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# Relationship Between Strategic Environmental Scanning and Mining Companies Performance: A Case of Banro Corporation

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***Abstract:***

***Background:*** *The study aimed to investigate the relationship between strategic environmental scanning and mining companies' performance of Banro Corporation.*

***Materials and Methods:*** *To conduct this research, surveys were used to collect data from the sample population. The research relied on questionnaire, as it was easy to send to respondents at their own place and collect it after having answered it. The study adopted a descriptive research design and the target population of this study was comprised of 150 respondents; 100 employees, 25 Heads of departments/units and 25 executive managers from which the sample size of 109 respondents used stratified random sampling and purposive sampling techniques by using Slovin's formula.*
*Data was entered into the Microsoft Excel and by the Stata 12 and the Statistical Packages for Social Sciences (SPSS – Version 21) computer software for analysis. Descriptive statistics using percentages and frequencies were used to explain analysed data which was presented in Tables.*

***Results:*** *The overall Cronbach's Alpha coefficient obtained from the principal component analysis was 0.948, the KMO was 0.765 and the p- value of Bartlett's Test of sphericity was 0.000. The components considered explained the total variance of 77.739% of the environmental scanning. The confirmatory analysis with the multiple regressions showed that the continuous scanning of the three main components: community needs assessments, the objectives set and government support has a positive impact of 68.10% on Banro Business Performance. The results obtained from the survey conducted on Banro Corporation demonstrated that there is a strong positive relationship between environmental scanning and mining companies 'performance. The harsh unexpected internal and external pressure and turbulence occurring in the Democratic Republic of Congo has been a trigger to push many of the mining companies to fail and threaten to close the business operations. To get the desired information about the business environment for strategies formulation, smart decisions making, survive from the internal and external constraints and earn competitive advantages, any mining company that expects to do business in the Democratic Republic of Congo should continuously scan the business environment which is dynamic. It has been revealed from this study that the environmental scanning factors such as the community needs assessment, the company objectives set and the government support, explain 68.10% of the variance in the business performance.*

***Conclusion:*** *From the research findings presented, mining companies' owners should put in place all the necessary resources required and use scanning techniques and tools in their organization to establish a controlled environmental scanning system in their companies. To vigorously observe and respect the laws of the country where*

*operating, such as the mining code and any commitments signed with the local community and or with the government to get full support and work in a peaceful social climate. Establish and strengthen the collaboration and trust between the mining companies' owners and the management with the community and the government to avoid any frustration and misunderstanding that could trigger a conflict and harm the smooth running of the company 'operations.*

***Key Words**: Environmental Scanning, mining companies' performance, Banro Corporation, Democratic Republic of Congo*

## I. Introduction

The Democratic Republic of Congo (DRC) is a country is sub-Saharan Africa and a member of SADV. The country adopted a mining code in 2002 at pulling in private and foreign investors. Earlier to the adoption of the code, the country had an informal mining sector that partially supported the national economy. More than eighty percent pf mineral production and export being at the hands of the informal sector, which was a source of employment and livelihood for millions of individuals (Universal Alarm, 2009; Armstrong, 2007). Mining in DRC has been singled out as one of the avenues that can be used to deal with the challenges associated with poverty while at the same time prompting the development of third-world countries.

The World Bank Group (Szablowski, 2002) pegged the developmental importance of mining to four reasons. To begin with, mining was cited as an underground activity that defined national assets. Secondly, the mining sector was seen as a footprint industry due to the social and economic implications inflicted by related activities. Thirdly, the mining sector defines foreign direct investment due to the high risks it poses to foreign investors in developing nations. The sector also acts as an important source of government revenues defined by export-based fiscal incomes in the form of revenues in most of the developing nations whose economy largely depends on export sectors, among them ores and minerals (Szablowski, 2002).

The mining industry in DRC significantly contributes to the financial improvement of the nation. The development of BANRO Corporation sector is founded on individual units managed by proprietors. The mining sector has for the last few years faced increasing competition due to the concentration of numerous mining destinations and mining operator bargaining powers, and hence prompting BANRO Corporation to factor in vigorous managerial approach to their business operations (Cavaco, 1993). The move to change its management techniques have been characterized by the adoption of awareness campaigns that were initiated by the government and funded by Canadian funds. The move was followed by the identification of the main challenges facing the mining sector, elements that could be made to enhance quality, market diversification, productivity, cost reduction strategies, and the application of policies guiding marketing (Sousa, et al., 1993). Together with the identified challenges, the sector has continued to face additional pressures making it re-think of the strategic approaches adopted that have been informal and reactive (Lindsey, Martin, & Nuckton, 1993).

Political debates surrounding the mining sector are to some degree concerning the link between the mining sector and poverty alleviation in developing states can be significant achievement towards the achievement of MDGs. Nevertheless, the topic has remained an issue of contention since 18$^{th}$ century and the achievement of objectives and goals have remained futile (Szablowski, 2002). Contemporary modernization and neo-political approaches have further changed the nature of the debate with major International Financial Institutions (IFIs) looking forward to privatize the mining sector and its reformation with the objectives of pulling in private and foreign investment would translate to enhanced job opportunities, boost of economic growth, and reduction of poverty (Willis, 2005).

In order to participate in the development of the communities surrounding the BANRO mining effectively and efficiently, BANRO Foundation, one of BANRO Corporation subsidiaries has been appointed to focused on education, agriculture, health and social infrastructure projects in all the communities where BANRO is performing its mining activities. Eighteen (18) social infrastructure projects of modern educational facility with twelve classrooms serving approximately six hundred children built, twenty-six (26) scholarships offered to students from secondary school, under and post graduate level, fourteen (14) projects of hospital construction with medical equipment and medicine constructed. BANRO Foundation has also initiated programs that aims at reintegrating former child artisan miners (200) into formal education system. Twangiza Mining employees have created the ''Hand of Compassion' 'to participate individually with a part of their salary on the community development and poverty reduction in the communities surrounding the mining area such as Luhwinja, Burhinyi and Kaziba. The corporation has conducted socio-economic baseline surveys and implemented re-settlement action plans that are

drawn in accordance with the standards set by the World Bank involving financial compensation for the affected populations and the construction of new shelters using navel labor and materials.

BANRO Corporation has been going through some challenges of different nature both internal and external in its mining business operations that hinder its goal achievement. Despite all the development and humanitarian actions that BANRO Corporation has tried to realize in the community where it is performing its mining activities; and the means that the company has invested to perform well; it has been going through different challenges that ended by shutting some of its projects; case of Namoya Mining since September 2019. BANRO Corporation mining projects have been victim of some repeated conflicts from the communities surrounding these mining companies and some government pressures or demands that have been giving a headache to the company and preventing it to perform well and earn competitive advantages. Some community group armies repeatedly invaded some of the mining projects and kidnapped some BANRO staff in to the bush, shot at some personnel, looted the minerals kept for processing and often destroyed mining equipment.

There has been a destruction of BANRO Foundation agriculture project of 200 hectares of maize and the tractors utilized to plow the field by the community members. BANRO Corporation has been often opposed to government charges/taxes and fines which do not allow the company to reach its goal in terms of profit. Road infrastructure has also been an issue for BANRO Corporation to perform well and reach the targeted production and earn desired benefit. The research had tried to investigate if the scanning of the business environment that is composed of these listed factors and even unlisted ones could help the mining firms to clearly understand the business environment and come out with new strategies and get these mentioned factors under control and improve the companies' health. The specific objectives that guided this research are:

i. To assess the strategic environmental scanning practices applied at BANRO Corporation.
ii. To investigate the impact of strategic environmental scanning on the performance of mining companies with the specific case of BANRO Corporation
iii. To examine the contribution of the scanning of the business environment to mining companies' performance with the case of BANRO Corporation.

## ii. Theoretical Literature

Effective environmental scanning programs create a platform that promote the decision- making process factoring in current potential changes happening in an organization's external environment (Fahey & Naravanan, 1986). Scanning of the environment offers intelligent information regarding organizational strategies. Brown and Weiner (1985) defined environmental scanning as a detector that examines the world systematically and signals information that is new, unexpected, major, or minor. Aguilar (1967) connected environmental scanning with the precise social occasion of outer data with the sole purpose of providing early information flowing into the organizational.

Commonly referred to as environmental analysis, scanning of the environment is the first step in strategic management. It is a process used to identify major issues affecting organizations. The process of detecting opportunities and threats enables organizations achieve its competitive advantage. Thus, environmental scanning fulfills the major functions of informing strategy formulation and monitoring for adjustments due to changes in business operational environment. Strategic environmental scanning (SES) encompasses numerous participatory and analytical practices that assimilate environmental concerns into plans, programs, and policies while at the same time evaluating how the environment links with social and economic factors. The World Bank's environment strategy of 2001 indicated that SESs were important upstream analytical tool aimed at addressing sophisticated cross-sectional environmental concerns and helping the integration of environmental and sustainability issues into policies, programs, and plans.

### Factors Influencing Strategic Environmental Scanning

Various factors have been numerated in variant literature that influence SES include the securing and utilization of data identified with the connections, patterns, and occasions in the external environment of an association just as significant information that would help the procedure in making arrangements for the association's future game-plan (Choo, 2005). Choo (2005) further indicated that scanning the external environment was important for organizations as it aided in understanding the external forces of change. This way, organizations were capable of developing effective responses aimed at enhancing the position of the organization in future. Environmental scanning is fundamentally conducted to combat surprises, pinpoint threats, improve long-haul and short-haul planning, and fain a competitive advantage (Choo, 2005).

External factors influencing environmental scanning include resource dependency, nature of business and strategy perused, accessibility and nature of data, individual elements among them the information on the personnel scanning and their cognition, and environmental turbulence (Choo C. W., 1993). The identification of data hotspots for ecological examining is firmly connected with the availability and nature of source (Zhanga, Majid, & Foo, 2012)

**Strategic Environmental Scanning Choices**

Strategic environmental planning scanners make decisions regarding how and when to involve other stakeholders in making plans. The participation program is guided by six critical considerations, which include; administration, objectives, stage, target, techniques, and information. The administration factors determine avenues of incorporating staff members in the plan and determining its scope. Objectives determine the information collection processes, stage incorporates involvement od stakeholder groups in the arranging procedure, focusing on recognizes which partner gatherings to be engaged with the interest stage, strategies factor in the idea of support approaches employed, and information deals with the transmission of data to incorporate participation (Brody, *et al.*, 2003).

**Organizational Strategy**

Organization strategy defined the competitive advantage of an organization. Strategy deals with the long haul thriving of an association, and factors in long-term growth in assets as opposed to short-term profits. Therefore, there is need for organizations to strategize with the aim of ensuring that allocation of resources is effectively implemented. Strategies are important especially when making major resource allocation decisions (Papulova & Papulova, 2006). Strategies therefore set directions for organizations and constitute together efforts towards achieving objectives.

Organizations practicing strategies, such as product differentiation, focus, or cost leadership, or adopt strategic behaviors, among them defender analyzer, and prospector, are likely to adopt scanning practices that provide data fathering capabilities to aid in persuing the desired strategies (Porter 1980, Miles & Snow 1978; Choo, 2005). The strategy can be regarded as plans for actions that influence how we do things. Understanding organizational strategies is dependable on the thorough evaluation of an organization's position, evaluation of the achievements of the strategy, and reasons leading to its adoption. Dess, *et al*., (2005) and (Babatunde & Adebisi, 2012) linked organizational strategies with examination, decision, and actions undertaken with the foundation of creating and sustaining competitive advantage over a length of time. Hence there was need to determine the competitive avenues of the organization by its managers. For example, they can decide to situate the organization as a minimal effort producer, or achieve uniqueness by developing products and services which earn the company premium profits, or incorporate a combination of both strategies (Babatunde & Adebisi, 2012).

**Relationship between Strategic environmental scanning and mining companies' performance**

Performance despite unfit is conceptualized that corporations that have efficiently grasped vital environment scanning and documented better performance that those that have not. According to Davin (1997), strategic scanning for the environment is a pre requisite for firms that record better performance. Factoring in strategic planning processes is essential in facilitating the realization of the effectiveness of mining companies. Strategic planning defines the purpose and goals of a company which in turn guides the company by directing processes and enhances the coordination and control of activities. The link between strategic environmental scanning and performance of mining companies needed to be analyzed for better understanding how the former is practices and how it improved mining companies' performance. In some cases, strategic environmental scanning does not reach its desired objectives due to barriers in the implementation stage.

Scholarly sources have documented mixed relationships as to central job of strategic environmental scanning in enhancing the performance of mining companies resulting in uncertain debates regarding the effectiveness of strategic environmental scanning (Wagner, 2006). (Bryson, 1989) opined that strategic environmental scanning was instrumental in directing the organization, hence its members were well aware of the direction the company was heading to and where major efforts needed to be expanded. Strategic planning is instrumental in defining the nature of operations of the business, its needs, and strategies implemented to accomplish the needs successfully. Strategic environmental planning entails a process that factors in the use of logical, systematic, and rational approach so as to uncover and explain future dangers and openings. This way, it provides a framework that can be used in the decision making process. Strategic environmental scanning envisions the desired goals and defines the performance metrics to be used in measuring performance, while at the same time measurement of performance offers feedback against planned targets (Dusenbury, 2000).

A system approach is used in strategic planning in order to investigate a firms' systems and subsystems. Managers are provided with the ability to have a holistic view of the organization as well as identify the interrelationships within the organization. Strategic planning offers a framework for control and coordination of government activities and decision making through the processes of setting objectives leading to performance measurement (Arasa & K'Obonyo, 2012). According to Kotter (1996), the processes involved in strategic environmental scanning can be used to transform the organization. Thompson *et al.* (2007) linked good strategy making with a strong market position and strong organizational processes leading to success.

**Implementation Procedures**

The implementation period of the methodology follows the plan stage. It incorporates the transformation of the identified strategy into action. Strategy implementation requires a good strategic architecture of the organization and should therefore take into account how various parts of the organization work together in a manner that optimizes resource allocation (Johnson and Scholes, 2002). Even though strategy implementation has been identified as fundamental to strategic environmental scanning process, little has been written or researched on implementation challenges (Awino & Mutua, 2014).

Strategy implementation was defined by Thompson and Strickland (1992) as an administrative function characterized by processes of organizing, budgeting, and motivating cultures. It entailed supervisory and leadership roles as major vehicles towards the achievement of intended strategic and financial outcomes of an organization. The implementation of strategies differs significantly among industries and organizational sizes. Nevertheless, it is the implementation phase that oversees resource management, focusses on efficiency in operational processes, and requires strategic leadership and motivation skills to coordinate employees and diverse stakeholders to adopt a proposed strategy.

Most of the available scholarly evidence has delved into understanding the dynamics of strategy formulation but have ignored the implementation process (Thompson & Strickland, 1992). This has been despite failures in the implementation of several strategies. Thus, it is important to develop clear strategies that are not only formulated but also efficiently implemented in order to attain competitive advantage. Commitment, time, energy, and emotion required to implement strategies effectively has been underestimated. The lapses in these resources create an implementation gap between realized and strategic goals leading to failed or poor strategy implementation or total failure in implementing (Abiero, 2012).

For successful strategy implementation, companies ought to understand its operational historical and environmental factors (Johnson & Scholes, 2002). The corporate culture which is defined by collective beliefs, values, and attitudes shared by members, and the compatibility to the strategy being implemented. The match between culture and strategy enables employees to support the process leading to a favorable implementation environment. More often than not the organization culture is not compatible with the strategy because of mistrust and suspicion making implementation difficult. Organization leadership and Environmental scanning role is to align the organization culture with strategy.

Strategy is defined by Pearce and Robinson (2010) as consisting the consistent ideas of thought for confronting dangers and vulnerability, holding onto the open doors exhibited by nature and utilizing the particular capabilities of the assets of the association. Contemporary organizations are adopting formal approaches of planning in order to mitigate challenges resulting from the complexity of manager's jobs, uncertain changes in markets, increasing importance to match organizations with their respective external environments, and enhancing the intervals between preparation of plans and their future implementation. The leadership ought to share motivation, vision, initiative, and inspiration in steering the organization to undertake changes required in strategy implementation (Massie, 1987). Team spirit should be cultivated by the chief executive and encourage the implementation process fully. Besides, other managers need to work as a team with the CEO since their motivation and commitment to the strategy determines its successful implementation. Implementation of strategy may require leadership changes through transfers, retirements, demotions.

The implementation stage is operations oriented in nature, and requires managers to get things going. It is the most requesting and tedious segment of the strategic environmental scanning process. It factors in the readiness of a strategy plan that recognizes yearly goals, set up a viable organizational structure, determines a budget to support all activities, and generates a practical work plan for executing the work effectively. The phase also involves employee motivation, resource allocation, and the creation of a supportive culture that links employee compensation to activities being undertaken to complete the strategy (Thompson, 2004).

The last stage of strategic environmental scanning entails the evaluation of the strategy by making assessments to determine whether a company aims at achieving set objectives. Strategy evaluation activities include conducting a review of external and internal factors of the current procedure, estimating execution by connecting actual execution with spending plans, goals, and targets, and taking restorative actions by reviewing the formulation, implementation, and evaluation processes of the strategy.

**Challenges of Strategy Implementation**

Traditional functional mindsets are the most common impediments to tye implementation of strategy (Pearce & Robinson, 1997; Johnson & Scholes 2002) various reasons have been advanced to explain this phenomenon. Structure and staffing can overcome a traditional functional mindset (Johnson & Scholes, 2002). In addition, system thinking is essential to overcome this as there is a bond between strategy implementation and organizational change. It is common for organizations to resist change in a bid to maintain the status quo even in the wake of yielding unsatisfactory results (Pearce & Robinson, 2002). The implementation of strategic plan should be supported by the involvement and participation of employees in all processes. Without resources, the implementation of strategy is almost impossible (Johnson & Scholes 2002).

There is a general consensus as to the definition of resources to incorporate all inputs that enables an organization to discharge its mandate in producing goods or rendering services. In this sense, resources include raw materials, power and energy, intangible human capital, and facilities and buildings housing factories and organizations. Company resources are categorized into two to include internal or external inputs. External inputs emanate from the environment of the firm. These external resources include raw material, power and energy, manpower and small accessories. Internal inputs include internal installed capacity, structures, facilities, infrastructure, capability of employees, industrial relations and corporate culture.

Thompson, *et al.,* (2001) suggested that strategy execution is achieved with the availability of sufficient resources and human capital. Managers have a fundamental role in executing responsibility in their numerous areas of authority while employees and other participants participate in the execution procedure. During the beginning periods of strategy implementation and execution, managers are expected to identify and determine resources needed and consider whether monetary resources are adequate to actualize the strategy. Besides, the abilities of companies to marshal resources should be anchored on supporting new strategic initiatives and match them with organizational units, which significantly impacts the implementation of strategies (Johnson & Scholes, 2002).

Limited funding as a result of constrained financial resources or inactive environmental scanning have negative implications on the budget leading to slow progress of strategy implementation. In addition, efforts of organizational units to execute their goals as per the strategic plan are constrained. On the other hand, the availability of too much fuds translates to the wastage of monetary resources and reduction in the financial performance of an organization. Hrebiniak, (2005) identified ineffective and misled formulation of communication of mission, vision, and values as the significant challenge of strategy implementation. Commitment to projects and business results fulfills on the mission and design of organizational architect that allows empowerment and communication. Formulation has been identified as the end prompting the accomplishment of targets and objectives, while usage is the means, which factor in allocation of resources and action plan.

**iii. Empirical Review**

Scholarly evidence on factors affecting environmental scanning of organizations. Empirical analysis by Babatunde and Adebisi (2012) on the connection between authoritative exhibition and environmental scanning revealed a 30% variation of change in viable organizational performance as brought about by vital environmental scanning. The study linked the application of strategic environmental scanning with the evaluation and identification of environmental threats and opportunities. Conclusion reached by the study suggested that environmental scanning was importance due to its ability to recognize the dynamic nature of a firm's operating environment and existing uncertainties in adopting strategies. Hence, it was recommended that organizations conduct training sessions in order to empower employees with the knowledge regarding environmental scanning and its importance to the firm.

An empirical analysis by Jorosi (2008) on CEO's and SMEs environmental scamming behaviors in the Botswana manufacturing sector revealed an inclination by CEOs to conduct environmental scanning with much focus directed to suppliers, consumers, and competitors. The continuous scanning mode was frequently used, and preferred sources of information was mosaic in nature – managers, suppliers, consumers, and business associates. The study's findings were consistent with existing scanning theory generated from developing nations, most especially the DRC.

An examination by Abiodun (2009) to establish the associations between environmental scanning frequency and perceptions of strategic uncertainty revealed that the operational environment, which was characterized by numerous factors among them technology, consumers, and competition was considered as creating greater uncertainty than the Macro-environmental variables thus leading to significant intensity of scanning. The study's conclusion linked managerial judgment as an important determinant to determination on sections of strategic environmental scanning.

Empirical evidence by (Cancellier, Blageski Junior, & Rossetto, 2014) regarding the association between performance, strategic behavior, and scanning environment information among car dealers in Brazil. Empirical evidence suggested that scanning was done on competitors and technological aspects. In addition, access to written information and internal information sources was adopted more frequently as opposed to other strategic behaviors. In summation, scanning of information sources enhanced performance more that the strategy which was measured using the typology of strategic behaviors.

### iv. Critical Review and Research Gap Identification

Numerous empirical scholars have examined the determining critical success factors contributing to the performance of mining companies. Most of the studies as discussed both in the theoretical literature and empirical review indicate the influence of strategic environmental scanning on mining companies' performance. Several other studies reviewed also focused on variant constructs of strategic environmental scanning that determine the level of mining companies' performance. Mutemi (2013) who examined strategic environmental scanning and execution of mining companies suggested that investing in personnel and skills determined the practice of strategic environmental scanning and influenced performance among small scale businesses. The research gap identified in Mutemi's study is that there is a contextual variance with this study. Banro Corporation is a large scale manufacturing company that may by characteristic not tally with Mutemi's. In his study, Poku (2012) suggested that all employees were not aware of the structures supporting bottom-up information flow. Hence, there was need to establish the trend of Poku's findings in Banro Corporation to ascertain if the same is happening in Banro Corporation.

Charles, *et al*. (2004) contended that strategic environmental scanning is best examined in the context of both its formal and informal aspects, as well as with operational strategic environmental scanning and technology policy. Conceptualization of Charles' findings and the current situation of Banro Corporation because none of the reviewed studies have addressed to the specific link between organizational performance and strategic environmental scanning. Whereas Davin (1997) argued that firms recorded improved performance upon embracing strategic environmental scanning, the current study sought to identify the existing knowledge gap that would supplement the existing knowledge and serve as a platform for future studies on innovative ways of achieving competitive advantage from the scholarly point of view, more so in the Kenyan, Rwandan, and Congolese context.

### v. Theoretical Framework

A theoretical review offers a conceptual foundation necessary for conducting research. In this section we examined what various scholars and authors had said about factors affecting environmental scanning and mining companies' performance.The system theory hypothesizes that organic, mechanical, and social systems, including organizations, cab ne well known through their interactions with their respective environments (Gregory 1999). In the event that strategic environmental scanning moves towards achieving maturity, an 'open system' outlook is applied to the performance of mining companies. The suggestion is that the growth and survival of an association relies upon the idea of its operational condition as of now and in the future (Fahey, & King, 1981). According to Katz and Khan (2008), strategic environmental scanning characterizes open social systems that emphasize on characters where movement in one part affects the movement in other parts in a fashion that is predictable and open to inputs from the environment in a way that they remain in a state of change.

The environmental scanning process, certain viewpoints develop as vital to the setting of this study. The way that environmental scanning can be utilized for organizational advancement and structure and furthermore for environmental scanning education. (Terry, 1977) Uncovered a lot more extensive degree for the examining procedure that is only the social occasion of information for strategic planning.

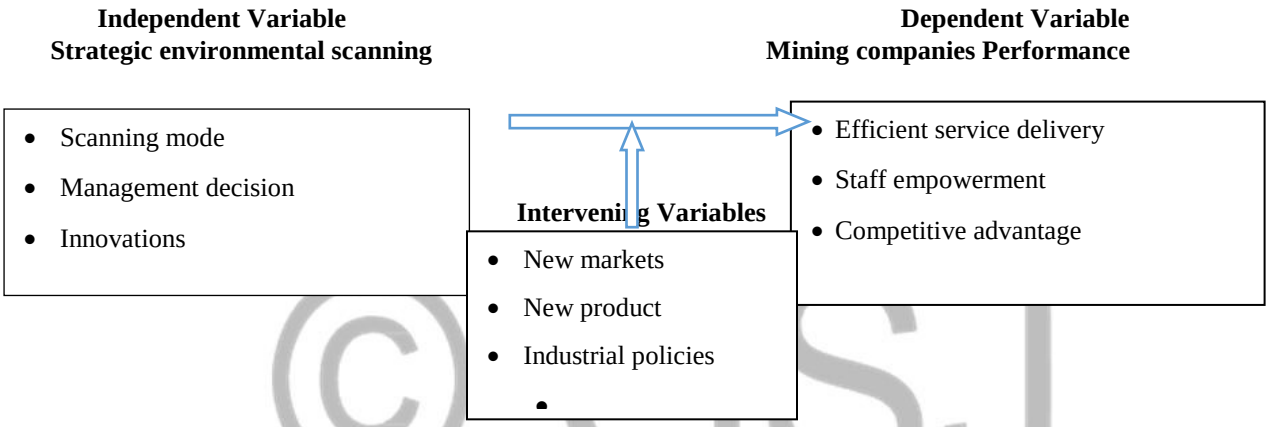
#### Resource-Dependency Theory

The resource dependency theory is anchored on the hypothesis that organizational are not self-sufficient, hence they obtain resources by exchanging with the environment (Gatwiri, Bichanga, Loki &Makau, 2014). The Vulnerability

of the mining companies' performance depends on the control it can exercise on the resources in the environment. This implies that the more resources under firm's control is, the less vulnerable it is and more competitive compared with others in a similar environmental setting (Gatwiri, *et* al., 2014). Barringer and Harrison (2010) in their contribution acknowledged that sustainable competitive advantage is sustainable through acquisition of rare resources, which are valuable in the market, cannot be substituted, nor can they be imitated. The abundance of resources and their concentration to the extent that they disperse the power and authority of the environment affect resource dependence. Within the mining sector, resource dependence is affected by the interconnectedness and number of pattern linking individual mining companies. Scarcity of resources brings about high degree of dependency due to high concentration of entities in the environment. Dependence can be enhanced by adjusting to outer requests, or staying away from them, or changing the interest designs through diversification, mergers and growth. Another way would be forming a negotiated environment by establishing collective structures and using social, legal, and political actions to create environments. Hence, managers must be able to manipulate and scheme against existing environments.

## Conceptual Framework

The figure below shows the relationship between the dependent and independent Variable:




*Source: Researcher (2021)*

The conceptual framework of this study helped to illustrate the relationship between the dependent and independent variable. Environmental scanning is the monitoring, evaluating, and disseminating of information from the external and internal environment to key people within the corporation or organization. (Kazmi, 2008). The strategic environmental scanning as independent variable stands for the scanning of both internal and external factors for gathering, analyzing and dispensing the information to the management and enable to make right and innovative decisions before and during the business operation for its growth. The internal environmental factors to the firm can be considered as strengths (S) or weaknesses (W), and the external environmental factors as opportunities (O) or threats (T) which are summarized in environmental SWOT analysis that provides helpful information of the business environment in which the firm is operating or going to operate. The mining companies' performance as dependent variable depends on the scanning of the business environment to allow the company to compete well. Thus, the mining companies would become performant and competitive and make its objectives a reality from efficient service delivery, the staff empowering, the creation of new markets and new products and strict respect of the firm policies.

## vi. Research Materials and Methods

**Research design:** A research design is defined by (Marcoulides, Chin, & Saunders, 2009) as a system including a common plan of how the analyst will measure the objectives guiding the study and respond to the research questions adequately. The study utilized a qualitative case study research design, which is important in understanding social issues or the causes and changes in social viewpoints from the points of view of the research participants (Firestone, 1987). According to Gillham (2000) case studies are essential in answering specific research questions through their ability to investigate study constructs. Thus, a case study research design is well placed to examine what led to the interruption of informal mining as a socioeconomic activity in the Eastern.

**Study duration:**

**Sample size:** Momo (2009) defined a sample as a section of the population that a researcher uses to gather information about from the entire population. According to Javeaux (1977), a sample is the total number of people or objects selected to represent a study population. He argued that the results obtained from the sample are considered to be the same as those that would have been if the study had been administered to the total population.

The sample size of the study was determined using Slovin's formula as stated below.

$$n = \frac{N}{1 + (N * e^2)}$$

Where: n = Sample size
N = Target population
e = Margin of error, which is 0.05 or 95% confidence level

$$n = \frac{150}{1+(150)0.05^2} = 109$$

The sample size was 109 participants selected randomly and purposively from the entire population of Banro Corporation as categorized in the target population.

### vii. Procedure of Data Collection

According to (Spengler, Neville, & Hoffman) Research methods refers only to the various specific ways data can be collected and analyzed. Data can be defined as information obtained by the researcher from participants in a study (Fraenkel & Wallen, 2003). The study used primary and secondary methods of collecting data like self-administered questionnaires (primary) and documentary review (secondary).

Self-administered surveys were used to collect data from sampled population. The questionnaires were structured in line with the objectives guiding the study in order to record adequate responses. The research mostly relied on questionnaire as it was easily sent to distant study participants at a relatively low cost.

The respondents had freedom to say what they wanted, because it was optional to reveal their identities. This helped the researcher to get the required data about the topic. Respondents answered questions at their own place and might have considered each question and answer carefully rather than replying with the first thought that comes in the mind. However, the use of questionnaires was most likely to have short comings such as; some of the questions were left un-answered which might have hindered the researcher from collecting adequate information related to the study variables. Some questionnaires arrived late which has given the researcher a hard task in data analysis.

### viii. Results

The structured self-administered questionnaire with background information of BANRO Corporation Company, requested respondents to indicate the name of their project or company, their job title, the numbers of workers in the project and its category. Below are the results obtained for this question:

**Table 1: Name Project Distribution of Respondents**

| Project | Freq. | Percent | Cum. |
|---|---|---|---|
| Twangiza Mining | 38 | 34,86 | 34,86 |
| Namoya Mining | 31 | 28,45 | 63,31 |
| Banro congo Mining | 17 | 15,6 | 78,91 |
| Kamituga Mining | 6 | 5,5 | 84,41 |
| Lugushwa Mining | 11 | 10,09 | 94,5 |
| Banro Foundation | 6 | 5,5 | 100 |
| Total | 109 | 100 | |

*Source: Primary Data in 2019*

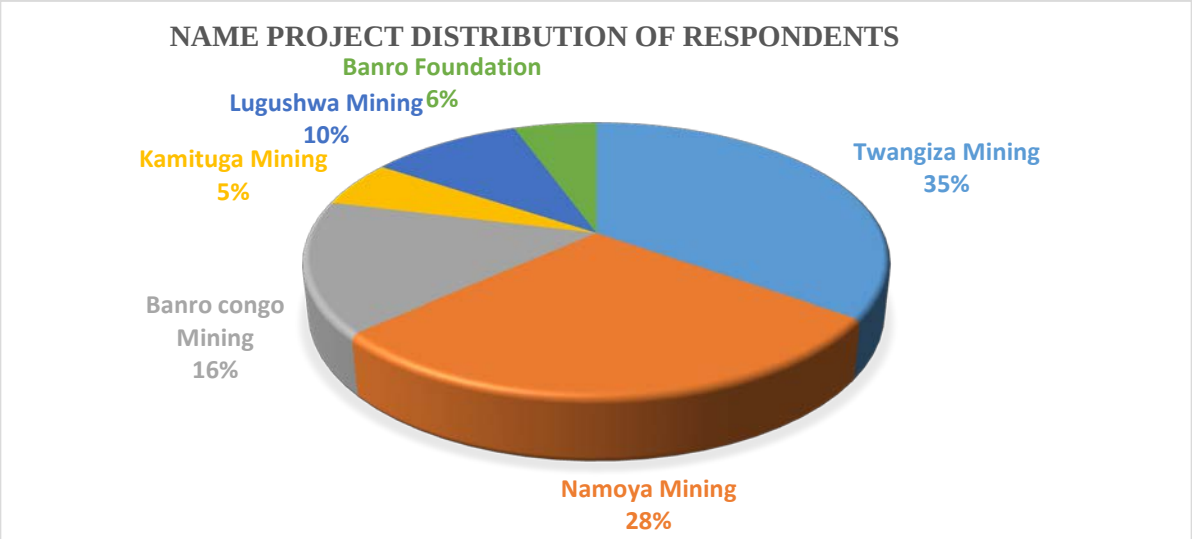


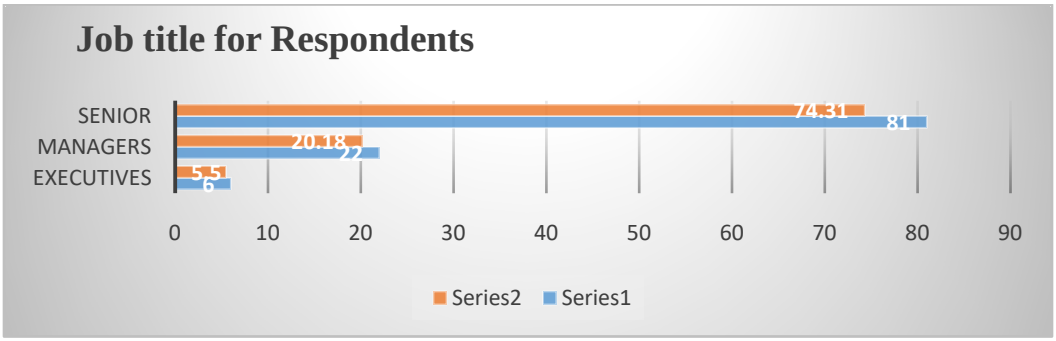

Table 4.1 represents BANRO Corporation Projects in the Democratic Republic of Congo with an overall population responses rate per project of a total of 109 responses recorded: Twangiza Mining SA: 34.86%, Namoya Mining SA:28.45%, Banro Congo Mining SA: 15.60% , Kamituga Mining SA: 5.50% , Lugushwa Mining SA: 10.09% and Banro Foundation SA: 5.50%.

**Level of Management**

**Table 2: Level of Management Distribution of Respondents**

| Job title | Freq. | Percent | Cum. |
|---|---|---|---|
| Executives | 6 | 5,5 | 5,5 |
| Managers | 22 | 20,18 | 25,69 |
| Senior | 81 | 74,31 | 100 |
| Total | 100 | 100 | |

*Source: Primary Data in 2019*




The results of the level of management distribution is shown in the table 4.2. The majority of respondents were seniors and juniors staff whose total was 81 respondents with the rate of 74.31%. Managers or Head of department staff were 22 respondents with the rate of 20.18%. Executives were 6 respondents with the rate of 5.50%. The frequency level for the executives and senior managers of Banro Corporation is that they are directly involved in environmental scanning for information gathering with the purpose of strategy formulation**.**

## Project category and number of respondents per project

**Table 3: Cross Table by Project Category and Number of Employees.**

| | Project category | | | |
|---|---|---|---|---|
| **Workers number** | **High** | **Medium** | **Small** | **Total** |
| Below 500 | 18 | 30 | 21 | 69 |
| 501 - 800 | 9 | 16 | 0 | 25 |
| Over 800 | 9 | 6 | 0 | 15 |
| Total | 36 | 52 | 21 | 109 |
| Pearson Chi2(4) = 18,3878 Pr = 0,0001 | | | | |

*Source: Primary Data in 2019*

Table 4.3 presents the projects category and the number of employees per project. Considering the returned questionnaires for the research conducted on Banro Corporation projects, the research was conducted on the rate of 47.71% for medium project with 52 respondents out of the total of 109, 33.03% for high projects with 36 respondents out of 109 and 19.27% for small projects with 21 respondents out of 109 .These frenquencies show 69 respondents out of 109 which means that 63.30% of the projects utilize less than 500 employees; whereas 25 respondents out of 109 which means that 22.94 % stands for the projects for which the employees' number is between 501-800, and 15 respondents out of 109 with a rate of 13.76% for projects that the employees' number is over 800. From this statistics figures,it sounds that there is a dependent link between the project category and the employees size as confirmed by the Chi2 of Pearson test of 18.3878 which is significant with the minimum rate of 1% ( P-value=0.001). In fact, I then reject the non result hypothesis and confirm the alternative of the existing of a dependent link between the two variables.

## Strategic Environmental Scanning and Performance in Mining Companies

### Exploratory Analysis

The reliability test was conducted to test for internal consistency of the self- administered questionnaire. The Cronbach`s alpha test was used in this research study and the results are shown in Table 4.4 and Table 4.5 below. The overall Cronbach's Alpha coefficient obtained from the principal components analysis was 0.948. According to George and Mallery (2003), a Cronbach's Alpha score above 0.7 is declared acceptable for most research studies. Hence, the current score of 0.948 obtained from this conducted study sounds good for our research study. This high score contributes to the random sampling conducted in all mining companies on which the research was conducted. The respondents were given an equal chance of being surveyed.

**Table 4: Reliability Statistics**

| **Cronbach's Alpha** | **N of items** |
|---|---|
| 0,948 | 23 |

*Source: Primary Data in 2019*

The self- administered questionnaires were tested for internal consistency basing on the overall Cronbach's alpha coefficient of 0.948. The table 4.5 presents the results of the test and the individual scores for each item. The individual scores were compared with the overall Cronbach's alpha values. The individual scores do not have to exceed the overall alpha value and any other item would require any modification or removal. The results show that the majority of the items had a Cronbach's alpha value equal or less than 0.948. The results demonstrate the high reliability of the measuring instrument in the required parameters. Evrard *et al.*; (2003).

**Table 5: Cronbach Alpha Coefficients for each Question**

| **Items** | **Scale Mean if Item delected** | **Scale Variance if Item deleted** | **Corrected item-total Correlation** | **Cronbach's Alpha if Item deleted** |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Stakinv1 | 86,22 | 292,433 | 0,524 | 0,948 |
| Stakinv2 | 86,36 | 284,436 | 0,772 | 0,944 |
| Stakinv3 | 86,09 | 294,973 | 0,606 | 0,946 |
| Stakinv4 | 85,73 | 305,66 | 0,334 | 0,949 |
| Stakinv5 | 86,07 | 298,624 | 0,616 | 0,946 |
| Stakinv6 | 86,07 | 285,835 | 0,754 | 0,944 |
| Stakinv7 | 86,93 | 280,606 | 0,705 | 0,945 |
| Activit1 | 86,03 | 284,805 | 0,766 | 0,944 |
| Activit2 | 86,28 | 282,794 | 0,789 | 0,944 |
| Activit3 | 86,17 | 292,287 | 0,717 | 0,945 |
| Activit4 | 86,04 | 290,869 | 0,708 | 0,945 |
| Activit5 | 86,01 | 298,065 | 0,601 | 0,946 |
| Activit6 | 86,2 | 295,774 | 0,54 | 0,947 |
| Activit7 | 86,42 | 289,246 | 0,686 | 0,945 |
| Implem1 | 86,31 | 284,161 | 0,786 | 0,944 |
| Implem2 | 86,53 | 278,696 | 0,842 | 0,943 |
| Implem3 | 86,42 | 283,58 | 0,757 | 0,944 |
| Implem4 | 86,39 | 287,519 | 0,719 | 0,945 |
| Particip1 | 85,83 | 291,121 | 0,573 | 0,947 |
| Particip2 | 85,89 | 292,025 | 0,557 | 0,947 |
| Particip3 | 85,77 | 298,104 | 0,501 | 0,948 |
| Particip4 | 85,54 | 302,695 | 0,532 | 0,947 |
| Particip5 | 85,71 | 296,709 | 0,507 | 0,948 |

*Source: Primary Data*

As mentioned previously, the coefficient value of Cronbach's alpha of 0.948 shows a fair internal reliability. The questions were established on an instrument size copied from Linkert (Carricano et Poujol, 2009). Thus, for the sampling analysis, we can mainly use the component as exploratory analysis for the strategic environmental scanning. This analysis expresses some pre-conditions such as Cronbach's Alpha which is high to 0.7 in order to assess the reliability of the items. For reliability seek, also, the test of Kaiser-Meyer-Olkin and the sphericity test of Bartlett were used as per the Table 4.6.

The KMO test of 0.765 is fair at this level and shows that the items are considered and explain the same reality. This is also explained by the sphericity test of Bartlett for which the probability is lower to the signification's level α of 0.05 (P-value = 0.000 and Approx. Chi-Square = 2306.629). The table below indicates the KMO test and the sphericity test of Bartlett.

**Table 6: KMO and Bartlett's Test**

| **Kaiser-Meyer-Olkin Measure of Sampling Adequacy** | | ,765 |
|---|---|---|
| Bartlett's Test of Sphericity | Approx Chi-Square | 2306,629 |
| | Df | 136 |
| | Sig. | ,000 |

*Source: Primary Data, 2019*

Referring to authors like Many Carricano and Poujol (2009) and Naresh Malhotra (2011), this index allows to understand the quality of the factorized items. It is then important that the KMO index becomes higher to 0.7 to indicate the validity level of the item factorization. It implies the validity between the factors and the items. Thus,

for this research the KMO index is 0.765 and the test of Bartlett is significant (Approx. Chi –Square = 2306.629 and P-value =0.000 with a degree of freedom of 136). Taking into account the three mentioned conditions, the obtained results can be validated with the principal component analysis. Therefore, the researcher mentions that the purpose of the principal component analysis (PCA) is to reduce the information. Nevertheless, the analysis realization proceeds by many steps, such as the elimination on basis of the quality of the item representation, the explained total variance, and on basis of component after the rotation.

This means that when one item has a communality lower to 0.5 or when it has two communalities higher to 0.5 for two or more factors, it must be removed. After all possible elimination on the basis of the mentioned condition, the research has maintained the items and factors as represented in table 4.7 below.

**Table 7: Communalities**

| **Items** | **Initial** | **Extraction** |
|---|---|---|
| stakinv1 | 1,000 | ,796 |
| stakinv2 | 1,000 | ,835 |
| stakinv3 | 1,000 | ,675 |
| stakinv4 | 1,000 | ,597 |
| activit1 | 1,000 | ,637 |
| activit3 | 1,000 | ,692 |
| activit6 | 1,000 | ,597 |
| activit7 | 1,000 | ,710 |
| implem1 | 1,000 | ,749 |
| implem2 | 1,000 | ,894 |
| implem3 | 1,000 | ,850 |
| implem4 | 1,000 | ,798 |
| particip1 | 1,000 | ,948 |
| particip2 | 1,000 | ,898 |
| particip3 | 1,000 | ,849 |
| particip4 | 1,000 | ,864 |
| particip5 | 1,000 | ,825 |
| Extraction Method : Principal Component Analysis. | | |

*Source: Primary Data*

From the interpretation of this table, it is clear that all the items are well represented in the analysis with the communalities superior to 0.5. What means that the maintained items in this type are necessarily those which contribute to explain the total variance cumulated in the table 4.8 below:

**Table 8: Total of explained Variance**

| **Component** | **Initial Eigenvalues** | | | **Extraction Sums of Squared Loadings** | | | **Rotation Sums of Squared Loadings** | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of the Variance | Cumulative % | Total | % of variance | Cumulative % | Total | % of variance | Cumulative % |
| 1 | 8,037 | 47,278 | 47,278 | 8,037 | 47,278 | 47,278 | 5,104 | 30,023 | 30,023 |
| 2 | 3,687 | 21,690 | 68,968 | 3,687 | 21,690 | 68,968 | 5,027 | 29,570 | 59,593 |
| 3 | 1,491 | 8,771 | 77,739 | 1,491 | 8,771 | 77,739 | 3,085 | 18,146 | 77,739 |
| 4 | ,931 | 5,476 | 83,215 | | | | | | |
| 5 | ,629 | 3,699 | 86,914 | | | | | | |
| 6 | ,569 | 3,345 | 90,259 | | | | | | |
| 7 | ,392 | 2,307 | 92,566 | | | | | | |
| 8 | ,317 | 1,862 | 94,428 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 9 | ,256 | 1,505 | 95,932 | | | | | | |
| 10 | ,209 | 1,227 | 97,159 | | | | | | |
| 11 | ,148 | ,871 | 98,031 | | | | | | |
| 12 | ,105 | ,615 | 98,646 | | | | | | |
| 13 | ,084 | ,492 | 99,138 | | | | | | |
| 14 | ,053 | ,309 | 99,447 | | | | | | |
| 15 | ,048 | ,280 | 99,727 | | | | | | |
| 16 | ,034 | ,198 | 99,925 | | | | | | |
| 17 | ,013 | ,075 | 100,000 | | | | | | |
| Extraction Method : Principal Component Analysis. | | | | | | | | | |

*Source: Primary Data*

This Table shows the items which stands for one hand to explain the strategic environmental scanning and on the other hand to explain the total variance cumulated of those items. Thus, it is noticed that the total variance explained for the strategic environmental scanning is 77.739%. This total variance explained indicates on the other hands, the number of factors that explain the strategic environmental scanning. Therefore, we have obtained three (3) factors and 17 items to explain the mentioned concept. The obtained factors are nominated on the item rate with high communality of factors.

The following table shows the matrix of the item coefficient after the rotation in order to decide about the items and their belonging factors. It is important to mention that we have proceeded with the elimination of items following the communality and the Eigenvalue criteria in the analysis with the Varimax method.

**Table 9: Components Matrix after Rotation**

| | **Component** | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| stakinv1 | | | ,867 |
| stakinv2 | | | ,740 |
| stakinv3 | | | ,752 |
| stakinv4 | | | ,661 |
| activit1 | | ,560 | |
| activit3 | | ,700 | |
| activit6 | | ,640 | |
| activit7 | | ,729 | |
| implem1 | | ,773 | |
| implem2 | | ,867 | |
| implem3 | | ,892 | |
| implem4 | | ,876 | |
| particip1 | ,952 | | |
| particip2 | ,924 | | |
| particip3 | ,916 | | |
| particip4 | ,918 | | |
| particip5 | ,898 | | |
| Extraction Method : Principal Component Analysis.<br>Rotation Method : Varimax with Kaiser Normalization | | | |
| a. Rotation converged in 5 iterations. | | | |

*Source: Primary Data*

This Table indicates the 3 obtained factors by the end of the exploratory analysis. The first factor which is the government support explains that the establishment of the mining companies must take into account the government demands and the government must provide a full support to these companies to achieve their goals. This factor is supported by five items that show the aspects that allows a fair analysis of the business environment such as increased support by the government (0.952), increased support by Nvivo (0.924), increased support by the

community (0.916), the commitment and dedication of staff (0.918) and the increased relationship with other companies in the area (0.898).

The second factor concerns the objectives set by the companies for a good strategic environmental scanning. This factor is explained by eight items including many activities that the mining companies may deal with when implementing the strategic environmental scanning. The concerned items with this second factor are: The resource analysis (0.560), the needs assessment (0.700), the analysis of adequacy of staff members (0.640), the relationship gap with external institutions and stakeholder's assessment (0.729), an action plan which is developed and adhered to (0.773), the timeless set and met (0.867), the objectives set and met (0.892) and the changes established and implemented (0.876).

The third obtained factor is the community needs assessment. This factor of scanning the community where the business is taking place sounds very important to allow the company to gather the information from this community for good decision making. The scanning activity per item is presented as following: the community local government and opinion leaders (0.740), the community needs assessment (0.867), the government institutions (0.752) and the security issues (0.661). The numbers repeated in parenthesis () above explain the Eigenvalue of each item in the factor. To confirm the three discussed factors and measure their relationship with the company performance, the following analysis must be done:

## Regression Analysis

The current research is trying to confirm from this point, the results obtained from the exploratory analysis. It requires at one hand to understand the factors that explain the environmental scanning and on the other hand, find out the relationship that exists between the environmental scanning and the mining company's performance. The research predicted from these factors on basis of the exploratory analysis and on the performance variable index from the **Stata 12 Software** that helps in quantitative analysis, and then the **Ordinary Least Square Method (OLS)** that permits to do the multiple regression in order to explain the existing link or relationship between these factors and the BANRO Corporation's performance.

Thus, regression analysis was used to determine which environmental scanning factors applies greater influence on the performance of Mining companies, with the specific case of BANRO Corporation. The environmental scanning factors such as the community needs assessment, the company objectives set and the government support were analyzed on their ability to mainly predict and indicate the impact on the business performance. To predict and measure the company performance index, the following variables were concerned : increase shareholders value, increase the Return On Investment (ROI), increase customer satisfaction, attract new customers, retain customers loyalty, improve operation effectiveness and efficiency, reduce operation cost for benefit increase, improve job satisfaction for employees, reduce employees turnover and provide training, demonstrate social responsibility and develop new technology services (Zhang, Majid& Foo, 2011).

**Table 10: Multiple Regression**

| **source** | **SS** | **df** | **MS** | **Number of obs =** | 109 | |
|---|---|---|---|---|---|---|
| Model | 106,0996 | 3 | 35,36655 | F (3, 105) = | 74,70 | |
| Residual | 49,71033 | 105 | 0,473432 | Orob > F = | 0,0000 | |
| Total | 155,8099 | 108 | 1,442685 | R - squared = | 0,6810 | |
| | | | | Adj R - squared = | 0,6718 | |
| PERFOM | coef. | Std.Err. | t | P>/t/ | 95% Conf. Interval | |
| Communityneeds | 1,058947 | 0,07399 | 14,31 | 0,000 | 0,912221 | 1,2056 |
| Objectives | 4,08E-12 | 1,65E-12 | 2,47 | 0,015 | 8,04E-13 | 7,36E-12 |
| Governsup | 0,040459 | 0,05721 | 0,71 | 0,481 | -0,07297 | 0,15389 |
| _cons | 0,0191257 | 0,312527 | 0,06 | 0,951 | -0,60056 | 0,63881 |

*Source: Primary Data*

The Table 4.10 shows the results of regression analysis. The Coefficient shows the combined effect of all the environmental scanning factors on Mining Companies business performance. The "R" Square value is multiplied by 100 to convert it into a percentage, hence it makes 68.1% and with the adjusted R Square value, it becomes 67.18%. This means that the environmental scanning factors such as the community needs assessment, the company objectives set and the government support, explain 68.10% of the variance in business performance. This result means that there are other factors that explain the remaining 31.90% of the variance.

The community needs assessment variable is significant and positively influences the company performance because its probability is less than 0.05 (P-value =0.000). It means that this result confirms at 99.9% that the strategic environmental scanning must first of all concern the community needs assessment when the mining companies is scanning it business environment. The second significant variable as shown in the table above, is the objectives set of the mining companies. This variable, also, influences positively the independent variable that is the mining company performance as its probability is less than the signification accepted level of 0.05 (P-value = 0.015). For the first, that the variable explains that when the company scans the community needs assessment before the company establishment and continuously during the company normal activities, the increasing of 1% of community needs assessment scanning explains the increasing of 1.05% of the company performance in the case of Banro corporation minings.

## Confirmatory Analysis Test

**Table 11: Normality Test**

| Skewness/Kurtosis tests for Normality | | | | | _joint_ |
|---|---|---|---|---|---|
| Variable | Obs | Pr(Skewness) | Pr(Kurtosis) | adj chi2(2) | prob>chi2 |
| Residus | 109 | 0,0073 | 0,5034 | 7,04 | 0,0295 |

*Source: Primary Data*

This test indicates that the data as collected from the ground are normally distributed by the fact that the probability of the normality Test is less than the acceptable significance standard of 0.05 for this study. The probability (P-value) is 0.02995.



## Ramsey Test

**Table 12: Ramsey Test**

| Ramsey RESET test using powers of the fitted values of stakinv1 |
|---|
| H0: model has no omitted variables |
| F(3, 82) = 121,37 |
| Prob > F = 0,0000 |

*Source: Primary Data*

The test of Ramsey permits to identify the missing variables in the analysis. The research can then confirm that the data analysis has taken into account at 99.9% all the sensitive variables to explain the dependent variable which is the performance of BANRO Corporation mining companies. This assertion results from the significant probability of 0.0000 which is extremely less than the standard significance level of 1%. This being the case, this model is well specified.

## Correlation Test

**Table 13: Correlation Test**

| | **PERFORM** | **Governsup** | **Objectives** | **Communityass** |
|---|---|---|---|---|
| PERFORM | 1 | | | |
| Governsup | 0,2250* | 1 | | |

| | | | | |
|---|---|---|---|---|
| | 0,0186 | | | |
| Objectives | 0,0762 | -0,0599 | 1 | |
| | 0,4309 | 0,5364 | | |
| Communityass | 0,8137 | 0,2992 | 0,2505* | 1 |
| | 0,00000 | 0,0016 | 0,0086 | |

*Source: Primary Data*

The correlation test of variables allows to effectively check the relationship between the two different variables, after having noticed that the performance of BANRO Corporation correlated positively and significantly with the community needs assessment. This correlation is explained at 81.37%. In other words, among factors to be scanned, the community needs assessment contributes at 81.37 % for the mining company's performance. The other significant variable is the analysis of opportunities and threats from the local government or chiefdom for which there is a positive and significant correlation of 22.50%. There is also another positive correlation but not significant between performance and the company objectives when we try to assess the company's external environment which rate is 7.62%. In sum, there is a direct relationship between the strategic environmental scanning with the three (3) listed factors of the strategic environmental scanning and BANRO Corporation mining performance.

## ix. Discussion of Findings

The conducted research aimed to analyze the relationship between the environmental scanning and the performance of mining companies in RDC with a specific case of BANRO Corporation minings. It tried to analyze the impact of environmental scanning on the performance of mining companies with the case of BANRO Corporation. Available literature was collected in chapter two and analyzed with the results from the quantitative tests conducted.

The findings were supported by Temtine (2006) who outlined the five environmental constituents or factors namely; social, economic, political, regulatory and technological which should be frequently scanned as they contain valuable information which leads to firm performance**.** Our research shows three factors which may explain the environmental scanning such as the community needs assessment, the government support and the company objectives set.

The Correlation results indicate a moderate positive correlation between the scanning of community needs assessment (0.8137), the government support (0.2250) and Banro corporation performance. From the regression results, the first variable explains positively and significantly the company performance and shows that the increase of 1% of the community needs assessment scanning increases 1.05% of BANRO Corporation performance. The government support also impacts positively and significantly the growth of the BANRO performance. This result shows that these two factors have a great influence on mining company's performance. This result is supported by Gupta (2013) who stated that environmental techniques assists organizations to react to changes in its external and internal environments which leads to business performance.

From the results of multiple regression, "R" square coefficient indicates that the environmental scanning explains company's performance. It shows that the environmental scanning factors predicting BANRO corporation performance is 68.10%. This shared view was supported by Beal (2000) who stated that many strategists and strategic management scholars generally agreed that firms which aligned their competitive strategies with the requirements of their environment (environmental scanning) outperformed firms that failed to achieve such alignment.

## x. Conclusion

The purpose of the research was to investigate the relationship or the impact of environmental scanning on the performance of Mining Companies with the case of BANRO Corporation. It also looked at the determinant factors of environmental scanning and how they influence the business performance. As per the results obtained, it is clear that there is a strong relationship between the environmental scanning and mining companies 'performance. The research methods and techniques as discussed in chapter three were used for data collection and analysis to achieve the research purpose. It provided details regarding research design, the population study, sample and sampling techniques, the description of data collection instruments and the techniques used to analyse the collected data.

This dissertation was subdivided into five chapters: Chapter one introduced the study by presenting a comprehensive background of the study concepts, states the research problem, objectives of the study, research questions, significance and limitations of the study, scope of the study, and organization of the study. Chapter two delved into reviewing numerous literatures that are relevant to the study to provide readers with the ability to have a clear

understanding of the key issues, concepts related to the study such as theoretical literature, empirical literature, and critical review. It also dealt with research gaps identification, theoretical framework, and conceptual framework. Chapter three presented a detailed description of the research methodology and techniques adopted by the researcher to conduct the survey; such as the research design, target population, sample population and strategies used to determine the sample size, data collection methods, tools and techniques. Chapter four dealt with analyzing and discuss the survey results in relationship with the relevant literature on the three determinant factors of environmental scanning and its relationship with firm performance. Statistical applications were applied including correlation and regression analysis to determine the relationship among the independent and dependent variables.

The results of correlation and regression analysis obtained indicated that there was a strong and positive relationship between environmental scanning and mining companies' performance with the case of BANRO Corporation as explained by the R-Square of 68.10% and the global model signification which P-value = .000 < .05. The objective of this study was achieved through the survey conducted and concluded that there is a positive relationship between environmental scanning and mining companies' performance, with the specific case of BANRO Corporation. This implies that mining companies should continuously scan the business environment in order to survive from the internal and external pressure and unexpected events that might occur either at the beginning or during the business operations. Without scanning the business environment, mining companies will be limited to vital information, which is essential for the company to formulation management strategies and earn competitive advantages.

**Suggestions for Future Study**

The current research study was conducted in the Republic Democratic of Congo in the South Kivu and North Kivu provinces but a possible areas of further research can focus on other major provinces like and Oriental Province and Katanga Province. In this current study, the focus was to investigate a possible relationship between environmental scanning and mining companies 'performance. However, the surrounding communities can still deal with other possible research topics related to this study with other researchers who want to investigate the mining company performance with the Impact of production technics, motivation, employees' satisfaction, the perception and adoption of mining companies.

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