize in from the air (airborne geophysical surveys) or on the ground (ground geophysical surveys). GUI intends to perform airborne radiometric airborne surveys.

As mentioned in earlier paragraphs, there are a few large geophysical surveying companies operating in the industry that are providing electro-magnetic and radiometric geophysical surveys. Two major players have monopolistic advantages on electro-magnetic surveys. These two companies also produce the electro-magnetometers used in the mineral exploration industry.

2.18 Five Forces Analysis of the Mineral Exploration Services Industry

This section reviews the service industry’s external environment using Porter’s 5 Forces Model. The company expects that this analysis will indicate how the incumbents will respond to it as a new entrant to the industry when the external environment changes. Also, it will provide an indication of the industry attractiveness, the competition facing GUI in the service industry, potential
customers and suppliers, the threat of new entrants, the threat of substitutes, and rivalry. An investigation of each component of the 5 Forces in the mineral exploration service industry follows.

2.18.1 Power of Barriers to Entry in the Mineral Exploration Service Industry (Low to Medium)

The threat of new entrants is low to medium in the diamond drill and geophysical survey industry. The barriers are higher in the electro-magnetic geophysical survey segment where two larger companies manufacture electro-magnetometers and conduct electro-magnetic surveys while monopolizing this segment of the geophysical sector. The low to medium barriers are not favourable for medium to small sized diamond drilling and geophysical survey companies.

2.18.1.1 Main Barrier to Entry: Limited Access to Diamond Drilling and Geophysical Survey Equipment

The equipment required for the segment of the geophysical survey industry that conducts radiometric surveys and diamond drilling programs are more readily available than the equipment required for the electro-magnetic surveys. Radiometrics and drilling equipment are manufactured by suppliers who are independent of the surveying and drilling companies. The barriers of entry to this part of the industry are therefore lower. The two firms that conduct electro-magnetic surveys monopolize production and distribution of the equipment in Canada, raising the barriers to entry.
However, this equipment is on back order. The supplies to the diamond drill and geophysical survey cannot manufacture it fast enough. Second hand equipment may be available in the global market, but parts required for maintaining discontinued equipment may not be available. GUI may have to wait two to six months for delivery of its radiometrics and diamond drill equipment, and this delay would mean that GUI has to conduct its programs in 2008, instead of 2007 as initially planned. This analysis assumes GUI would get its equipment in time to conduct its survey in August 2007. Although barriers to entry are generally low, this situation is favourable for incumbents and not favourable for potential new entrants.

2.18.1.2 Other Barriers of Entry to the Mineral Exploration Service Industry

Other barriers of entry in the industry exist in the form of economies of scale, proprietary product differences, established brand identities, and considerable capital needed to enter the industry. GUI has the adequate finances to integrate into diamond drilling or the geophysical surveying, but not both simultaneously. Availability of financial resources is one of GUI's KSFs. Newcomers to the service industry, such as GUI, may expect strong retaliation on entering the market from the geophysical surveying companies when the industry stops expanding and the demand for suppliers' services decreases.

This retaliation may come from the larger companies that manufacture as well as conduct electro-magnetic surveys. These companies also conduct radiometric surveys, so GUI would be in direct competition with them in the radiometrics market when the market turns and demand for metals stabilizes.
Therefore, they may withhold their electro-magnetic surveys to GUI. Since they have a monopoly over this type of survey, if they retaliate, GUI may fail to fully evaluate its mineral properties in the future.

GUI expects no retaliation in the current external environment where incumbents are not able to supply the whole market. GUI is not concerned with the retaliation it anticipates in the future. The threat is not extreme and to minimize retaliation, GUI will show it is not competing with incumbent firms by offering the same price for its radiometric geophysical surveys as larger incumbent firms (Abramson, 2007). Not undercutting incumbents' prices may ensure GUI does not initiate price wars (Baye, 2006). In the current market, GUI expects it will receive the business left by incumbents after they reach capacity. Like a hyena, GUI will scavenge for business left over by the incumbents.

2.18.2 Power of Buyers in the Mineral Exploration Services Industry: Junior Exploration Companies (Low)

Buyers in this industry are junior mineral exploration companies that require the diamond drilling and geophysical surveys to evaluate the mineral potential of their mineral properties. These buyers have no bargaining power, which is favourable for the companies in the industry. This is the same as in the relationship with suppliers in the 6 Forces analysis of the mineral exploration industry.
2.18.2.1 Reasons Buyers in the Mineral Exploration Service Industry Have Limited Bargaining Power

There is a large number of buyers relative to the number of service companies in this industry, so the business generated by each of these customers has an insignificant contribution to the diamond drilling and geophysical surveying companies' revenues. The customers incur costs when switching suppliers. They require important information from the surveyors and the means to interpret this information. This is a KSF in the geophysical survey industry.

2.18.3 Threat of Substitutes in the Service Industry (Low)

The threat of substitutes is low in the industry as the junior exploration companies have no real substitutes for the information generated from geophysical surveys and the diamond drilling process. Exploration companies use several exploration techniques other than diamond drilling and geophysical surveys. This includes geological mapping, geochemical analysis of soil, and rock chip samples. Although these techniques generate valuable information, this data cannot replace the unique data generated from diamond drilling and geophysical surveys.

2.18.4 Bargaining Power of Suppliers of the Service Industry (Medium)

Suppliers of the diamond drilling and radiometric surveys have some bargaining power. While these types of services are unique and specialized, and the individual components of the equipment are standard, there is an equipment shortage. Once drilling and surveying companies have ordered their equipment
from particular suppliers, switching between available suppliers is time consuming and expensive. Possessing the drilling and surveying equipment is a KSF in the industry.

2.18.5 Rivalry among Existing Companies in the Service Industry (Low)

This industry experienced negative growth in the last decade. The growth rate increased slightly as the levels of exploration increased dramatically. There is enough demand in this industry to fuel and support rapid growth. The few diamond drilling and geophysical surveying companies in the industry that only conduct geophysical surveys are not enough to serve the increasing demand for their services from junior mineral exploration companies. The companies have more business than they can manage, so rivalry among the existing companies is very low. Still, these incumbents may retaliate against newcomers in an attempt to maintain this favourable environment. This is very favourable for the incumbent companies.

Existing companies anticipate the rivalry to increase as the number of new entrants increase in both sectors and demand for their services peak, making the environment less favourable for them. GUI anticipates that the few large survey companies that conduct radiometric and electro-magnetic surveys and manufacture electro-magnetic equipment may respond negatively to it entering the industry by withholding the electro-magnetic surveys that they monopolize when growth in the exploration industry slows down. In entering the diamond sector, GUI anticipates no retaliation because all the companies operating in the drilling sector are small to medium sized, and possess limited retaliatory power.
2.19 Mineral Exploration Service Industry Attractiveness

Industry attractiveness was determined by assessing the strength of Porter's forces within the mineral exploration service industry (Vining, 2007). These strengths show that the service industry is extremely attractive. As Table 4 illustrates, four out of Porter's five forces are significantly favourable to the industry. However, suppliers have medium bargaining power which is slightly unfavourable. The suppliers' medium power is associated with the shortage of equipment and parts that are currently on back order (Hibbits, 2007). Although this is an attractive industry, potential new entrants are dissuaded by the equipment shortage. There are many small to medium sized suppliers in the industry, and they do not have significant negotiating power.

Table 4: The Effect Porter’s Forces Have on the Mineral Exploration Service Industry Attractiveness

<table>
<thead>
<tr>
<th>Porter's Force of Mineral Exploration Service Industry</th>
<th>Force's Strength</th>
<th>Effect on Attractiveness of Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power of barriers to entry</td>
<td>Low to Medium (High for electro-magnetic segment)</td>
<td>Favourable to industry</td>
</tr>
<tr>
<td>Power of buyers</td>
<td>Low</td>
<td>Favourable to industry</td>
</tr>
<tr>
<td>Power of substitutes</td>
<td>Low</td>
<td>Favourable to industry</td>
</tr>
<tr>
<td>Power of suppliers</td>
<td>Medium</td>
<td>Unfavourable to industry</td>
</tr>
<tr>
<td>Rivalry</td>
<td>Very Low</td>
<td>Favourable to industry</td>
</tr>
</tbody>
</table>

SOURCE: JT Mazvihwa, June 2007

GUI expects to achieve supplier control by diversifying and vertically integrating into the mineral exploration service industry. Supplier control is a major KSF in the mineral exploration industry. This would enable the company to
evaluate its properties within two to three years, continue its ability to provide a positive ROI, and maintain its good reputation with financiers.

2.20 GUI’s Strategic Alternative # 4: Status Quo

The status quo strategic alternative involves GUI continuing its current strategy. This current strategy involves conducting mineral exploration activities which are GUI’s current core activities. The company would continue exploring the mineral properties it currently holds in the Yukon. Its exploration activities would continue to focus on precious metals such as gold and silver, as well as base metals such as uranium and copper.

The status quo would mean GUI has to continue competing with other junior companies to secure contracts with suppliers. GUI would continue relying on an inadequate and unreliable system to secure the contracts required to evaluate mineral properties in a timely manner of three years or less. This impairs GUI’s competitive advantages in access to funding or acquiring more properties.
3.0 DIAMOND FRAMEWORK ANALYSIS OF GUI’s INTERNAL CAPABILITIES

3.1 Introduction

GUI’s internal capabilities were evaluated using the Diamond Framework (Diamond) to describe and evaluate the firm’s activities and its resources (Crossan et al, 2005). The purpose of the analysis is to determine GUI’s sources of competitive advantage and the feasibility of implementing its strategic alternatives. The Diamond variables: a) Management Preference; b) Organization; and c) Resources (Crossan et al, 2005), were investigated in turn.

The objective was to test the consistency of internal capabilities with GUI’s strategic alternatives. These strategic alternatives, discussed in Chapter 2, were derived from analyzing the company’s current external environment and identifying the threats and opportunities it presented. The Diamond analyzes the relationship between GUI’s existing internal capabilities and those required to achieve the strategic alternatives. This relationship determines GUI’s ability to implement each alternative successfully and efficiently. Inconsistencies between the existing internal capabilities, and those required for success create capability gaps. Gap analysis investigates whether they are major or minor gaps, whether they can be filled feasibly in a reasonable time, how they should be filled, at what cost, and for what anticipated benefit. Where appropriate, the risks and consequences of not closing these gaps were investigated.
Where required, the strength of linkages between the Diamond variables was analysed as well. The consistency between these variables, and how the effect of a change in one variable affects other variables, was also assessed. High consistency among the Diamond variables leads to successful performance, whereas conflicts and inconsistencies lead to poor performance.

To create a competitive advantage in the present external environment where suppliers have extreme bargaining power, GUI's strategic alternatives involve vertically integrating into the mineral exploration diamond drilling and geophysical survey service industry.

3.2 Expected Effect of GUI Entering the Exploration Service Industry

Entering the exploration service industry would eliminate GUI's need to deal with either suppliers of geophysical radiometrics surveys and/or diamond drilling companies, depending on which alternative it chose.

Geophysical surveying and diamond drilling is core to GUI's operations. Continuing to outsource these activities in a volatile environment where suppliers have unlimited negotiating power may be disastrous to GUI's operations. Vertical integration (backward) may decrease the suppliers' bargaining power, and provide GUI with some supplier control. Supplier control may provide GUI with a competitive advantage over its rivals, helping it to compete in the industry.
3.3 GUI's Strategy-Environment Linkage

This component of the Diamond analysis was conducted in the previous chapter. The strategy-environment linkage involves isolating factors that are important to the strategy. Part of this environment analysis identifies KSFs and developing strategic alternatives that address these opportunities and mitigate threats.

3.4 GUI's Strategy-Management Preference Linkage

Management preference consists of a company's (1) goals, (2) service/market focus, (3) value proposition, (4) core activities, and (5) the capabilities and preferences of managers who are critical to the implementation process. Management preference is important in strategy as managers formulate and implement strategy, and therefore their individual preferences can drive or constrain the implementation process.

This section analyzes GUI's current management preference and the preference required for successful vertical integration. The gap analysis is conducted where appropriate.

3.5 GUI's Goals

The majority of the company's initial goal preferences required by the strategic proposals consist of short term goals that are fulfilled within a year, and long term goals that will be achieved in at least two years. GUI prioritizes its hard goals over its soft goals. Hard goals are easily evaluated by a quantitative
measure, whereas soft goals are difficult to state in measurable terms (Crossan et al, 2005).

3.5.1 Current Goals

GUI’s current short term goal is to fully, effectively and efficiently, evaluate the mineral potential of its properties in the Yukon. Since acquiring the properties in 2002, GUI’s hard goal has been to discover at least one economically feasible deposit. A discovery would provide GUI with a significant advantage that is measurable in terms of share price appreciation. A higher share price would make it easier to raise equity financing at high prices that are less dilutive to GUI’s share capital structure.

GUI’s current soft goals related to its social conduct are to hire as much local labour as is possible in the Yukon. As with most juniors, the company has no existing soft goals to achieve sustainable development and corporate social responsibilities.

3.5.2 Goals Required For Successful Vertical Integration

The hard and soft goals required for effective implementation are the same as GUI’s existing goals stated above. The intension is to evaluate fully GUI’s mineral properties.

3.5.3 Gap Analysis for Goals

GUI’s current goals are consistent with those required to integrate successfully in to the exploration service industry. No gaps exist, so gap analysis in not necessary.
3.6 GUI’s Product/Service Market Focus

GUI’s product focus is information and interest ownership for the economic mineral deposits it discovers. Information on, and mineral rights to, these deposits are then sold to major mining companies. GUI’s customers are numerous and have minimal bargaining power.

3.6.1 Current Product/Service Market Focus

To date, GUI’s product/service market focus has been exploring and developing mineral properties in search of economically feasible deposits. GUI is concerned that its focus strategy is obsolete and its exploration progress and market focus may be impeded by a shortage of suppliers of exploration services.

3.6.2 Product/Service Market Focus Required For Successful Vertical Integration

For successful vertical integration and to adopt the differentiation strategy, GUI’s product/service market focus must extend to offering diamond drilling, geophysical survey services, or both services internally. By vertically integrating into drilling and surveying, GUI will offer a new service to a new market. The most appropriate strategic choice in the current environment is diversification.

3.6.3 Gap Analysis for Product/Service Market Focus

This presents a gap between the current and required product/service market focus. GUI is not set up to be a service and marketing company, and it has no marketing capabilities. This presents structural problems such as lack of servicing and marketing capabilities. Senior management is confident that they
can fill this gap in a timely manner by creating a new division devoted to the service industry at a relatively low cost of approximately CDN$585,000. Changing GUI's strategy, from product/service market focus to differentiation, is better suited to the current external environment.

3.7 GUI's Value Proposition

GUI's value proposition is how the company tries to differentiate itself from its rivals. As previously discussed in Porter's 6 Forces analysis of the mineral exploration industry under rivalry, it is extremely difficult for juniors to differentiate themselves from each other.

3.7.1 Current Value Proposition

Like other juniors, GUI currently tries to differentiate itself by holding properties with above average potential for the discovery of economic deposits. This is based on qualitative dimensions important to buyers and adds value (Pearlson and Saunders, 2006). GUI's flagship property is unique to the market place. It covers the highest magnetic anomaly in the area, near the Edith Fault (Young, 2007), and has a geological model similar to that of the Olympic Dam deposit in Australia. This is a deposit well known for its extensive uranium mineralization. Owning this unique mineral property differentiates GUI, providing it with a significant competitive advantage that its Canadian competitors are not able to imitate. GUI's value proposition is well developed. It therefore provides a meaningful sense of direction.
3.7.2 Value Proposition Required For Successful Vertical Integration

GUI requires a value proposition that reduces the time it takes to fully evaluate its properties and discover a deposit, in order to further differentiate the company from its competitors in the current environment. This timely discovery can be achieved by internalizing diamond drilling and/or geophysical surveying functions. This allows GUI to differentiate itself tangibly in a way that is important and valuable to buyers and generates total customer responsiveness. Major mining companies are willing to pay juniors more for accelerated exploration and property evaluation that translate into shorter time to discoveries.

3.7.3 Gap Analysis for Value Proposition

This analysis presents a gap between the current and required value propositions. GUI’s value proposition is currently based on the potential of its mineral properties. To extend its value proposition to efficient evaluation of mineral properties, GUI must attain supplier control. Senior management believes this gap is major because it is generally difficult for juniors to differentiate themselves from other juniors. GUI has a unique opportunity to differentiate itself by getting into the service industry since it already has a senior geophysicist on staff and has a competitive advantage in its ability to raise money. Other juniors do not have this advantage. Therefore, management would easily fill the gap in a relatively timely manner of two to six months by simply acquiring the rest of the resources required to integrate into the service industry. GUI’s management is willing and ready to execute this project. This assumes that GUI gets its geophysical surveying equipment delivered without any delay.
3.8 GUI’s Core Activities

Core activities refer to what GUI does, and how well it does this. It describes the sequence of steps that transform GUI’s activities of inputs into its product output. These core activities are the same for most juniors.

3.8.1 GUI’s Current Core Activities

GUI’s core activities involve the full evaluation of the mineral potential of its properties. These activities are critical to GUI’s effective operation. Ineffective and inefficient exploration programs can impact GUI’s market, operations, capabilities, and flexibility. For example, delays in exploration programs caused by an inability to secure contracts with suppliers of exploration services can result in shareholders losing confidence in management. Also, it can result in investors losing confidence in the company’s ability to provide a return on their investment. This would make it difficult to raise equity funding.

3.8.2 Core Activities Required For Successful Vertical Integration

In order to successfully implement GUI’s strategic alternative, the company should change its core activities which are currently focused on exploration only. The core activity focus should change to exploration and supplying exploration services (differentiation strategy – that adds value by integrating into diamond drilling and geophysical surveys). This is a significant gap.
3.8.3 Gap Analysis for Core Activities

GUI's current core activities are not consistent with those required to successfully integrate into the mineral exploration service industry. This gap eliminates the status quo as a viable strategic alternative. The status quo is not aligned with management's preference for fully evaluating its mineral properties in a timely manner of two to three years. Failing to conduct and complete its drilling and surveying programs would hurt GUI's reputation with financiers. This internal capability gap shows that management cannot implement the status quo. Therefore, this strategic alternative is eliminated and not considered again in this analysis (Crossan et al, 2005).

3.9 GUI's Capabilities and Preferences of Managers Critical to the Implementation Process

GUI's management team's capabilities are acquiring and exploring mineral properties, and extracting minerals. The CEO has been in the industry for over forty years, and the VP of Exploration has developed over four mines in his career. This management team is competent and experienced in exploration.

3.9.1 Current Capabilities and Preferences of Managers Critical to the Implementation Process

GUI's management team prefers exploration programs that involve regional geophysical radiometric surveys first, followed by diamond drilling. The geophysical surveys usually identify areas of geological interest called targets. These targets are then diamond drilled for further evaluation. Conducting the
geophysical surveys first ensures that drilling is concentrated only on prospective
targets. Diamond drilling is therefore contingent on geophysical surveys.

3.9.2 Required Capabilities and Preferences of Managers Critical to the
Implementation Process

To successfully integrate into the mineral exploration service industry,
senior management preference to conduct geophysical surveys first should be
maintained as drilling is contingent on these surveys. Integrating into the
diamond drilling sector first, or integrating into both diamond drilling and
geophysical surveying simultaneously, requires GUI to either conduct drilling first,
or conduct both diamond drilling and surveying simultaneously. This goes against
management's preferred exploration method. GUI is a small company that
cannot integrate into two new functional areas at the same time. The company
also does not have the resources or the willingness to spend the money
necessary to enter both sectors simultaneously. So the management preference
is to enter the survey sector first, as drilling is dependent on this function. This is
a sequential interdependence argument linked to the limited capabilities of a
small firm entering a new field of endeavour (Abramson, 2007).

3.9.3 Gap Analysis Capabilities and Preferences of Managers

The gap presented by GUI's management preference for conducting an
extensive geophysical survey to identify drill targets eliminates the two strategic
alternatives involving entering the diamond drilling sector first, or entering both
the diamond drilling and geophysical survey simultaneously. This preference
eliminates GUI's immediate need to integrate with the diamond drilling sector. It
justifies entering the geophysical surveying sector as a primary priority and
diamond drilling as a secondary priority in 2008 or 2009. This leaves entering the
géophysical survey as the only viable alternative. In the subsections that follow in
this Diamond analysis, entering into geophysical surveying is the only strategic
proposal evaluated.

3.10 GUI's Strategy-Organization Linkage

Organization describes how employees are collectively capable of working
together (Crossan et al, 2005). It consists of (1) culture, (2) structure, and (3)
management processes/systems. This section analyses GUI’s existing
organization, and the organization required for successful vertical integration into
the geophysical surveying industry.

Management is concerned that diversifying will result in two cultures. The
traditional non-revenue generating and new revenue generating divisions will
require two different cultures (Wexler, 2006). These cultures should be separated
and contained in two divisions to protect the existing culture. Introducing a new
division will change GUI’s structure. This new division will use old systems as
well as new systems that are appropriate for a revenue producing service
division. GUI will have to implement parallel systems in each division.

This section analyses GUI’s current organization and what is required for
successful vertical integration. Gap analysis is conducted where necessary.
3.11 GUI’s Corporate Culture

Culture determines the personalities and temperaments of the work force. It fills in the gap that the written rules of the entity did not anticipate (Sahlman et al, 1999). GUI’s corporate culture, as mentioned previously, is typical to that of juniors that generate no revenues and rely on equity financing. It is organic and familiar and orientated around its founder.

3.11.1 Current Corporate Culture

GUI’s current corporate culture involves management systems that promote and reward risk-taking to fully evaluate the mineral potential of its properties with equity funds (Young, 2007). This culture is aligned with the entrepreneurial spirit of flexibility and willingness to change and learn.

3.11.2 Required Corporate Culture for Successful Vertical Integration

The organizational capabilities required to efficiently implement the strategic proposal involve less risk-taking in order to maximize on revenues from the geophysical surveys. This culture is more formed, rigid, and planned as it may involve working with other juniors as a service provider.

3.11.3 Gap Analysis of GUI’s Culture

Senior management believes that the introduction of a revenue generating division may disrupt GUI’s current corporate culture. It might divide the new revenue earning department from the rest of the GUI’s departments, which traditionally earn no revenues. These divisions are likely to resist attempts to be merged together. The division is likely to offset the group dynamics in GUI,
reducing employee morale, their will and ability to work together, and ultimately affecting other Diamond variables. Management believes it can bridge this gap adequately by intentionally keeping the old and the new division geographically and physically separated by changing GUI’s structure.

Closing this organizational capability gap might negatively affect GUI’s management preference. Management may be tempted to increase resources targeted towards revenue generating activities at the expense of the non-revenue generating core activities such as exploration. This unintended and unexpected outcome may change GUI’s culture and direction, with negative ramifications on its exploration activities, evaluation of its mineral properties, and other linkages of the Diamond Framework.

This is a potential problem for senior management. To solve these problems, GUI could physically separate divisions for the exploration and geophysical survey process, thereby ensuring the cultural separation. Only senior management would go back and forth between the divisions to further ensure that the separate cultures are maintained. Management is willing to change GUI’s structure and close this gap.

3.12 GUI’s Structure

This outlines GUI’s line of control and command. It is reflected in the company’s organization chart (Crossan et al, 2005). GUI’s organizational structure is typical to that of juniors and entrepreneurial organizations. It is flat
with multiple information networks and functions allowing for autonomy and rapid response to changes (Sahlman et al, 1999).

3.12.1 Current Structure

Though GUI's current organizational structure is flat and functional, it only has three departments: exploration, finance, and investor relations. As illustrated in the organizational chart in Figure 4, the exploration service department does not exist in the current organizational structure.

Figure 4: GUI’s Current Organizational Chart

3.12.2 Required Structure for Successful Vertical Integration

Also required is a functional organizational structure that is generally flat with a fourth department, exploration services, as shown in Figure 5, illustrating the required organizational structure. This organizational structure further
facilitates autonomy and promotes the entrepreneurial culture. The entrepreneurial culture tolerates risky business ventures associated with mineral exploration industry.

3.12.3 Gap Analysis of GUI’s Structure

Changing GUI’s structure by adding a fourth department to GUI’s organizational structure is not difficult to achieve. The fourth department would initially consist of the four assistants and two senior geophysicists.

Figure 5: GUI’s Required Organizational Chart

SOURCE: Produced by JT Mazviwhwa, March 2007. Based on International GUI Resources Corp.’s Organizational Structure

The expectation is that the senior geophysicist currently on board will head the new department (Young, 2007). This gap can be closed feasibly;
however, GUI may have to wait three to six months for the delivery of the purchased geophysical survey equipment for radiometrics. Hiring the assistants could be completed before this year's summer exploration season begins, but if GUI has to wait six months for its equipment, then the company may only start flying its surveys in August 2008, instead of August 2007. The company would have to implement two sets of parallel systems in the two divisions.

3.13 GUI’s Management Processes/Systems

GUI’s management processes are typical of a junior resources firm and are entrepreneurial driven by the perception of opportunity (Sahlman et al, 1999). These processes/systems include performance review, control systems, and a reporting system. These processes are of equal importance and each play a vital role in GUI functions. Each division should have its own system.

3.13.1 Current Management Systems

GUI has an autonomous and decentralized control system typical of entrepreneurial organizations like junior resources. At present, GUI’s performance review system is not based on revenue. Instead it is based on results of exploration efforts on the company’s mineral properties (Young, 2007). This performance review system is suitable for junior exploration companies as they usually have no revenues.

3.13.2 Required Management Systems for Successful Vertical Integration

The organizational capabilities most essential for success are management processes that promote autonomous and decentralized control
systems. Autonomy best supports GUI’s proposed differentiation strategy as it decentralizes power. This empowers individuals to act in the field without first checking with senior management, thereby facilitating rapid response in a dynamic environment. The reporting system generally flows up to senior management, not down as is characteristic of centralized control systems. This is consistent with the current management system.

The performance review system for the new service component of GUI should be revenue based. This performance measure will take the company’s required rate of return for internal investments, the opportunity cost for the investment, and the present value to cash inflows that GUI can anticipate to be generated from investing in the geophysical equipment. Two potential sources will generate the cash inflows. The initial source of cash inflow is the profit that GUI will make from flying its own geophysical surveys. The second source of cash inflows will be generated by GUI extending its geophysical services to other juniors (Young, 2007).

A revenue based performance review system may enhance GUI’s ability to compete with incumbent suppliers in the exploration service industry for contracts. As employees’ performance is related directly to remuneration, they are motivated to generate revenues. Incentives affect how resources are used and determine how hard employees work (Baye, 2006). Other systems that GUI may need include maintenance systems, booking, scheduling, and customer service.
3.13.3 Gap Analysis of GUI's Management Systems

There is a minor capability gap between the required and the evident organizational capabilities. Closing the gap is feasible by introducing two parallel systems for each division. For instance, GUI would introduce a revenue based performance review for employees recruited to operate the new and only revenue generating exploration service (geophysical surveying) department. GUI's current employees working in the traditional non-revenue generating exploration department will not change their performance review system.

GUI can purchase and customize a project management software program like Intuit QuickBase that allows GUI to book and schedule surveying projects and equipment maintenance. This software program would also track availability, allocation, and project progress (MacLean, 2007). Initially, GUI's sales person would also manage customer service issues.

3.14 GUI's Strategy-Resources Linkage

Resources provide a business with the potential to act and generally include: (1) human resources; (2) operational resources; and (3) financial resources. In testing the strategy resources linkage, the resources requirements for GUI's new strategic proposal were identified, and then compared with resources that are readily available to the company.

This section analyzes GUI's existing resources and the organization required for successful vertical integration into the geophysical surveying industry. The section also evaluates the possibilities of how to close the gap and
the consequences of succeeding or failing to close them on other Diamond variables.

3.15 GUI’s Human Resources

Tangible resources such as human resources are qualitative and difficult to qualify. This section concentrates on the required quantitative requirements. The quantitative resource requirement most crucial to the execution of GUI’s strategic alternative is human resources to operate and maintain the survey equipment.

3.15.1 Current Human Resources

GUI has just one senior geophysicist on staff. GUI’s current human resources are limited in conducting geophysical surveys, interpreting geophysical data produced from the surveys, or maintaining the equipment used. GUI’s human resources is mainly experienced in mineral exploration (one of its core competencies), except for the one senior geophysicist on staff. This presents a major gap for senior management.

3.15.2 Required Human Resources for Successful Vertical Integration

Two senior geophysicists and four assistants are required. Given the severe shortage of technical and experienced personnel in the industry, GUI may fail to retain a second senior geophysicist. This would present a major gap for management.
Finally, assuming that GUI decides to offer this exploration service to other junior exploration companies to mitigate underutilization in a slow market, the company may require sophisticated marketing capabilities for promotion. When the industry turns, and demand for the exploration services decline significantly, GUI might find itself in direct competition with incumbent surveying companies (Abramson, 2007). GUI will only require human resources to sell GUI's geophysical services in the current favourable environment. A relatively low paid sales person will be adequate to sell GUI’s simple product that will 'sell itself' in today's market conditions.

3.15.3 Gap Analysis in GUI's Human Resources

If GUI fails to retain a second senior geophysicist, the company will have to revise its plan and reduce the number of geophysical surveys planned for the season. This will fill the gap and eliminate the need for two senior geophysicists by enabling one to conduct the surveys. Although this is a significant gap for management, it is easily closed. Closing it will cost GUI in terms of the number of surveys it can conduct in a given exploration season. With only one senior geophysicist instead of two, GUI may only conduct half of its planned surveys.

3.16 GUI's Operational Resources

Operational resources are the operations GUI's resources can do. The way GUI develops its operations resources will have a significant impact on its strategic success in the long term (Slack et al, 2004). The following influence the operations GUI's resources can achieve: access to low-cost inputs, access to
exploration services, relationships with suppliers, efficiency and flexibility in conducting its core activities, and quality reputation (Crossan et al, 2005). Operational resources also include the structure of an organization, as well as marketing capabilities that are most significant to this analysis.

3.16.1 Current Operational Resources

GUI has the resources to conduct mineral exploration only, and its current organizational structure supports this function. The operations GUI's current resources can achieve are influenced by the lack of access to low-cost inputs such as exploration services, relationships with suppliers of these services, access to geologists, efficiency and flexibility in its exploration activities, and the reputation for quality property evaluation.

3.16.2 Required Operational Resources for Successful Vertical Integration

The operations that GUI's required resources can achieve may be affected by (1) access to the radiometric geophysical survey equipment it requires that is currently on back order, (2) its efficiency and flexibility in conducting the survey, and (3) its quality reputation. These influences indicate resource gaps. GUI will also require scheduling, customer service (as described earlier), and space to place and maintain the surveying equipment. GUI may require a marketing department.

To succeed in vertically integrating into the survey industry, GUI requires a structure that supports its ability to compete in the geophysical survey industry, and then needs to schedule and complete geophysical surveys. This requires
marketing capability. Although 80 percent of the management is ready to integrate into the geophysical survey industry, management lacks the sales capability required for the current favourable environment. GUI also lacks the marketing capability necessary to compete actively with incumbent suppliers of geophysical surveying in a more competitive environment. This presents a significant gap.

Until senior managers hire sales staff and close this gap, GUI may use the geophysical equipment to evaluate its own mineral properties (approximately 35,000 line kilometres of surveying) (Hibbitts, 2007). Until senior management develop their marketing capability GUI may only survey for juniors in the current favourable environment (Abramson, 2007). This may result in underutilization if the market turns and becomes unfavourable. However, given that exploration companies currently compete with each other for contracts with the few suppliers in the industry, GUI will succeed in attracting business with a simple sales strategy and full utilization of its equipment despite not having the normal necessary marketing capabilities.

Therefore, GUI will have funding from its traditional equity financing, as well as the positive cash flow, increasing the company’s resources and scope of operations. Management will use this income to finance part of its exploration activities and decrease its equity financing.
3.16.3 Gap Analysis in GUI’s Operational Resources

It is not feasible to close the human resources gap in GUI’s marketing capability. Closing this gap may be costly and time consuming. Closing this gap is therefore a constraint on the strategy. Operating beyond this constraint is not sustainable for the company’s operations (Crossan et al, 2005). Failing to close this gap may result in underutilization of the equipment if demand for surveys declines. Senior management is divided on how to address this issue. In the present environment, juniors are desperate to get these services, so a salesperson will have no trouble acquiring business for GUI’s service division (Abramson, 2007). In the long term, if the market regresses as before, GUI can either develop marketing capabilities and compete in the service industry, or sell off the equipment. Integrating into the exploration service industry is expected to generate income (Rake, 2007).

3.17 GUI’s Financial Resources

This resource is a tangible asset. GUI’s KSF is availability of financial resources. The resource requirements most crucial to the execution of GUI’s strategic alternative include quantitative (financial) and qualitative requirements. Quantitative resource requirements are easier to predict and measure.

3.17.1 Current Financial Resources

GUI has funds available for this project on its 2007 budget. The company has approximately CDN$590,000 budgeted for the 2007 geophysical exploration program. Had GUI succeeded in securing a contract with a geophysical
surveying company, these funds were reserved to pay the geophysical contractors.

3.17.2 Required Financial Resources for Successful Vertical Integration

The financial resources for the initial investment is CDN$586,000, excluding helicopter costs (Rake, 2007). This expense is excluded because it is a support cost and should be allocated to the property. It is therefore an expense for GUI’s exploration division, not GUI’s exploration service division. The rate of return on this investment should be at least 12 percent per year after tax. This would be higher than the opportunity cost of GUI holding the funds in an investment account (Young, 2007). A list of the equipment GUI will require is given in Chapter 4 in Table 6 (on page 112).

3.17.3 Gap Analysis in GUI’s Financial Resources

GUI has funds required for the initial investment, and according to the net present value calculation in the cost/benefit section, this project will deliver 12 percent return on investment. GUI has sufficient financial resources to integrate successfully into the geophysical survey industry. This presents no gaps rendering gap analysis unnecessary.

3.18 Cost/Benefit Analysis of Vertical Integration

Initial indications of cost/benefit analysis are financially favourable. It is cost efficient to internalize the geophysical surveying process. The annual budget for contracting the geophysical surveying process equals the budget required to purchase the radiometric equipment and internalize the geophysical surveying
process. The funds previously allocated for contracting geophysical surveys for 2007 will be used to purchase the survey equipment and pay geophysicists to operate and maintain the machine in 2007. Once GUI has surveyed its own properties, it can contract its services out to independent juniors and start earning revenues. This assumes GUI takes delivery of its equipment no later than August 2007. However, given that the equipment is on back order, the company may only receive its equipment in December 2007. This would put GUI behind schedule by at least a year.

The tangible and less tangible costs and benefits of entering the geophysical surveying industry were analysed. Tangible costs and benefits are easier to measure. They are usually of a financial nature and given the most attention. Intangible costs and benefits are less evident and are usually eliminated from the cost/benefit analysis.

3.19 Discounted Cash Flow (DCF) Method

The cost/benefit analysis was conducted in light of the initial financial investment required to enter the geophysical survey industry, as well as the potential and actual financial benefits generated by the alternative for GUI in the next four years. The discounted cash flow (DCF) method calculated the net present value of the potential cash flows generated as a result of the initial cash output for the alternative that passed the internal capability analysis. The DCF was the most appropriate method because it is a monetized measure that reduces optimism bias and strategic bias (Vining, 2007).
3.19.1 Interpreting the Discounted Cash Flow Method

The DCF calculation attempts to account for the impact that taxes and inflation have on the net present values of entering the geophysical survey industry. Tax regulations and inflation are not constant, and so their impact on the DCF method will change over time (Horngren et al, 2007). However, this computation still provides an approximate indication of the potential return expected from the initial investment in the current environment.

A negative net present value illustrates that the initial invested funds are higher than the potential return that the investment would generate. The calculation would indicate that the strategic alternative under consideration would result in financial losses for GUI, and probably should not be implemented.

A positive net present value shows that the initial invested funds are lower than the potential return that the investment would generate. The calculation would indicate that the proposed strategic alternative under investigation would result in financial gains for GUI, indicating that this alternative probably should be implemented.
### Table 5: Discounted Cash Flow Calculations - Showing Positive Net Present Value

**Net Present Value of Strategic Alternative: Enter Geophysical Survey Industry**

Assumption: In Year Zero when geophysical equipment is purchased, GUI will only survey its own mineral properties (for cost).

GU I will survey mineral properties for other juniors for profit in Years 1 to 4.

Operating Costs are $250,000 on average in Year 0. Costs are expected to decrease to $200,000 from Year 1 to Year 4.

**GUL’s Hurdle Rates (after tax)**

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<th>Year</th>
<th>Rate</th>
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</tr>
<tr>
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</tr>
<tr>
<td>4</td>
<td>12%</td>
</tr>
<tr>
<td>5</td>
<td>12%</td>
</tr>
</tbody>
</table>

**Assumptions**

**Cash Out-flows**

- **Initial Machine Cost**: $530,000
- **Installation Costs (capitalized)**: $50,000
- **Testing Costs (expensed)**: $600
- **Total Initial Investment**: $586,000

**Cash In-flows**

- **Net operating inflows Years 1**: $600,000
- **Net operating inflows Years 2**: $1,000,000
- **Net operating inflows Years 3 through Year 4**: $1,500,000
- **Sale of Machine in Year 4**: $50,000

**Net Present Value (NPV) Calculations**

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating Costs</th>
<th>Revenues</th>
<th>Terminal Sale</th>
<th>Tax Effect</th>
<th>Reverse Tax Shield</th>
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<tr>
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<tr>
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<tr>
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<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>67.4%</td>
</tr>
</tbody>
</table>

**NPV (with year 0)**

1,085,778

Meets or exceeds hurdle rate. Financial 'Yes' investment.

Below is the data "Active Box"
3.19.2 Tangible Costs and Benefits of Entering the Geophysical Surveying Industry: Results of Discounted Cash Flow Method and the

The discounted cash flow method, which was used to calculate the net present value of initial investment made to purchase the equipment, gave a positive value of CDN$1,085,778. This shows that integrating into the geophysical survey industry would generate a positive cash flow for GUI. Junior exploration companies generally do not have revenues. GUI would earn revenues in 2008 (reflected as Year 2 in the discounted cash flow calculation) by extending its surveying services to other junior exploration companies.

Assuming GUI received the equipment on time, GUI would concentrate on surveying its own mineral properties in 2007. The company would therefore earn a negative cash flow in Year 0 of CDN$585,241 (CDN$586,000 less effect of future tax shields), as indicated in the discounted cash flow calculation in Table 5. GUI expects to generate CDN$240,000 in 2008 (Year 1), net of operating costs and 40 percent tax on the operating costs and revenues (SY). GUI would generate CDN$480,000, CDN$780,000, and CDN$816,486 net in 2009, 2010, and 2011 (Years 2, 3, and 4) respectively. Revenues in 2011 would take into account the revenues generated from selling the equipment at CDN$50,000.

3.19.3 Intangible Costs and Benefits of Entering the Geophysical Surveying Industry

The intangible costs and benefits have qualitative measures, and their impact is subjective. The main cost involves the negative impact on employees in the non-revenue generating exploration division. The main qualitative benefits include are increased efficiency of GUI's internal exploration activities, and
increased independence from the suppliers. These intangible benefits result in GUI controlling its core activities, and maintaining the two competitive advantages identified by the 5 Forces analysis that segment the company from key competitors (Abramson, 2007).

A second cost/benefit analysis should be conducted again two years into the program to determine the actual results of integrating into the geophysical survey industry. This ex ante analysis will determine if the project is generating its intended objectives.

3.20 Conclusion

This analysis of GUI’s existing internal capabilities and those required to efficiently vertically integrate into the exploration service industry, geophysical surveying sector, helped identify gaps and inconsistencies between Diamond variables and their linkages. The general expectation is that closing these gaps is feasible in the short term. GUI’s senior management anticipates that its strategic alternative to integrate vertically into the mineral exploration service industry may be implemented successfully. However, because GUI’s external environment and internal capabilities are not static, it is difficult to sustain consistency between expected and observed capabilities. Closing these gaps also may result in unexpected outcomes with potentially negative ramifications on the other Diamond variables.
4.0 IMPLEMENTATION AND RECOMMENDATION

4.1 Introduction

The Diamond Framework model in Chapter 3 supports the recommendation to enter the geophysical surveying industry in order to increase supplier control. For this alternative to succeed, several requirements should first be implemented. This final chapter analyses these requirements in the order of the priority of their implementation-turning plan into action (Vining, 2007). In the first stage GUI should: (1) purchase the required equipment; (2) adjust structure and acquire the necessary human resources; (3) decide where to organise office space; and finally (4) produce detailed survey plan for GUI’s properties. In the second stage GUI should: (1) retain sales staff; and (2) line up juniors as contractors. In stage three, GUI should develop marketing capabilities in anticipation of a downturn in the market. GUI’s senior management is the implementation leader. They are responsible for implementing with clear lines of responsibility, the strategy illustrated in Appendix 2.

GUI must implement the first stage as soon as is possible. The second stage of implementation can only be addressed after GUI has completed surveying its own properties. The third stage can only be addressed when management has agreed on how to deal with underutilization of the geophysical equipment in a declining market (acquire sophisticated marketing capabilities to
sell equipment). The following sections, therefore, only speak to the first stage of implementation that requires immediate attention.

4.2 Purchase the Required Geophysical Equipment

GUI has the required financial resources to purchase the geophysical equipment. The first step in implementation is for GUI's management to start purchasing the required radiometrics geophysical survey equipment. The expected delivery time for the equipment will determine the timing for implementing the other requirements. Management will ask the senior geophysicist to present a list of proposed equipment models and possible manufacturers for approval. To increase the company's chance of acquiring the required equipment as soon as is possible, GUI management should encourage the senior geophysicist to deal with suppliers he has an existing professional relationship with. However, GUI should be prepared to postpone its geophysical survey until August 2008 if delivery of the ordered equipment is delayed by six months.

Purchasing the required equipment tackles gaps that arose in the strategy/linkage resource linkage. It acquires the required human resources and operational resources.

4.3 Adjust GUI’s Structure and Acquire the Required Human Resources

Based on the expectation that the equipment may only be delivered after six months, GUI should introduce the formation of the new geophysical surveying
division and appoint the senior geophysicist currently on staff as the head of this division reporting to the President and CEO. GUI should clarify his duties and responsibilities with him and the rest of the organization. The chain of command and goal congruence (Horngren et al, 2007) between the exploration division and GUI as a whole should be tested immediately to minimise future problems. After the head of the new division’s appointment (HOD), he should initiate the necessary steps to recruit another senior geophysicist and four assistants. GUI may not find another senior geophysicist, and it should be prepared to adjust its program accordingly in the event this position cannot be filled in a reasonable time of six months. If GUI fails to fill this position, its survey programs will be operated by one crew instead of two crews (Young, 2007). The company, therefore, would adjust its survey plans to cover fewer properties over a given exploration season.

Introducing the division as separate from GUI’s exploration activities is the first step in addressing the gap presented in culture, structure, and management systems. The perception that the two divisions are independent and separate will facilitate implementing performance based compensation to employees in the service department while maintaining the same system in the old exploration department.

4.4 Decide Where to Organise Office Space

GUI’s management has to decide where to house the exploration service industry at the same time as it starts looking for the four assistants. The office
location will determine where GUI will hire these assistants to avoid unnecessary relocation expenses.

Preliminary analysis indicates senior management favours Whitehorse in the Yukon. Whitehorse is strategically located near GUI’s properties, this allows for efficient and effective mobilization for the geophysical surveys. This location is far enough from the exploration division in Vancouver to ensure that the two cultures are kept separate. However, it is close enough for senior management to travel between the two divisions and maintain adequate control in the predominately autonomous operations (Young, 2007).

There are two disadvantages with locating the exploration service division in Whitehorse. The first is that Whitehorse is a relatively small town and management anticipates most of the products and services the division requires will originate from Vancouver, not Whitehorse. Transporting the products and services from Vancouver to Whitehorse will increase acquisition costs. The second disadvantage is again related to Whitehorse’s remote location. If the market regresses and demand for geophysical surveys drop, management may have to develop marketing capabilities and conduct a marketing campaign from isolated Whitehorse.

When management decides where to house the office, it will look for office space to lease for a minimum of two year periods. This office space should be adapted to the service division’s specifications by the time the assistants are hired and their training starts. Simply acquiring this resource to integrate into the surveying industry and separating the two divisions will bridge the gap in
product/service market focus. Office space is the most symbolic resource GUI can acquire immediately to show commitment to implementing the proposed strategic alternative. This indicates a change from the original focus strategy to a differentiation strategy as GUI widens its economy of scope by addressing the gap identified in GUI’s core activities.

4.5 Produce Detailed Geophysical Survey Plan for GUI’s Properties

The final requirement, when all the other requirements are in place, is for the new division to produce a detailed geophysical survey plan for GUI’s properties. This is the very last requirement, and can only be performed once GUI has taken delivery of the ordered geophysical survey equipment and hired the required personnel. This function’s timing will depend on whether GUI receives delivery of the survey equipment in the next couple of months or in December 2007. Exploration in the Yukon is performed during the summer months. The surveys are weather dependent. Rain and moist ground interferes with radiometric surveys, so GUI’s properties can only be flown when the weather is dry in August 2007 or 2008. GUI’s senior management prefers GUI’s flagship property to be surveyed first in order to generate potential diamond drill targets. Then the equipment may be used for the external customers and GUI management would have to implement stage two of its vertical integration into the geophysical survey industry.
Table 6: List of Geophysical Equipment GUI will Purchase to Enter the Geophysical Survey Industry- Showing the estimated cost of each item

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>1) MMS-4 Multi-sensor Meter</td>
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<tr>
<td>2) Radiometer Compensation Module</td>
<td>$25,975.00</td>
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<tr>
<td>3) Airborne Cesium Meter</td>
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<td>4) Radiometer Stinger Boom</td>
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<td>5) GRS 10 Spectrometer System</td>
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<td>6) Temperature Sensor for the GRS 10</td>
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</tr>
<tr>
<td>7) Humidity Sensor for the GRS 10</td>
<td>$3,164.00</td>
</tr>
<tr>
<td>8) Pressure Sensor for the GRS 10</td>
<td>$2,103.00</td>
</tr>
<tr>
<td>9) Cables for the GRS 10</td>
<td>$3,215.00</td>
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<tr>
<td>10) GSX-1024/256 Detector Box</td>
<td>$180,941.00</td>
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<tr>
<td>11) AGIS-XP Data Display Module</td>
<td>$61,286.00</td>
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<td>12) Navigation Display Module</td>
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<tr>
<td>13) Single Sensor Radar Altimeter</td>
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<td>14) Dual Freq. Differential GPS System</td>
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<td>15) Barometric Transducer</td>
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<td>16) Cesium Mag/GPS Base station</td>
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<td>20) Printer/Plotter, (14X17 inch paper)</td>
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<td>21) 2 GIS Portable Gamma Ray Spectrometers</td>
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<td>22) Wide Profile printer for the field</td>
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<td>23) Ink cartridges for printer above</td>
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<td>25) LCD screen and X-hard drive for above Laptop</td>
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<td>29) More memory cards (3), 2 usb card readers, cable</td>
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<td>30) Power cables for base station (200 ft)</td>
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<td>31) Mag basestation power &amp; chrger</td>
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<tr>
<td>32) 24 volt Power supply for AGIS system</td>
<td>$326.43</td>
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Total, CDN $530,000.75

SOURCE: JT Mazvihwa, June 2007
4.6 Conclusion

Michael Porter’s 6 Forces analysis in Chapter 2 determined the mineral exploration industry is fairly attractive and identified GUI’s key strategic issues. These issues indicated the threat GUI faces in the current environment, which is the formidable bargaining power of suppliers. The chapter presented strategic alternatives aimed to decrease this power, reduce the threat, and possibly generate a competitive advantage for GUI. Chapter 3 evaluated the strategic alternatives against GUI’s internal capabilities using the Diamond Framework analysis model. This isolated the strategic alternative most compatible with GUI’s internal capabilities. Chapter 4 analysed how GUI can implement the chosen strategic alternative that reduces suppliers bargaining power.
APPENDICES

Appendix 1: GUI’s Share Price between August 2006 and January 2007 (From TSX-V)

<table>
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<tr>
<th>Trade Date</th>
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<th>Volume</th>
<th>Last Price</th>
<th>Value</th>
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# Appendix 2: Implementation Outline

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<td>8. Clarify HOD's duties and responsibilities</td>
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<td>9. Issue news release to announce development</td>
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<td>12. Advertise for assistants in professional magazines</td>
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<td>12. Hire and train the finalists</td>
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<td>Produce detailed survey plan to</td>
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**SOURCE:** JT Mazvihwa, June 2007
REFERENCE LIST

Abramson Neil R. June/July 2007 - Interview With – Senior Supervisor of MBA Project Submitted in Partial Fulfillment of the Requirements for the Degree of MBA.


MacLean Scott A. July 2007. Interview With- Applications Specialist of Intuit QuickBase


Michael M.H. June 2007- Interview With Michael H- Head of Exploration of International MMM Resources Corp.


Rake S. June 2007- Interview with – Senior Geophysist of International GUI Resources Corp.


Vining Aidan CNABS Professor of Business and Government Relations. 2007. MBA 691-Business Government and Society Class Notes


