THE APPLICATION OF MULTI-LEADERSHIP STYLES IN STEERING AN ORGANISATION FROM CRISIS TO BUSINESS EXCELLENCE

by

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Dedication

I was blessed with awesome parents, John and Veronica Appiah. I dedicate this work to the memory of my loving but late father; the greatest dad any blessed child could ever have. Amongst countless acts of love and selflessness, he lived for the best of his children. Forewent his dreams, to ensure his children reached heights he was not opportune to reach as a child, against all odds.

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To all my friends and colleagues, thank you for all the support and kind thoughts throughout all these years. I am optimistic that you will each positively affect other people's lives as you have mine.

To all, who would read this, I am grateful and humbled.

ABSTRACT
THE APPLICATION OF MULTI-LEADERSHIP STYLES IN STEERING AN

ORGANISATION FROM CRISIS TO BUSINESS EXCELLENCE

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There are many leadership styles, but this research paper sought to demonstrate

how multi- leadership principles (Transformational and Servant leadership) approach

could be employed in resolving real life industrial or corporate problems. That could aid

in steering an organization from crisis and various organizational changes to business

prosperity and excellence. These two leadership styles according to most research works

done on them, are superior evolutions of the leadership development theories, very

influential and effective in making the requisite positive impact on groups and

organizations and hence their consideration. In conducting this research, a combination of

mainly qualitative (meetings, calls and interviews) and quantitative (customer satisfaction

survey) methods would be employed in a case study approach of a Mining Service Provider, a Laboratory in Africa. The goal of the paper is to investigate, demonstrate and establish that the application of right leadership and its right approach, thereof, is instrumental in solving various organizational challenges and therefore, enabling and ennobling organizational success. The study could increase the knowledge base in both academia and the corporate world. And this study will also further advance research into leadership, especially, in its practical application in business organization for maximum and positive results.

The study confirmed that Transformational and Servant leadership strategies were adequate and effective in solving the organization's problems. The application of the two leadership principles saved the laboratory, a contract amounting to about 3.6 million USD per annum in revenue and the Mine from potentially losing several millions of dollars, up to over 600 million USD per annum in revenue. The multi-leadership application secured the laboratory's contract, made the Mine very happy and regain confidence in the laboratory. The Mine extended the duration of the contract, increasing sample volumes and scope of testing. At the same time, the multi-leadership style application took the laboratory's financial fortunes from deep red to deep blue, consistently, continuously, and incrementally. The future financial prosperity of the laboratory looked even more promising.

Keywords: Mining, change, profitability, productivity, laboratory, customer service, excellence, performance, management.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I: INTRODUCTION

1.1 Introduction

Leadership has been a topic of interest in the research world for several years. A lot of knowledge has been added as new theories or improvement of old concepts in recent years. With the recent global changes and its crisis, it has become increasingly clear that leadership is indispensable in every facet, sector, segment or stage of human life and development, and therefore, an organization's effort at reaching its goals. Indeed, every nation of the world's success or failure hinges on leadership. If this was not the case, then Africa for instance, with most of the worlds' natural resources could not be so poor. This underscores the significance of right leadership in the fabric of every facet of human livelihood. Leadership holds the key to unlocking the door to business growth and profitability. Business leadership has to do with generation of ideas and strategies, influencing positive changes, managing resources to attain organizational objectives and goals, improve efficiency and effectiveness and maximize profitability, if it is part of an organization's aims.

The Mining industry in Africa is largely over-concentrated on production and revenue-generating activities, that it has relegated leadership and leadership development to the background; thus, leadership skill identification, training and development of managers and directors. Due to the rise in outsourcing of Mining services, in quite recent times, some of the service provider organizations are also falling prey to these counter-productive trends.

Commitment by some mining firms in the sphere of leadership development investment had left much to be desired. Staff awareness has seen recent surge, therefore, there is a need for conscious efforts by all stakeholders in the Mining industry to upgrade the managers and directors of the Mining sector's leadership skills. These skills update should be carefully selected to reflect the environment and functions of the managers, so that they can stay above all challenges presented by the industry and current global business climate which is rapidly changing. So that possible business losses could be averted, and business efficiency and growth improved.

It is expedient we understand the organizational issues and the appropriate leadership principles or approach relevant in solving them. The researcher of this paper examines the application of multi-leadership (Transformational and Servant leadership) tenets in addressing the organization's challenges.

1.2 Research Problem

The lack of proper leadership and organizational leadership for that matter had resulted in many industrial problems and losses and still does. Some of the losses are huge, others mild. Losses include loss of lives, loss of revenue, loss of business contracts, collapse or extinction of businesses, bankruptcy, and negative profitability. And when these happen, the repercussions vary and impose adverse, ripple effect on the economy and the people who benefits from the business directly or remotely.

The mining industry is a major economic contributor for many nations of the world, most especially in Africa, the continent endowed with a lot of natural mineral

resources. Therefore, if the mining industry did well, nations benefitted greatly

especially, if the firm was a multi-national, which, most mining firms were. The

community where Mines were situated, the employees as well as stakeholders, directly or

indirectly, gained. The more profitable the business, the better the chances at gains for the

stakeholders. Some of the gains came in the form of employment for especially the

indigenes, development for the community and nations via corporate social

responsibility, all geared towards improving the quality of life for the stakeholders. To

achieve this, the role of the Mine laboratory, which acts as the eyes of the Mining

processes was principal, significant and key.

When a Mine laboratory, like the one selected for this study was not fixed, the

laboratory could lose the contract amounting to about 3.6 million USD per annum and the

Mine could lose over 600 million USD per annum in revenue and the effect on

economies, personal finances and potential developmental growth could be crippling to

all stakeholders. The Mine laboratory serves as key indicator and eyes at every stage of

the Mining process cycle from Mineral exploration to Mining to Plant operations and

even the quantity and quality of gold and minerals produced and sold.

1.3 Purpose of Research

The aim of this study was to investigate, confirm and demonstrate how multi-

leadership styles (Transformational and Servant leadership) principles could be applied in

real world organization in guiding the organization through challenges, changes, business

3

crisis and negative profitability to business prosperity. It is hoped that at the end of this research, the following objectives would be met:

- Some factors and situations that lead to organizational challenges, failures or successes would be identified and elucidated.

- Researcher could confirm that Transformational and Servant leadership strategies are adequate and effective in solving the organization's problems.

- We would study how leadership principles are appropriately and practically applied in solving real corporate problems, thereby, contributing to organizational successes and superior business performance.

- That this study could contribute to knowledge and understanding of the subject of leadership in both the academia and corporate worlds and advance further study into leadership, especially, in its practical application.

It was also hoped that once successful, the results and lessons gathered and drawn from the research, could be replicated in other organizations beyond the African continent, and even outside of the Mining sector, with either same or similar challenges.

1.4 Significance of the Study

The study could increase the knowledge base in both academia and the corporate worlds with respect to application of leadership principles in solving real world organization problems.

This study could further advance research into leadership, especially, in its practical application in business organizations, confirming the viability and usefulness of the Transformational and Servant leadership strategies as adequate and effective in solving the organization's problems.

In the establishment of the above, with respect to the success in the application of chiefly the two leadership principles, the case study organization could secure its contract, amounting to about 3.6 million USD per annum in revenue and prevent the Mine from potentially losing several millions of dollars, up to about 600 million USD per annum in revenue.

The Mine could, as a result of this study's successes, regain confidence in the Service provider lab and at the same time, take the laboratory from negative profitability to positive profitability, continuously and incrementally, throughout the period of the study. When that happened, the Mine would be happy, the case study organization would also be happy, and all stakeholders as well. Possibly, in the application of the leadership principles in finding solutions to the organization's issues, it would positively enhance everyone who was involved in the study to be better at what they do via learning, observing, training and picking up valuable lessons from even failures.

1.5 Research Purpose and Questions

In the attempt at solving the issues and challenges of the organization under study, we would endeavor to gather all their staff's, client's and stakeholders' concerns, expectations, and ideas if any, on how best to proceed. However, the following questions ought to be addressed by the end of this study:

- What were some of the factors or situations that triggered the organizational challenges, failures, or successes?

- Could Transformational and Servant leadership tenets be adequate and effective in resolving the organization's issues?

- How multi-leadership principles, methods or approaches were appropriately and practically applied at solving real corporate problems, thereby, contributing to organizational successes and superior business performance?

CHAPTER II: REVIEW OF LITERATURE

2.1 Leadership

What ran through most definitions of leadership from reviewed literature was one who influences and one who has follower (s). Which renders influence to be "sine qua non" of leadership. Different scholars have defined leadership differently (Russell, 2005). Leadership is the "interpersonal influence exercised by a person or persons, through the process of communication, toward the attainment of an organization's goals" (Russell, 2005, p. 16). Northouse (2012) defined leadership as a "process whereby an individual

influences a group of individuals to achieve a common goal" (Northouse, 2012, p. 5). Rue and Byars (2009) also defined leadership as "the ability to influence people to willingly follow one's guidance or adhere to one's decisions" (Rue and Byars, 2009, p. 465).

The lack of effective leadership has been a top challenge for past and present organizations. Leadership behavior has a significant impact on employee behavior, performance, and well-being (Inceoglu, Thomas, Chu, Plans, & Gerbasi, 2018). Armandi, Oppedisano, and Sherman (2003) suggested that leadership was about influencing a group of people toward desired group goal. The success of an organization hinges on the effective of the leader through the leader's foresight, vision, passion, and skills to inspire the team to succeed. Leadership determines the direction, acceleration, or deceleration of an organization. In today's uncertain and chaotic world, leaders are called to steer the wheel, by bringing in change or managing change in an organization.

With the influence comes power that if properly utilized would make a leader successful and effective, leading a prosperous organization. If it is abuse, it might destroy the leader, then the organization might follow. Sometimes, the organization might fall first, exposing a corrupt leader.

According to Lægaard (2006), leadership is the influence on other people, regardless of the reason. Management is creating results with and through people. Leaders focus on vision, objective, and people, fulfilling expectations of stakeholders (Laegaard, 2006).

2.2 The Leader

A leader is one who influence followers, synergizing their abilities and energy towards the attainment of organizational goals (Winston & Patterson, 2006, p. 7). They posited and emphasized the need for a leader to develop followers. That went a long way to positively affect the staff's motivation and commitment in an organization or group. This would eventually affirm the multi-dimensional nature of leadership.

A leader is defined as one with the ability to influence one or more followers and responsibly direct them to achieve a set objective (Winston and Patterson, 2006). A leader must possess vision and a clear sense of direction and must be able to let his followers buy into his or her vision via inspiration, motivation, and influence and through clear and concise communication and actions.

Attributes that make a good leader are integrity, charisma, inspirational, visionary, encouraging, positivity, confidence builder, dynamic, foresight, effective team building, effective communication, coordinating, decisiveness, intelligence, win-win problem solver coupled with personality, character, skill, and emotional intelligence (Hyacinth, 2014). A good director is a motivator and inspirer of his or her followers and subordinates. They are leader creators and find pride in doing that. A boss is selfish and self-centered and does not care about anyone but himself or herself. A good manager influences others to their best and for the best of the group, bosses manipulate. An authentic superior takes the focus from themselves and recognize the followers. Bosses take the praise and blame others.

A great captain seeks the opinions of his followers, but bosses monopolize decision making. Pacesetters take the followers along, so the followers own the process or idea. They feel appreciated and respected. They get the followership, and loyalty of the staff. A good shepherd is opened to feedback from followers, the boss has no time for such. To the boss, subordinates can keep their opinions to themselves. Bosses normally end up being sabotaged by the aggrieved staff. A foreperson is an effective communicator and negotiator, bosses gag their employees. Sometimes they keep a close-door policy. A leader asks how people can work better or what they can do, bosses tells people what to do and it must be done. Good superintendents earn the respect of the followers, by treating the followers with respect and decorum, but bosses demand respect, and mostly they do not get. Bosses are feared, not admired by their followers, and if bosses have any respect, it is cosmetic.

A good overseer sees employees as teammates and offers support to them, bosses see them as slaves and mostly treat them with disdain. A leader invests in the growth of subordinates, because he knows it is very good and helpful to his leadership, organization's success and then the subordinate's growth but a boss is threatened by the growth of his subordinates. Bosses will do anything and everything to impede such growth. They micromanage and stifles subordinate's creativity.

Good administrators take responsibility for their staff although they delegate and empower the employees. They correct in love, and in the hope of improving the staff, but the boss would not delegate or respect the honor of staff but will expose the weaknesses of followers and denigrate them. A boss will not train or teach the followers what they

9

need to know to advance, but the contrary is an utmost desire of a good leader. Leaders use people and change as a starting point and managers use structure and systems as a starting point. Leaders do the right things; managers want to do the right things (Laegaard, 2006). A manager must have very good leadership skills to deliver superior results. Manager's focus includes planning, budgeting, organization, control, and scheduling. Ideal leader must be amongst others a change leader and an effective vision communicator and a consistent enabler of staff progress.

Good head of business leads by inspiring managerial functions in coordination, planning, and controlling the operations of the organization (Katz & Kahn,1966; Redding, 1972; Thayer,1968). Good leaders are essential part of effective business organizations and mostly, great leadership skills could be learnt and applied for the progress of a group or organization, in its attainment of their set goals, visions, mission, or objectives.

2.3 Types of Leadership Styles

The progress of a team or group in any organization is largely dependent on the style of leadership employed by the organizational leader (Hunt & Fitzgerald, 2018). Therefore, when an organization succeeds or fails, the first point of call should be the leadership of the organization. Leadership style is the approach or behavior applied by a leader in his or her effort at influencing the follower(s).

Experts keep developing new leadership styles. The earliest theories of leadership posited that leadership was based on traits and the assumption that leaders were born and

not made (Shazia, Anis-ul-Haq, & Niazi, 2014). After the autocratic (authoritative), democratic (participative) and laissez-faire (delegative) styles of leadership by Lewin and his team, forming the basis of subsequent theories, the focus turned to how both leaders and followers were inter-dependent on one another, and inter-relate (Shazia et al., 2014).

Some are born with the leadership traits whilst others deliberately learnt. Recent research suggests that only 30% of leadership skills are genetic, while 70% are mix of lessons learned and life experience (ACES, 2014). Most leaders learned to develop their own leadership skills and competencies (Reynolds, 2021). The great news is that leadership skills could be learnt, mastery comes with learning, training, and practicing it. According to Kate Carter (2019), most leaders learnt the skills, and did not naturally acquire it. It largely depends on the leader's internal willingness, motivation, and inspiration, during the learning process. Once that is adequate, they will be able to utilize their own leadership style after acquiring sufficient leadership knowledge and experience (Keating et al., 2014).

Autocracy has become unpopular in both politics and business world and staff shun this style. Most firms that practice autocratic leadership at the core, would not get very far in business. They hold power and never share it. The Autocratic (authoritative) style of leadership is where absolute power and authority is given or taken by the leader, which gives rise to dictatorship (Wroblewski, 2019). The leader forces his will on followers. They impose policies, procedures, ideas, and define outcomes on their subjects or subordinates. This might be useful in a situation of unskilled, incompetent, and inexperience staff (Hunt & Fitzgerald, 2018). This style is characterized by a top-down

11

approach (Wroblewski, 2019). Its high sides include bringing cohesiveness, and consistency. On the other hand, it suppresses creativity, dilutes collaboration efforts, innovation, diversity, and stifles professional growth (Lee, 2020).

For a Service provider, whose service and business sustenance depends on strict integrity like a Mine Laboratory, laissez-faire style could be a recipe for disaster. They leave the staff or followers to their devices. They are what I term as absent leaders. This is because in such organizations, there is not enough room for mistakes. Accuracy and precision are non-negotiable, and the client could be very uncharitable when a laboratory deviated above or below certain industry standards or even the client's expectation. This stemmed from the fact that, the very present and future of the mining activities is based on these precisions or accuracies by the laboratory, in terms of their results, and hence errors could be very costly and damaging on various levels and in various segments of the mining activities.

Democratic (participative) style of leadership has teams or followers involved in the decision-making processes through consensus building workplace, developed by Kurt Lewin and his team in 1939, popularized in 1988 by John Cotton and his team (Wroblewski, 2019). Team members are encouraged to express their thought processes regarding a task fostering deeper sense of belonging, positive loyalty and inclusion in the workplace that it increases team members motivation and creativity by making them more involved (Dike, Ego & Madubueze, 2019; Lee, 2020), however decision making will be highly time consuming and the possibility of debate is common (Lee, 2020).

Laissez-faire (delegative or hands-off) style of leadership is where real leadership comes from subordinates according to Lewin and his team (Shazia et al., 2014). This might be workable with very competent and independent followers (Lee, 2020).

Bureaucratic leadership style as postulated by Max Weber around 1947 is when followers follow rules and chain of command (Wroblewski, 2019). The good thing about this style is that it has very clear roles, responsibilities, and expectations. On the contrary it has some elements of inefficiency. It discourages professional growth, creativity, innovation, and free thinking (Lee, 2020).

Charismatic leadership first developed by German Sociologist, Max Weber, in which a leader uses his or her superior communication abilities, charm and persuasive skills to influence followers (Wroblewski, 2019). Followers are attracted to them because of their infectious and admirable personality rather than their power and authority (Hunt & Fitzgerald, 2018). The advantage of this style is that the leader has the full support of his or her team or followers but the downside of this style is that it has the potential for the leader to become self-serving (Kugler, 2021).

Management theory also known as Transactional style first described by Max Weber in 1947, where the leader sets targets and uses reward or deprivation or punishment as a means of motivation for the followers (Cherry, K., 2020). It was further developed by Bernard Bass in 1981. According to Bauer & Erdogan (2012), transactional leadership provides resources and incentives only when the employee demonstrates right or expected behaviors. The good thing about this style is that it can be efficient in

achieving short-term goals while on the other hand, it can limit creativity, growth, and initiative (Hunt, & Fitzgerald, 2018; Lee, 2020).

Pacesetting style is a type of leadership where a leader leads from the front, sets high standards and pursues them expecting followers to follow as suit, ensuring each team member is held responsible for the achievement of those goals (Hunt & Fitzgerald, 2018). This style might rate high on performance but has the propensity of adversely affecting the morale of some workers.

With Affiliative style, it is people centric, where a leader builds bonds and emotional connections with followers (Hunt & Fitzgerald, 2018). Coaching style of leadership focuses on guiding followers, bringing out the best in them and focuses on a person's individuality to identify skills, imbibes knowledge, and assists individual to attain the high level of competence (Hunt & Fitzgerald, 2018). It is quite resource intensive because it requires a lot of time and energy. It is key for a leader to understand each member's strengths, weaknesses, drive, interests, and motivations (Hunt & Fitzgerald, 2018). Visionary style is where the leader ensures that visions manifest as realities by clarifying strategic plans for followers, as described by the Science journalist Daniel Goleman (Hunt & Fitzgerald, 2018).

Servant leadership style popularized by Robert Greenleaf in the 1970s, where the leader serves the followers, ensuring the followers gets improved. According to Greenleaf (1970), the leader selflessly focuses on the wellbeing of followers. They address challenges with the team's interest in mind. This style of leadership must be

14

supported with dynamics because it can be easily diminished or weakened by the employees (Lee, 2020).

Transformational leadership style popularized by James McGregor Burns in 1978, whose end goal is to bring positive change in followers and bringing out the leadership abilities in followers (Wroblewski, 2019). Transformational leadership style's success hinges on inspiring and engaging followers to attain organizational objective (Lee, 2020). It helps employees to be better version of themselves. Through empowerment, motivation, inspiration, the support shown by the leader, employees are geared towards achieving success. The success of this leadership style hinges on inspirational and motivational capacity of the leader. One advantage of the transformational leadership is that it helps to strengthen the collaboration within a team (Whitener, 2020).

Transformational leaders lead their employees by aligning the employee goals with their leaders'. This enables the employees to focus on the well-being of the company than that of their parochial selves (Bauer & Erdogan, 2012). Transformational leaders instill in their followers a high level of trust that leads to greater job satisfaction, better team morale, and pride of their company (Whitener, 2020).

The type of leadership style applied in an organization would most likely predict the type of result in an organization. From reviewed literature, transformational theory is deemed to be an improvement of and superior to the transactional theory of leadership by many researchers. "Transformational and transactional leadership styles are positively related to the engagement of managers. Managers' engagement was associated with followers' appraisal of change. The two leadership styles also have a direct, long-term

15

effect on followers' change appraisal: positive for transformational leadership and negative for transactional leadership" (Holten & Brenner, 2015).

Tara Padua observed that "Our leadership style is a whirlpool of our values, our natural strengths and abilities and our beliefs and experiences. Knowing your leadership style can help you align that whirlpool with your vision, goals and even your organization's mission and vision" (Wroblewski, 2019). Business organizations differ, and change is a constant factor in life and therefore, business. Successful businesses are to study leadership styles, understand their appropriate applications and business suitability to achieve optimum success (Bauer & Erdogan, 2012).

2.4 Importance of Leadership

Leadership is responsible for driving organization to a targeted future, by taking the followers or subordinate to the envisioned destination. The test of a leader is in his or her ability to balance the effort at reaching the future destination and then engaging the followers' or subordinates' commitment through that journey to the destination.

With the right leadership, most, if not all the problems of Africa could be resolved. The effects of poor leadership have plagued most sectors, segments, departments, and agencies of governance on the continent. The consequence of this, had been poor and weak systems. The business environment has not been spared of the consequences of poor leadership, and that includes the Mining sector and its Service provider firms or contractors. Special attention to leadership and leadership development

16

in managers and directors must be given utmost attention and priority, to reap the full benefits of good leadership.

Lægaard (2006) rightly observed the study of leadership in schools is a recent development. The need for strengthening leadership is very key, since organizations are managed by managers and leaders and we train managers in schools but not leaders. Leadership is vital. It is important for both personal development and organizational prosperity. In that, when leadership is weak, ineffective, counter-productive, absent, toxic, or misappropriated, the consequences for stakeholders, directly or indirectly are adverse in nature (Gandolfi & Stone, 2016).

2.5 Effects of Leadership

An effective leader is one who applies appropriate leadership styles in leading his or her followers, but ought to understand his followers' strengths and weaknesses, and seeing how best to improve those weaknesses and utilize those strengths (Nathan et al., 2017). Effective leadership is nonlinear, and it is a continual process (Northouse, 2007). Leadership is a process, thence continuous and not an event or one-off stance.

Leaders ought to develop sensitivity towards group dynamics and possess the ability to guide such dynamics to achieve organizational aims (Saggaf et al., 2014). Followers or subordinates take cues from the leader's actions, and those cues from leader's actions, influences the staff's behavior, work conditions and work environment (Podsakoff et al., 1990).

17

Personal leadership reflects on personal growth and success; just as business leadership reflects on business performance. Lack of properly adequate leadership is of significant concern. Leadership is effectively employed in solving various organizational challenges, finding means of making things simpler, more efficient, more effective, and profitable. Right leadership is instrumental in promoting and managing business growth and boosting employee commitment via organizational harmony. The most important asset in an organization is the human resource, which requires clear and proper leadership to blossom. It would therefore be useful for all industries to invest in leadership development, especially the traditional industries such as the Mining sector and its contractors.

Focusing on the application of Transformational and Servant leadership theories, the leaders move along with the followers in reaching the group's owned goal. Inspiration, synergy, integrity, and genuine character of the leader would ensure success with both the transformational and servant leader theories.

Avolio et al. (1991) for instance touted transformational leadership as effective and productive amongst other sterling attributes whilst Thornton (2013) on servant leadership style, suggested that it seeks to remove the barriers that hold back individuals from achieving their true and full potentials. Ably supported by Greenleaf (1977) that servant leadership style strongly, directly, or indirectly positively impacts on employees or staff motivation in so many ways, enabling organizations attain positive performance and productivity.

2.6 Servant Leadership

18

Greenleaf (1970) gave a new lease of life to the Servant leadership concept that predated him; however, it took about thirty years for it to be accepted into the corporate setting. Servant leadership according to the observations of Greenleaf (1970) are per the under listed attributes, depicting the hallmark of servant leadership theory. Listening: where the leader does a careful, focused, and attentive listening to what followers say and what is not even said. Healing: this involves healing broken relationships, which includes personal and work relationships. Some could be coming from former places of work or precursors from outside work environment. And when the leader makes honest effort at helping staff heal themselves within as well as of any hurt that affect employee's wellbeing. Empathy: the servant leader understands the follower on a deeper emotional level and tries to empathize with the follower. Awareness: where the leader is conscious of every experience and attributes of people and things around the leader's domain and the leader himself or herself. Persuasion: where the leader seeks to convince others and not by manipulation. To help followers see things from an improved perspective.

Conceptualization has to do with a leader being futuristic, where imagination and vision of the leader comes to the fore. The leader knows where he or she is headed towards. Foresight: as the leader gets futuristic, he ought to remember, where he or she is coming from, and let his past experiences guide them and note that actions always beget consequences always and should evaluate present actions. Stewardship: where the leader leads by example. This breeds trust in a group and boosts the commitment of followers. Commitment to the growth of the team: where servant leader considers and decides on developing, enhancing, and facilitating the growth of his followers, in most aspect of

19

their lives; especially physically, professionally, and personal lives. They invest in their team members to grow. Building a community: where the leader ensures great working relationship amongst team members by facilitating other social and fun gatherings (Greenleaf, 1970).

Listening is an effective component of the communication process and more pivotal for an effective leader even more than speaking. A careful, attentive and calm listening, with intermittent confirmation that you really understand what was communicated proved to be very effective, especially, if a leader would like to make an impact in the resolution of challenging problems in any organization. The leader asks questions and listens carefully, to what is being said and what is even not been said, through nonverbal clues and gestures. Letting the staff know by verbal and non-verbal responses and even taking notes and asking clarifying questions. Pertinent negative could be useful in this arena, where the leader seeks information on what is not so obvious or clear to him.

Healing would be necessary for a firm that had gone to difficult transitions, crisis or any difficult challenges or changes, it leaves most psychologically bruised and they require healing and that would be the responsibility of a leader. Some maybe coming from the client, others from old employers that the staff carry to the new work environment. If the leader cares, he, or she could investigate, discover the root cause and work at finding some sort of healing process for the staff. The well being of a staff should be an utmost priority of the effective leader.

Empathy could be likened to the leader placing himself or herself in the shoes of the followers. Seeing things from the perspective of the follower or subordinates enhances the communication and work relationship between the leader and follower. The follower creates a bond with the leader, necessary to positively affect the gains and prosperity of the company, making the job easier for the leader. It should be noted that this ought to be genuine lest, it could be counter-productive or disastrous in some instances.

Awareness has to do with the leader being aware of the limitations of the team and of himself. This would take conscious reflection, sincerity, and humility of the leader to succeed at this. What is even more important is to work on improving the followers' weaknesses, harnessing their strengths towards the organizational aims, and that the leaders must do same work on themselves as they work on their team.

On persuasion, it is advisable for the leader to get things from the staff's perspective because it would seem easier to convince someone when you understand or appreciate their perspective, rather than forcing yours on them. It is more powerful, when you pick some elements from their perspective into the group's interest which you might be championing. The staff would perceive this as humbling of you rather than manipulating, bossy, aggressive or over-bearing perception, and staff might naturally feel obliged to cooperate with you as a leader. In line with persuasion is the conceptualization, where the leader envisions, and shares the vision with the staff, encourage the staff to see the future through the leader's lenses, cross-checking with them if they are seeing the same bigger picture and destination. Breaking the bigger picture to the smaller pictures

for the staff to appreciate. All these elements would invariably contribute to the commitment of the staff to their business leader and organizational goals attainment, at the same time, contribute positively to the growth and development of his or her followers.

In addition, training, retraining, guidance by the leader, delegation, empowerment of the staff would help develop the staff. Training would be an essential step to eradicating micromanagement which is counter-effective and counter-efficient as far as the laboratory management is concerned. If a leader is allowed and could, the leader should endeavor to affect the staff on every level possible, not just professionally but personally and psychologically, as well as, all other dimensions of the staff. When other aspects are well developed, professional development becomes easier.

Sendjaya and Sarros (2002) opined Jesus was the first to "introduce the notion of servant leadership to everyday human endeavor." Servant leadership has at its core selflessness and elimination of the leader's ego. One of the earliest recorded examples of servant leadership was derived from the teachings of the Jewish, Jesus the Christ in the Bible. Jesus the Christ taught that he did not come to be served but to serve, and he demonstrated that by the washing of the feet of his disciples. He again reminded everyone that cared to listen that, if one wanted to be great, one must first serve.

The right application of servant leadership style results in good employee commitment and hence a great organizational performance (Manby, 2012). According to Dierendonck & Nuijten (2011), servant leadership holds the employee accountable for their personal developmental good.

It has been noted that servant leadership style has a good effect on staff motivation and that is also linked to employees' performance (Zafar et al., 2012) and hence business successes. Similar observations were made by Vadell and Ewing (2011).

At the core of servant leadership is a leader who possesses the values of genuine care, love, compassion, and positivity in work (Spear, 2004). The Servant leader's utmost concern must be the welfare of his or her followers (Stone and Patterson, 2005), via empathy and Servant leadership according to Stone and Patterson (2005) is an extension of transformational leadership.

Covey (2006) also advanced soft personal skills such as empathy, persuasion, kindness, love, gentleness, and patience as servant leaders' attributes. Carroll and Patterson (2014) supported, noting that altruism, humility, trust, vision, empowerment, service, and agape love as their perspective of the dimensions of servant leadership.

McCann et al. (2014) observed that Servant leadership improves customer focus in employees thereby increasing organizational advancement. Re-echoed by Lisbijanto and Budiyanto (2014), via their research found that servant leadership in an organization would lead to an increase in job satisfaction of staff. This observation is supported by Ding et al. (2012), whose study made a good case for servant leadership that it affects greatly and in positive terms, the job satisfaction of employees.

Sendjaya et al. (2008) suggested Transforming influence: as an aspect of servant leadership, under this sphere, servant leadership triggers multiple positive changes in followers towards the organization's good via minimizing barriers that inhibit success and setting subordinates up for success. They continued, with transcendental spirituality:

23

where the servant leader ennobles a conducive, purposeful, and healthy work environment through and around their followers.

Teamwork is key under servant leadership where team synergy and love are effectively present. This develops the inner self of followers and their sense of identity enriched. With Responsible morality: servant leader establishes moral standards throughout the organization entrenching moral values in the followers and leading by example.

Covenantal relationship involves servant leader treating people as equal partners in the organization, relating with them as if there were covenant between them. The work environment is saturated with amiable interpersonal relationship incited by the servant leader. This environment stirs potentials in the followers and their creativity is encouraged, consequently, growth by self-expression. The dimension that underpinned the servant leadership is the voluntary subordination, where the leader willfully serves his followers. He places the needs of his followers above his. The servant leader serves his followers not out of obligations, but his utmost will and desire (Sendjaya et al., 2008).

On Authenticity, Vannini & Franzese (2008) proposed that a servant leader ought to be authentic and true to himself or herself. And not be fake since followers could clearly see through it. It comes from deep and careful introspection and self-reflection and the leader ascertaining who he really is and being true to self.

Williams, Brandon, Hayek, Haden and Atinc (2017) suggested that servant leaders impacted employee creativity by fostering an environment that promotes

workplace spirituality. This relationship, according to them is strengthened to the extent that the servant leader possesses high levels of political skill.

Furthermore, Jaiswal and Dhar (2017) through their study noted that servant leaders instilled trust within followers, which acted as a mediator in predicting creativity. They also found that servant leadership increased trust between the leader and employee, thereby, enabling the greater degree of employees' creative behaviors when they trusted their leader.

Observations indicated that job satisfaction of employees is linked to their job performance. Thus, if the staff is satisfied, then he or she is happy and a happy staff performs happily; thus, they usually go to the extra mile to achieve organizational goals. Vadell and Ewing (2011) strongly stated that the servant leader will boost the intrinsic motivation of the workers; hence, higher achievement is most likely.

2.7 Transformational Leadership

Transformational style's success hinges on inspiring and engaging followers to attain organizational objective (Winston & Fields, 2015). The earliest scholar that proposed the theory of transformational leadership was Burns (Burns, 1978) however, Bass and Avolio improved on this theory (Bass & Avolio, 1996).

According to Bass and Avolio (1997), main elements of transformational leadership include idealized influence, individualized consideration, intellectual stimulation, and inspirational motivation. Transformational leadership is generally considered needful for the optimum functioning of a team. Their research showed that

25

transformational leadership was positively linked to functional problem-solving

communication by team members (Lehmann-Willenbrocka, Meinecke, Rowold &

Kauffeld, 2015).

It holds true for big businesses as small businesses, when Effelsberg, Solga, and

Gurt (2014), posited that transformational leaders possess unique traits that are effective

in managing staff for small business profitability. Chen, Zheng, Yang and Bai (2016)

suggested through their research work that transformational leadership has a direct

implication on organizational innovation.

Kouzes and Posner's postulated some tenets of transformational leadership

namely, challenging the process, modeling the way, encouraging the heart, inspiring a

shared vision, and enabling others to act (Abu-Tineh, Khasawneh & Al-Omari, 2008).

Challenging the process-Real leaders are challenge- driven. They look for

challenges and solve problems. They are open to changes and thrive on change. In this,

they are open to pertinent negative from their staff and team members. They understand

there is hardly any growth without changing via challenging the process or status quo.

There is hardly any progress in life without change. Real growth is impossible without

change. Change is difficult, it is uncomfortable. Real change is indeed hard. With

constantly changing times, an organization cannot compete without changing and doing

so effectively and quickly. Change should not end, it should be continuing and consistent,

always in progress.

Encouraging a shared vision-Author John P. Kotter believes that the power of

vision is underestimated and not communicated well enough. Until the vision is shared,

the vision is an orphan and only in the head of the leader. It must be shared with followers, the vision needs to be shared with the staff, and the leader should help the staff see, from where the leader stands. The leader requires taking the staff along, the staff must own it, and once that happens, successful manifestation of the vision would be imminent. Effective communication of the leader is pivotal in this. Without effective communication, a leader could hardly succeed in encouraging a shared vision.

Encouraging others to act-No matter how competent a leader might be, he or she cannot do it alone, more especially, in a laboratory environment. That is why, training, decentralization, delegation and encouraging hearts and minds of staff to act and take responsibility for their action is significant. It is a difficult thing for micromanagers, which must be discouraged in an organization. Leaders or managers who delegate must remember the final responsibility still rests with them, not the delegator or follower. Supervision and follow up is key especially in the laboratory setting as a Service provider to a demanding work environment like the Mine. If a leader succeeds in this, it fosters harmony, trust, positive loyalty, staff citizenship and teamwork, makes the shared vision objective easier and more natural.

Leading the way or modeling the way- A good leader sets good example because the leader becomes a role model to the staff. He or she leads the way. Leading the way works hand in hand with encouraging others to act and encouraging a shared vision.

Encouraging the heart- By communicating values and celebrating good works. This is where the influence of a leader is needed most. Celebrate small wins as well as big wins. The leader must keep the big picture in his and followers' minds, whilst

breaking it down into smaller pictures. Honesty is vital here, as a leader is politely and in the spirit of developing the staff, indicate areas of improvements. Soft skills and great communication skills would be clear advantage for the leader in this instance as well.

Bass (1999) thoughtfully captured, "Transformational leadership refers to the leader moving the follower beyond immediate self-interests. It elevates the follower's level of maturity and ideals as well as concerns for achievement, self-actualization, and well-being of others, the organization, and society". The four fundamental dimensions of transformational leadership are also known as 4is of transformational leadership as posited by Bernard Bass and could be summarized below.

Intellectual stimulation is when a leader enables creativity and innovation in the employees in finding solutions to organizational problems (Bass, 1985). Intellectual stimulation is the ability of the leader to inspire as well as challenge the followers to tap into their geniuses often buried within, for the good of an organization through innovation and creativity (Bass & Avolio, 1996; 1997).

Idealized influence is dually defined in term of both the behavior of the leader and the followers' attributions of the leader (Bass & Avolio, 1996). With idealized influence, Avolio & Bass (2004) noted that, leaders set and have high standards for moral and ethical behavior, hence, the leaders assume the status of role models in the group or organization. By so doing they earn the trust of the followers which sets them up for great success in the pursuits in the organization. In personal confidence, the leader inculcates same together with integrity, pride of association and power in the followers. With

behavioral sub-dimension, we recognize leader's beliefs, missions, values, sense of purpose and what really influences a leader's decisions.

Individualized consideration is where the individual's need, as a follower or a subordinate, is given special attention, mostly involving training, mentoring, and coaching the employee (Bass, 1990).

Inspirational motivation refers to a leader ability to communicate in clear terms, and in the follower's high expectation of the attainment of the group's goal that would invariably satisfy employee's expectations and that of the group. This is possible by setting visions, objectives, goals, and missions that all staff can buy into and identify with, as a leader (Bass, 1985).

2.8 Communication in Leadership

Communication is the act of information transfer or reception from one person, place, or group of persons to another. Communication messages could be through verbal or nonverbal means, including speech, or oral communication and signs, signals, and behavior. Indeed, one's refusal to communicate is even communicating, that is how indispensable communication is. It is so, in both individual and organizational lives. It is the life blood of every organizational and human relationship successes. Definition of communication could be classed into either giving and receiving information or sharing information (Boni, 2016). Nordquist (2019), simply stated, that communication is said to be "the creation and exchange of meaning."

Active listening is key to a successful communication for leaders. There is hardly an effective leadership without an effective communication and therefore, the significance of communication to organizational leaders can never be over-emphasized.

"The average employee spends 70% of their day communicating in some form" (Howatt, 2013). However, to be sure if one's employee decoded your message, one ought to collect feedback. Effective communication is the beginning of workplace trust and there is direct correlation between workplace trust and work engagement (Victor & Hoole, 2017).

Great leaders clearly communicate goals and tasks (Brownlee, 2019). Direct communication is much better than the indirect communication. Depending on the type of communication, face to face is much recommended, because one could read body language and non-verbal cues. The context and the content of message will define its communication channel. Suggestion box is another form of medium of communication for shy, reserved, or information the staff considers confidential. Opt (1998) rightly noted that suggestion boxes, a form of upward organizational communication, have received little attention in academic and business literature. Written communication is more official in nature.

Robbins & Judge (2012) defines an organization as a "consciously coordinated social unit composed of two or more people, that functions on a relatively continuous basis to achieve a common goal or set of goals." Hahn & Paynton (2019) also defines organizational communication as the sending and receiving of messages among interrelated individuals within a particular environment or setting to achieve individual

and common goals. What runs through both definitions and indeed paramount is common goal, if any organization failed to appreciate or achieve that commonality of goal, failure would be imminent.

"Organizational communication largely focuses on building relationships and interacting with internal organizational members and interested external publics" (Hahn & Paynton, 2019). The indispensability of communication in an organization is confirmed by several surveys conducted by experts which identified effective oral and written communication as the most sought-after skills by those who run organizations (Davis & Miller,1996; Holter & Kopka, 2001; Perrigo & Gaut,1994). Nădrag & Buzarna-Tihenea (2018) succinctly observed that communication and feedback is necessary in today's rapidly changing times at all the levels of hierarchy in an organization.

Organizational communication is a process through which people construct, interpret, filter, manage behaviors, signs, and symbols. Communicating within context helps with the understanding or decoding of the message being carried in the communication, making recipients process the information faster, easier and ennobling quicker decisions. Communicate from your audience's perspective, and create messages based on their background (Grossman, 2017). There are different types of communication; written and unwritten, verbal, and nonverbal.

Lack of clarity, inconsistency, language differences, perception, noise, non-active listening, are some of the factors that could create barriers in communication. Some barriers could be attitudes such as anger, structural design in lack of training and supervision, lack of common experience, cultural noise in the form of stereotyping,

31

language, social and cultural difference. Nonverbal cues like eye contact, body posture, voice tone, space, facial expressions should be considered in context of the culture and social implications of the intended recipient of communication lest the sender might misfire. Nodding of the head could be interpreted differently depending on where and how you do it. We are encouraged to look into the eyes when communicating but in some cultures, that is unacceptable, because it connotes something negative, and if one does that with the opposite sex, it could be catastrophic.

Long before CODVID-19 measures, handshake was not encouraged in some cultures and societies. For one to be able to communicate effectively, one must be socially and culturally educated, to identify all the factors and how to use them, in succeeding as a business leader. For one to communicate effectively one must have the requisite cultural and social intelligence. This could be useful in a manager's organizational success, and it could be lifesaving as well.

One of the ways that managers could ensure their employees are receiving their message is by communicating through the perspective of their audience. This will allow you to build a message based on a view of the recipient, to aid good understanding. Another way to communicate clearly is to be mindful of the message, keeping it simple, concise, easy to understand and consistent. One might also want to show respect and use the employee's preferred method of communication.

Typically, communication involves sender(s), message(s) and recipient(s). Communication should encapsulate the social context, emotions, cultural situation, medium of communicate, location, the appropriate choice of words, audience type

amongst others. As all these have direct implications on the effectiveness of communication. Effectiveness of communication is mostly based on how the message was decoded by the receiver and Engelstad et al (2017) opined that effective communication in an organization is a clear business advantage.

Among other salient factors, society and culture affect the effectiveness of communication and with culture comes religious dimensions. Individual's perceptions that formed their behaviour, is largely stemmed from their society and culture via upbringing and interactions fueling those social and cultural factors. In all these and at every stage of consciousness, language, and communication for that matter, was key and affects the quality of communication. Social and cultural sensitivity is therefore very paramount in conveying a message effectively. Social and cultural factors could serve as barriers or facilitators to effective communication. Some of the factors that impact effective communication include individual identity or affiliation such as religious, cultural, racial, gender, class system, ethnic, education and age. One can also think of poor listening, poor understanding, lack of clarity, lack of consistency underpinned by cultural and societal influence.

Organizations require effective communication, so they serve to improve customer relations, enhance the firm's competiveness, employee satisfaction, build knowledge-sharing in an organization. For communication to be effective, it must be open, honest, timely, short, clear, complete, and accurate to keep a business successful and increase profit. A good communication must be two-way. The leader needs the input of the employees because the employee over time is getting sophisticated through

enlightenment and empowerment. The focus of communication is on the audience or receiver, so the sender should ensure that the receiver understands and decodes the message adequately, otherwise, communication becomes ineffective and hence counterproductive. Organizations must be proactive in providing accurate, true information in a timely fashion, eliminating all barriers and to avoid grapevine or rumors.

Although Bharucha (2018) rightly observed that companies with high employee engagement commonly engage in open, honest, and frequent organizational communication. "Individual information seeking has become increasingly a critical determinant of the success of individual organizational members and of an organization as a whole" (Johnson, Donohue, Atkin & Johnson, 1995).

There are channels of communication that employs technology, and they include email, blogs, video calls, cellular phones, and online chats. Advance technologies such as instant messaging, social networks, emails, video calling features, through smart phones and other smart devices have significant influences on communication. To ensure successful receivability, managers should use suitable communication channel, addressing the right receiver and make sure that the qualifications and characteristics of the receivers are adequate to their messages (Callaway, 2019). Message is effective if and only if it was received as they intended before communicating it (Johnson, 2019). Face to face is mostly the best channel as the staff could ask questions and proper clarifications given if need be. Same time, there could be pertinent negative occasions. Other channels that could be used are bulletin boards, corporate newspapers, memos, newsletters, or magazines. There could be corporate social network such as Yammer. Megaphones and

loudspeakers could be used, especially in this era of social distancing for large staff numbers. There are conference video and audio calls, text messages and phone calls, which are all channels of communication. Corporate-produced television shows or copy-only messages transmitted by closed circuit television are options too.

There are several communication barriers that businesses experiences and they need to be overcome to ensure smooth and effective communication. These barriers include lack of communication clarity, communication inconsistency, language differences, passive listening just to name a few. The sender should therefore endeavour to eliminate every barrier that stands in the way of this objective.

Communication barrier is anything that prevents us from correctly receiving and understanding a message that others communicate to others. According to Carpenter, Bauer & Erdogan (2010), some of the barriers to effective communication are: filtering, selective perception, biased language, emotional disconnects, lack of source of familiarity or credibility, semantics, gender differences, workplace rumors and gossips, and information overload. Avoiding the communication barriers is a great solution to the misunderstanding. Lack of clarity, inconsistency, language differences, one-way communication, and misguiding nonverbal messages are the most common barriers that hinder the effective communication (Segal et al., 2019). Organizational leaders must make coherent strategies for effective communication and for the development of the company (Nikravan, 2011).

Communication is a skill that requires patience, self-reflection, self-control, self-mastery, and intelligence. The platinum rule is superior to the golden rule in corporate set

up but treating people as they want to be treated begins with treating people as you would want to be treated. If you cannot treat people, the way you want to be treated, it would be difficult to treat people, how they want to be treated.

Rumors and grapevines as unpopular sources of information should be carefully treated quickly by managers because they consume time, energy, and effort of employees in useless way. Rumors cause disturbances and discomfort in the work environment. Active listening is the best communication skill. Listening, understanding, and responding are three important elements of communication. Understanding is usually where the issues communication block transpires. I believe one reason we have two ears and one mouth is to listen more and speak less. Reading the information behind the words is way more important than making judgement too quickly in communication. What is not being said, is more than what is being said. Finally, active, and reflective listening is key as it promotes understanding, empathy and improves teamwork.
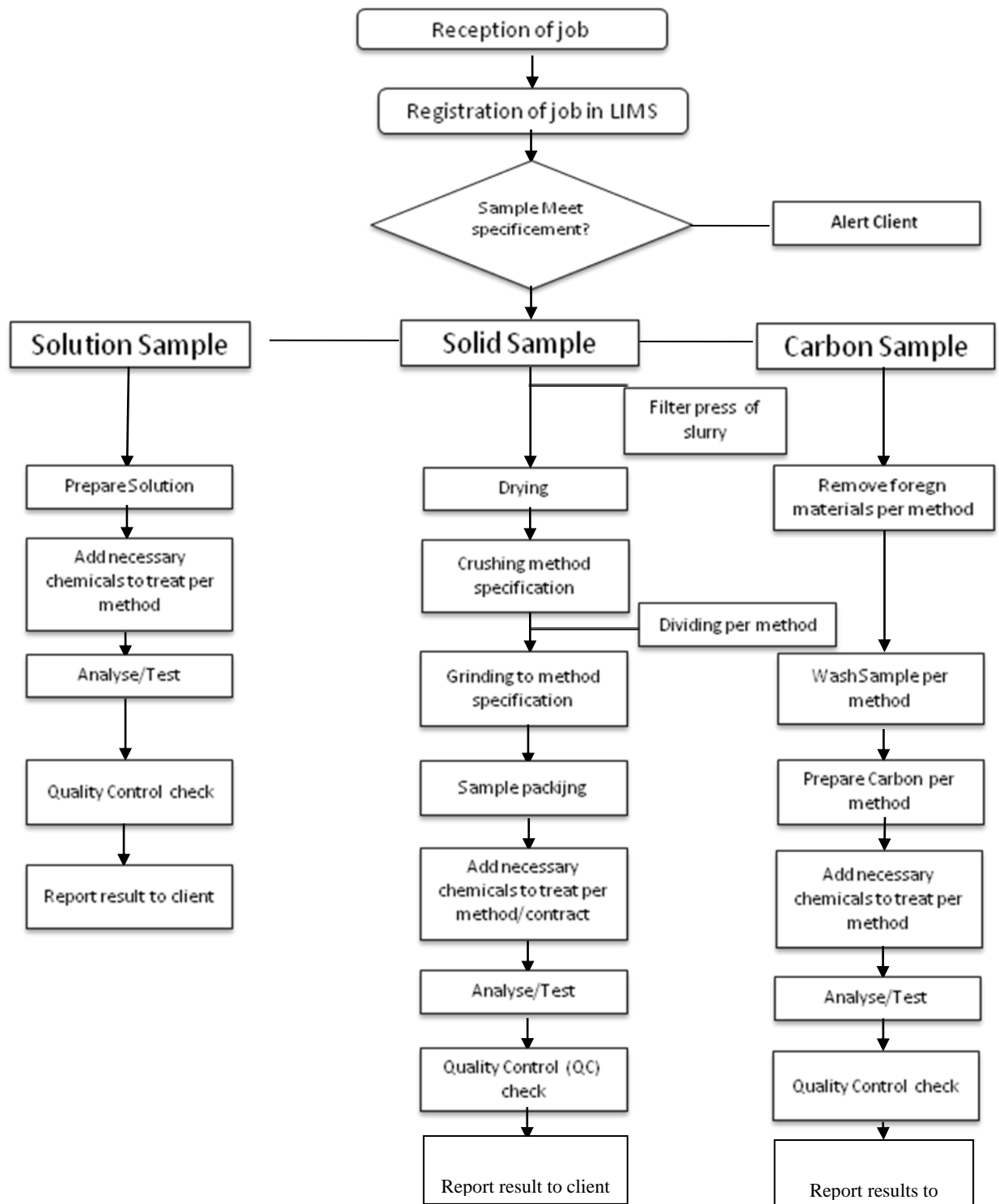
2.9 Mine Laboratory

Figure 1.1
"Mine Lab Process Flowchart"

The process of Mine laboratory testing involved principally three sample types as far as the laboratory operation is concerned. They are solid, solution, and carbon. The process is actually guided by the contract or the method as agreed to, by both parties, thus the laboratory and the Mine, however, in the absence of a contract clearly stating the process or procedure, the methods of the laboratory reigned supreme as a matter preferred choice. Once the client specifies and documents, the client preference is chosen. When that becomes the case, the client bears responsibility for procedural malfunctions or errors that emanates from bad or wrong or inappropriate procedures.

When the samples are submitted usually by the client; except otherwise stated by the contract, they are accompanied by submission sheets which indicated the type of samples, the quantity of samples per submission, identification of samples, and type of test requested by the client and other information about the client, the samples nature and testing required with dates. If the laboratory did otherwise or contrary to what the client requested, the client could decide not to pay for the services rendered and that would ostensibly, be counted as loss to the laboratory and poor customer service to the client, in the case of the study, the Mine. This is because elements such as poor turnaround time and poor production due to the loss time would automatically kick in and to the laboratory, waste of manhours, waste of stock materials, lose of revenue and consequently loss in profitability.

If the quantities were not consistent with the submissions or if any samples were missing, or if any unusual observations were noted, immediate communication was to be sent to the client for rectification, clarification, confirmation, or a recall of the

38

submission. Once, reconciliation was completed, the samples were received by the laboratory. The necessary custodian documentations signed and then the samples were received into the Laboratory Information Management System (LIMS) software of the laboratory, if it had one.

The investigation or testing was carried out if the samples met the specification per agreed by both the lab and the Mine. If it did not meet the specification, clarification, verification, or confirmation was sought from the Mine, once that green light was given by the Mine, the samples were categorized and tested.

If the samples were solution samples, they were prepared per the method specifications, necessary chemicals added, directed at separating or isolating the element of interest for testing. Testing was done, relevant quality control procedures performed on the results and if it passes, resulted were reported to the client. Solutions normally were the simplest and quickest to test, and report. With most of the instrumentation used in reading the testing, the sample form most preferred was the solution.

If it were carbon, after initial steps as solution and solid, impurities were removed and avoided from carbon, carbons were washed, prepared per method or contract stipulations. The necessary chemicals were then added to the carbons to isolate the element the laboratory wanted to test in the carbon. The test was then conducted, quality control and assurance done on the carbon results and then result reported to the client once it passed the quality control and assurance processes.

Carbon was used in most cases by the Mine, and in the case of the case study organization, to extract the element of interest, so the results sent by the laboratory to the

client is significantly pivotal in the controlling and monitoring processes of the Plant. Same as the solution results, and less urgently the solids. So, the priority sequence per rate of turnaround expected of the laboratory is solution, carbons, and solids in that deceasing order in the Mine.

With solid sample, the Plant, Grade control and Exploration samples were of this solid form. A lot of sample volumes of this kind normally came from the Exploration and Mining departments of the Mine. If the solid sample came as slurry, which was usually the case with Plant solids, the sample was filter pressed, to let the water out to gather a cake form of the slurry. The solid was then dried to temperature, until all moisture was taken out of the sample. Solid samples were then crushed to specification, and size test done to ensure the samples passed. The sample was subsequently separated or divided with a sample splitter, and then the solid samples were grinded also to specification and appropriate size particle test done to ensure passing. Samples were enveloped and prepared to be treated either by fire assay, adding chemicals or wet chemistry by addition of acids per method or contract, or by using cyanide or mercury to isolate or separate the element of interest, where relevant testing was conducted to ascertain the percentage or quantities and sometimes quality of the mineral of interest in the samples. After testing is completed, quality control and assurance were done on the samples, and when it passed, results were sent. If it failed any parameter, the process was repeated until quality control and assurance passed. The results reported to the client. All these testing done, aside the sample preparation was to be done in the laboratory software.

2.9 Summary

Review of literature so far, produced a lot of work on leadership theories, mostly, single theories but not on the practical applications of multi-leadership theories in real-world business situations, especially the Mining sector and Mine service provider organizations to be specific. To know theories is great but to know how to apply them or the application of such theories is better.

CHAPTER III: METHODOLOGY

3.1 Overview of the Research Problem

The chapter deals with the methodology adopted for this study. This chapter entails the how, where, when and by whom the research was conducted. This chapter discusses how the research processes were conducted and how progress was recorded and monitored at the various stages of the research and how the objectives were achieved or how the conclusions done in the research were reached. The chapter also discusses the types of data collected and the methods of recording and analyzing the data collected for the study which is also known to be the ethical consideration of the research.

It also elucidates the research design, the population and sample, the purpose of the research and the study approach employed, the various instruments used in the research, and the illustration of how effectiveness the chosen research instruments were in collecting significant data for the study. The methodology chapter concludes with a discussion on the limitations and conclusion. Bearing in mind that researches such as this,

is hardly entirely free of bias, conducted in a controlled environment, hardly done in a systematic pattern as was initially planned by the researcher (Cohen et al., 2007).

The methodology was to ensure that all the factors that contributed to the challenges that culminated into crisis were found, so that they could be solved using the multi-leadership styles approach. Resolution of the crisis was expected to reflect on the Mine's satisfaction survey, thereby, securing the contract for the Laboratory, then turning the negative financial fortunes of the Laboratory around for the better and consequently the Mine's in the process.

In conducting this research, a combination of mainly qualitative (meetings, calls and interviews) and quantitative (customer satisfaction survey) methods would be employed in a case study approach of a Mining service provider, a Mine Laboratory in Africa. The methodology used in this research is an approach developed by the researcher to assist him to gather rich data and information requisite for the study and to achieve the desired outcomes of the research.

3.2 Operationalization of Theoretical Constructs

A pre-study customer satisfaction survey was conducted before the interview, to confirm the lay of the ground. It provided an invaluable source of information with respect to the issues of the Laboratory and the Mine's difficulties with the non-performance of the laboratory. At the same time, giving clues as to what the expectations and evaluation of the Mine were, as far the Contractual performance of the laboratory was concerned.

The post-study customer satisfaction survey gave an indication as to whether the multi-leadership theories application objective of this research was successful, thus, whether the results of the study met the Mine's satisfaction or otherwise, the Mine's dissatisfaction. Normally, under the circumstances of the study, it should culminate into contract security and manifest in the profitability of the Laboratory.

3.3 Research Purpose and Questions

The research as indicated was to first, find out factors that led to the organizational challenges because of wrong or poor leadership in the Case Study organization, resulting in the organizational crisis. Once the factors were known, principally, the Transformational and Servant leadership styles approach would be employed in solving the issues. So that the crisis would be resolved, changes would be well-managed and challenges would be effectively resolved, ensuring that the business turned from negative profitability to consistently, positively and incrementally, profitability throughout the period of study and beyond, and saving millions of US dollars for both the Laboratory and the Mine. The following questions ought to be addressed in this study:

- What are some of the factors or situations that trigger organizational challenges, failures, or successes?
- Could Transformational and Servant leadership tenets be adequate and effective in resolving the organizations issues?

- How multi-leadership principles, methods or approaches are appropriately and practically applied in solving real corporate problems, thereby, contributing to organizational successes and superior business performance?

3.4 Research Design

Research design could be defined as a plan of how one intends to conduct the research (Babbie et el., 2001). It keeps the end results in concentration. The nature of the research was a mixture of largely qualitative and quantitative in the form of Customer Satisfaction Survey (pre-study and post-study). Qualitative data was collected using structured interviews, meetings and calls to those who were off-site, largely the support staff.

According to Morse (2003), the approached employed when a topic is not well-publicized or vague or even when its limitations unquantifiable, quantitative approach is advised. (Morse, 2003). The approach is a mixed methodology in research, although research using both methodologies did exist in the past to a limited extent. (Freeden, 2003; Makanda, 2009). The objective of the method was to find out all the issues both from the Laboratory and client's perspective. Then, principally, the two leadership styles were applied in solving the issues.

Firstly, a meeting was held with the Mine's Contract Manager, from the outcome of the meeting, a customer satisfaction survey (pre-study) of ten (10) questions was drafted and given to the Contract Manager of the Mine to complete. When the questions

44

are many, survey responders would be unwilling or discouraged from answering or doing so effectively.

Secondly, a meeting was held with the staff in group away from their Manager, for them to voice out why they think there was poor performance, hence the crisis and what their issues really were. After that, 10 structured interview questions were conducted for each of them by a neutral person, because some might not be able to voice out before their colleagues for personal or professional reasons.

Thirdly, Opinion or Suggestion box was introduced for staffs who wished to communicate anything that they might be afraid or shy to communicate, to do so in confidence. Just to be sure that no one is left out or no information is missed and to confirm the information gathered through meetings and interviews. To remove the fear, if there be, of any likelihood that someone might divulge the information shared with the Manager or a superior.

Fourthly, calls were placed to support staff whose offices were far off site and at various locations to verify and confirm information received and get their side of issues.

Fifthly, all claims by all contacted to be investigated for veracity. And observations noted.

Sixthly, all observations and findings made were noted, prioritized and action plan drawn to address them.

Seventhly, was application of the multi-leadership principles or styles in solving the problems and observations or results was discussed.

Finally, customer satisfaction survey (post study) was completed by the Mine's Contract Manager.

A comprehensive qualitative research is comprehensive in nature; it could assist in providing reliable information on certain social and psychological phenomenon and furthermore predict future social trends. (Fallon *et al.,* 2006).

Research designs could be categorized into two types: empirical studies and non-empirical studies. Empirical studies imply the study of real-life problems, whereas non-empirical studies involve the study of "entities" in the world (Babbie *et al.*, 2001). Going by this information, this research falls under the empirical type since it has to do with real-life problems and where new data was collected. With the primary data collected by the researcher, he endeavored that all data received were free of bias as much as possible, and useful in answering the research questions adequately.

3.5 Population and Sample

Cohen et al. (2011) defined research sample as a representation of the population or species that is being researched. For the sample, in the spirit of the two leadership styles under study, each willing staff would be interviewed, heard, and allowed to freely express him or herself. Sample size was 60, all the staff. And Mine Contract Manager was 1. The findings were generalized to that group which was well-represented in this research.

3.6 Participant Selection

Participants for the purposes of this research and in the spirit of tenets of Transformational and Servant leadership, all and each of the memebers were considered. The members representing the staff of the Case study organization, who in one way or the other might have contributed to the success or failure of the organization. The staff had first hand information on what transpired in the organization. The participants in the research sample must have the same socio-demographic characteristics as the population (Spitulnik, 1998). The Contract Manager of the Mine would offer us pre-study view and post study feedback via Customer Satisfaction Survey. The Mine Contract Manager was the single main contact as far as the management of the Laboratory contract was concerned and the evaluation of the performance of the Laboratory in terms of satisfying contractual agreement. He was very abreast with the history and happenings of the laboratory.

The research had a 100% sample participation, the enthusiasm was great, which was welcoming to the researcher, indicating that he would get rich data and stakeholder support to complete and accomplish the research aims.

3.7 Instrumentation

The nature of the research was a mixture of largely qualitative and quantitative in the form of Customer Satisfaction Survey (pre-study and post-study). Research was conducted by Interview of all willing memebers of the Case Study Organization, which was preceeded by Meetings with Client and then the staff. Then a Customer Satisfaction

survey (pre-study and post-study) conducted. It was ensured that there were no influences whatsoever in the process.

McNamara (1999) suggested that interviews may be deemed constructive means of research approach as they hold the ability at exploring trends. Interview was used as the main approach in collecting the data, however, meetings, suggestion boxes, surveys and researcher observations were also used for data gathering exercise and the reason is triangulation. Decrop (1999) suggests that the trustworthiness of a qualitative research investigation can be established by implementing key criteria by means of triangulation. Trustworthiness, repeatability, or validity of results is key. Triangulation in the research represents the use of two or more methods to verify whether they generate the same result (Tiainen et al., 2006).

Many forms of triangulation methods have been considered in qualitative research in time past (Tiainen et al., 2006). Triangulation manifest in means, such as the use of different techniques of data, different use of data sources, different data analyses, different frameworks, and different sources to investigate the problem. Triangulation also ensures that objectivity is reached by and large, seeking to eliminate or diminish the possibility of personal as well as procedural bias, and eventually broadening the generalization of the phenomenon under study (Trochim, 2006). It seems quite clear to the researcher that the use of both methodologies was evident mainly in the form of triangulation of data collected; however, the triangulation in this study conducted was hinged around interview process, which is qualitative in nature. The researcher's concern is with the application – what works – and solutions to problems. Like Creswell, the

48

researcher approaches emphasize the research problem and use all possible approaches

available to understand the problem and to find a suitable solution (Creswell, 2009).

Interviews, principally presented the primary means of data, confirmed, and

verified by the meetings, suggestion box feedback, observations, and surveys. The

interview questions were open ended, using rubrics such as:

What is the human resource or personnel issues that you have? Are there any IT or

software challenges that you have? Why are you not committed to your job? Do you

have adequate training for the job you do, and if no, which trainings needs do you have?

Have you identified any stock management issues? Do you have any shortages with

regards to equipment, tool or materials needed for work? Were you inducted, trained and

competence-wise cleared in Safety, Health, and Environment Management? What are the

financial issues that you have relating to your job? Do you have any questions for me? Is

there anything you like me to know?

For the objective of the research to be met, the researcher adopted the participant

observation as it is necessary for the Transformational and Servant leadership, during the

study. Researcher took detailed notes on every observation and finding. This is done in

natural settings (Hossain and Tollefson, 2009). Most of observations under participant

observation cannot be tape or video recorded. The approach, however, could be done

anywhere and everywhere (Babbie et al., 2001; Cohen et al., 2011).

All the instruments used in this research are interrogated and discussed. The

researcher also elaborates on the effectiveness of using these instruments in acquiring the

reliable data required for answering the critical questions that this study poses. There is a

school of thought that the use of mixed methodology (i.e. quantitative and qualitative) would provide a lot of valuable data for the study, from different perceptions and perspectives and would improve the outcomes of the research. The data obtained from the use of one methodology may be supported by the other or may even contrast, resulting in better appreciation of the information or data gathered.

The use of only qualitative method would not suffice in bid of reaching the goals of this research. What makes qualitative research methodology distinct and useful is that, aside allowing triangulation, it provides a means of determining the understanding individuals or groups ascribe to a social or human phenomenon (Aitchison, 2004; Tuckman, 1988). You can triangulate qualitative method with qualitative method or quantitative. One could rarely triangulate quantitative with quantitative but qualitative method. The use of mixed methodology is becoming increasing popular (Makanda, 2009).

All the participants were eager to participant and were eager to see the results of the research purpose, the results, and recommendations and whether it would change their professional lives or expectations. Precipitated by the close-door policy of management, which existed before the study, the mere fact that someone cared to ask and interested in knowing the issues and especially their challenges as staff, made them very open and supportive of the research, they were very welcoming of it and thought was long over-due. At the same time, they had doubts if things could change for the better, and doubted if their situation would change, pre-study.

3.8 Data Collection Procedures

Firstly, clearance was sought from Laboratory, which was the Case study organization, and the Mine under study, a clear and concise description of the study was communicated to the participants and followed up with information and informed consent document. (Appendix B).

Once participants had agreed to take part and sign acceptance. Then they were informed of all necessary interview procedure and if they had any questions or clarifications, they were addressed.

A suitable interview appointment was then scheduled. All 60 staff of the Organization were very willing to participate and the Contract Manager as well. With the inclusion and exclusion criteria communicated to participants, interviews were conducted.

The interview procedure took place in the various participants' personal surroundings (e.g. office environment) away from prying eyes or any fear or influence or wherever he was comfortable with.

On the interview day, the same letter of information and informed consent (Appendix B) was presented to each participant, requiring their signature prior to commencing the interview. Questions relating to their individual issues and issues of the laboratory in the various functions were discussed in about 30 to 45-minute-long face to face interview. These interviews were digitally recorded while ensuring that participant's anonymity and confidentiality throughout the exercise and even after. Recordings and hard copies were kept secure in the possession of the researcher during the study. On

51

completion of the study the recordings were safely stored and locked away for five (5 years) and after set time, safely disposed of. The participants were also entitled to end the interview at any stage they deemed fit, without resulting in any detriment to them in the future. The interview went on smoothly. The data gathered through the structured interview was transcribed into a word documents. The data received from the mixed methodology approach was primary data and was not manipulated.

Same data from two or more participants were registered as one to avoid repetitions and duplications of information. The same principle was used for same information that was gathered in a meeting, interview, or suggestions box, as well as researcher's observations were registered as one. Important information was immediately registered when observations were made.

3.9 Data Analysis

Under this heading, all information gathered mainly from the interviews conducted, meetings held, suggestion box information, and observations made were analyzed by the researcher to triangulate and validate the quantitative data gathered from the surveys and vice versa. The researcher first presents an in-depth analysis of the interviews, and next provides a comprehensive analysis of the researcher's observations.

The triangulation and validation of data was also used to find commonalities in the trends from all the methods used. This provided useful source of information for the researcher to advance and apply the leadership theories and get results.

The information provided clues and cues to the researcher on the root causes and an idea on how to progress and which button to press before the other. Thus, the information provided as a means of response provided the researcher with critical insight into the situation at hand. The researcher used both qualitative and quantitative methods of data analysis.

All the issues, information and data gathered through all the methods and means identified above were noted, divided into functions and sections. The information for the pre-study customer satisfaction survey was also noted and grouped and in the circumstances of this study treated as priority. The satisfaction of the Mine's expectations is paramount in this case. And then we focused on the many issues of the laboratory.

The researcher ensured the anonymity of respondents. The researcher did all he could to eliminate any information that could give the identity of the respondents. This was important, as some respondents opted to divulge information in confidence to the researcher, all that respondent deemed confidential was treated as such concerning the company under study.

3.10 Research Design Limitations

The case study approach of this study suggests that the data that were gathered from the organization under study might not be the same in every organization. However, the application of the two leadership styles or approach might not differ and then the data if collected from multiple firms might present a more diverse base.

3.11 Conclusion

The methodology employed enables the researcher to get to know how the client thought and felt about the performance of the laboratory before this study (pre-study), and the interview gave the researchers the factors that contributed to the unfavorable fate of the laboratory pre-study. That culminated into crisis and negative profitability of the laboratory and the losses of the Mine itself, consequently. Again, the observations made by the researcher, through his investigations and joyful curiosity, enabled the researcher to fill in the gap and provided important clues on the severity of the situation and how best to apply the leadership styles under study, on the challenges identified, to achieve effective business prosperity.

CHAPTER IV: RESULTS

CUSTOMER SATISFACTION SURVEY FEEDBACK: PRE-STUDY

4.1 Research Question One

1- How would you evaluate the leadership performance of the laboratory?

      ①   2   3   4

4.2 Research Question Two

2-How do you evaluate the customer service and professionalism of the laboratory?

      ①   2   3   4

4.3 Research Question Three

3- Rate the Turnaround Time (TAT) of the samples per contract of the laboratory?

      ①   2   3   4

4.4 Research Question Four

4- Evaluate the attainment of contractual production numbers done by the laboratory.

①   2   3   4

4.5 Research Question Five

5- How would you rate the quality control and assurance performance of the laboratory?

    1   ②   3   4

4.6 Research Question Six

6- Evaluate the ability of the laboratory to meet your general contract expectation.

    ①   2   3   4

4.7 Research Question Seven

7- Evaluate the Safety, Health and Environment management performance of the lab?

    ①   2   3   4

4.8 Research Question Eight

8- How effective was the communication lines of the laboratory?

    ①   2   3   4

4.9 Research Question Nine

9- How would you rate housekeeping/cleanliness performance of the laboratory?

    ①   2   3   4

4.10 Research Question Ten

10- Please any issue of concern to you, that you would like me to know about?

According to the contract manager, the laboratory staff was lazy. He thought the laboratory managers were not serious to him. The laboratory top management did not respect the contract and did not care. Although the intervention for the study was noble, it was long overdue and doubted if there would be any positive outcome of the study, and if any at all, could meet the ultimatum or change the client's decision on laboratory contract

termination in two month time. This was the view expressed by all managers connected to the laboratory. The situation of the lab pre-study was hopeless, but he wished the researcher success and pledged his support to researcher and the research.

The laziness perception or opinion of the Mine's Contract manager, an opinion which post-study would turn out to be inaccurate, implying an error due to attribution.

RESEARCH INTERVIEW RESPONSES

4.11 Research Interview Question One

Targeted at extracting HR/Personnel Issues:

1-What are the Human Resources or Personal issues that you have?

The casual staff was working without casual contracts

Some have been doing the same job as casuals for more than four years, when by law it should not exceed 2 years

Some had no medicals, prior to the starting the employment, and the proper recruitment procedures per the organization's policy, were not followed

Some of the casuals do not do their 45 days after their 11 months contract, but are re-engaged, without completing their leave.

Most casuals noted that their contract termination payment was not paid to them

Delays in payments of financial benefits in general

Some casuals noted, they do not do annual medical test like they do for the temporary and permanent staff

Some temporary staff noted they started working before signing their contract; contract might come after if lucky, for some, contract never arrives, and they remain as casuals without contracts

Long bureaucratic processes compounded by internal delays

No annual evaluations done for staff

No production bonus payment to staff

No change in staffs' categories and scales

No risk allowances paid out to staff

Electricity allowance not paid to staff like other sister laboratories

Accommodation allowances not paid out to staff like other sister labs

Night allowances not paid out to staff according to their labor laws

Transport allowances not paid to the staff

Health Insurance not paid out to the temporary and permanent staff

No training of staff. No promotion or career advancement for any staff

4.12 Research Interview Question Two

Targeted at extracting Operation/Production Issues:

2-Why are you not committed to your work as you should? Why are you not able to achieve your production targets? The staff indicated that:

They were not motivated enough, their concerns never addressed although communicated to site management.

Management did not care about them

57

Management disrespected them

Staff views not sought for, neither were staff listened to

It appeared site management could do it, alone, so they allowed site management

to fix it.

The site management blamed staff for every mishap

Staff was the unfortunate causalities for site management frustration

There were under-staffed according to the staff.

Some noted the air supply cut from the Mine, cut in water, electricity and shortage

in fuel supply was an issue that ought to be addressed.

4.13 Research Interview Question Three

Targeted at extracting QC Issues:

3-Do you have adequate training for the job you do? Do you understand the task you

perform?

No, was the unanimous response to this question.

4.14 Research Interview Question Four

Targeted at extracting IT/Lab Software Issues:

4-Are there any IT/Software challenges that you have?

The staff noted they have not had adequate training on the program, why most of

the tests were done outside the program.

Some noted, they were unable to access or log into the software

Frequent virus infections on some of the computers

4.15 Research Interview Question Five

Targeted at extracting Purchasing Issues:

5-Any stock order issues that you would want to bring to my attention?

Local orders that should take a day to 1 week maximum could take up to 9 months

Lab unable to get assistance from sister-labs when in need

Out-of-country orders, which should take 1- 3 months maximum, sometimes take a full year, making stock management difficult.

Stock ordered from within Africa, which should take about a month, could take 6 months before they arrive.

No substantive stock manager, so no inventory controls, just provisions made end of month.

Poor ordering processes resulting in late ordering, poor stock forecast (items and quantities), and wrong items ordered, wrong quantities ordered- higher or lower than requested. Wrong unit of measure in ordering process. Some items ordered were deleted without contacting site management by support staff.

Internally, poor stock order processes, since no proper stock count, correct orders were not made.

No competent stock management, hence duplicated orders were made, rendering the stock heavy in terms of net working capital.

Orders not judiciously follow up with.

The few orders that were followed up with, there were either no response or proper feedback from procurement. No sense of urgency on the stock ordering process by support staff.

Dishonesty in support staff- they communicated they ordered but the laboratory after waiting for several months would realize, they have not placed the order.

Sometimes, when the laboratory order arrives at the head office, it would be given to another laboratory without discussing that with anyone.

Some items of the laboratory when they arrive are transferred to another laboratory without communicating to the laboratory manager who ordered it.

Procurement persons have no clue on the items they are ordering, and they are not bothered.

Prices arrive very late; for instance, items used in 2020's prices could come in 2022.

Procurement procedures are not communicated to the laboratory

Targeted at extracting Stock Issues:

4.16 Research Interview Question Six

6-Do you have any stock material, tool or equipment shortages whilst working?

Sometimes, we have shortages and when machine breaks down client maintenance delays

4.17 Research Interview Question Seven

Targeted at extracting Safety, Health and Environmental Issues:

7- Were you inducted or trained in Safety, Health, and Environment management?

We were inducted by the Mine before we got the ID cards, as batches but no induction in the lab, no training in Safety, Health and Environmental Management ever in the laboratory.

4.18 Research Interview Question Eight

Targeted at extracting Financial and Administration Issues:

8-What are the financial or administration issues you have relating to your job?

Delays in payments for all staff categories

Delays in transfer of petty cash to the laboratory

Financial reports delay

4.19 Research Interview Question Nine

Targeted at extracting Leadership or Management Issues:

9- I assure you of strict confidentiality. Confide in me, I am here to help. Is there anything you would like me to know about the Management and Leadership of this Lab?

Site manager unapproachable, it appeared, he was angry before arriving at work each day

Management not interested in their welfare as staff.

Management never asked for staff's views, suggestions, or opinions.

Some indicated they would use the suggestion box system for this response. All responses in the suggestion box related to site and top management, all summarized under this heading.

Site Manager did not care and was disrespectful of the staff

Aside the start of contract, no HR or top management ever visited site, and none visited site for staff sake or interest.

Manager on site practiced close-door policy on communication and was sometimes, hostile to the staff.

Too many changes in Site managers, and managers, who come on site, were not good managers according to some of the staff.

Micro-management of site management, no training, delegation of duties and they disrespected their intelligence or did not trust their capabilities, and they did not give opportunity for the staff.

Staff not alerted or prepared ahead of changes or lack of training in the respective staff jobs that they performed before changes happen.

Some staff noted lack of strategic planning and leadership in management of the laboratory.

4.20 Research Interview Question Ten

Targeted at extracting any other issues that might escape researcher or get to know what is important to the interviewees:

10- Do you have any questions for me? Is there anything you would like me to know?

No one had ever bothered to ask or know what issues they had, they were grateful. Staff expressed hope that the researcher would help them resolve the issues identified. From site management, they bemoaned lack of support from the site staff and support staff, poor conditions of service, specifically, more money, incompetent staff, nepotism from the side of top management at the head office, undermining of the laboratory manager, some top management supports some indiscipline of some staff, remote managers and staff have no regards for hierarchy, lack of commitment from staff, too much absenteeism, permissions, lateness and frequent sick leaves of staff. And the crisis changed nothing within the support staff and laboratory staff.

4.21 Customer Satisfaction Survey (Post-study)

Overall Rating 3.9/4

Please select the corresponding number below

1Poor   4Excellent

1- How would you evaluate the leadership performance of the laboratory?

1   2   3   ④

2-How do you evaluate the customer service and professionalism of the laboratory?

1   2   ③   4

3- Rate the Turn Around Time (TAT) of the samples per contract of the laboratory?

1   2   3   ④

4-Evaluate the attainment of contractual production numbers done by the laboratory.

1   2   3   ④

5-How would rate the quality control and assurance performance of the laboratory?

       1   2   3   ④

6-Evaluate the ability of the laboratory to meet your general contract expectation.

       1   2   3   ④

7-Evaluate the Safety, Health and Environment management performance of the lab?

       1   2   ③   4

8-How effective was the communication lines of the laboratory?

       1   2   3   ④

9-How would you rate housekeeping performance of the laboratory?

       1   2   3   ④

10-Please any issue of concern to you, that you would like me to know about?

The client noted, customer service and professionalism and Safety Health and Environmental Management (SHE) were very good, they could not advise on any new innovations, ideas or expectations, but they were aspects that always required continuous improvements hence they could not rate it 4, hence the very good assessment, more like a 3.5, which was not part of the options. Aside that, considering the crisis and poor state of the laboratory prior to the study, the overall rating of 3.9 out of 4.0 was befitting of the assessment and fair, reflective of reality and appropriate in the client's view. They encouraged the laboratory to even improve and sustain, this amazing feat of the laboratory.

4.22 Summary of Findings

Under the pre-study survey, all but the Quality control and assurance question received 1 out of 4 on average for rating of the ten questions asked of the Client's contract manager. Quality control and assurance received rating of 2. If there were options for lower rating than 1, it would not come as a surprise that the client would have rated the laboratory lower than it did. From housekeeping, SHE Management, production numbers, turnaround time, customer service and professionalism and leadership performance of the laboratory. The ability of the laboratory to meet contractual expectation and communication were asked of the client to evaluate.

This rating suggested a lab in trouble and for the case study, the client was direct with the researcher before start, that the laboratory was in crisis and had ultimatum already communicated to the laboratory.

With regards to the interview, the responses showed there were a lot of issues unresolved by the laboratory management. The client was discontentment with the laboratory. There was frustration, anger, discouragement, and disappointment in a tensely charged environment of the laboratory. Top management of the laboratory was shocked and unhappy, the staff management was very sad, the staff angry, disappointment and discouraged. The client noted its disapproval and listed its grievances, which was unattended to by the laboratory, hence causing the crisis of the laboratory.

Most of the issues bordered on human resource and personnel issues and stock and procurement challenges. The lack of commitment of the staff was due to poor leadership as noted, through poor communication, lack of interest and care in the welfare of the staff. This resulted in the crisis and the poor financial performance of the

laboratory. Lack of effective leadership adversely affected the morale and commitment of the laboratory staff. The communication breakdown worsened the already bad situation, intensified, and perpetuated the bad work culture that culminated into the crisis and poor financial situation of the laboratory.

Post-study customer satisfaction survey saw the client evaluating the laboratory excellently, as an overall performance. In the exception of the customer service performance and SHE management, which required continuous improvement and hence their decision to rate the two topics as very good. They had no reservations or additional piece of ideas or advice for the laboratory. The client was very happy and extremely satisfied with the laboratory performances. It was an evaluation of the effectiveness of the application of transformational and servant leadership principles.

4.23 Conclusion

Per the pre-study evaluation of the laboratory by the client, it was evident that the Mine was very dissatisfied with the laboratory's inability to execute the contractual provisions that fell within the purview of the laboratory. The client as noted intended to take the laboratory contract from the case study organization to one of its competitors. The client expressed doubt that the laboratory would recover from the crisis and meet the two-month deadline or ultimatum given to the laboratory, to fix the situation or lose the contract.

Per the interview responses it was clear the laboratory had a lot of issues at various levels and functions of the laboratory. The lack of commitment of the laboratory

staff was because of lack of effective leadership, which triggered poor turnaround time, poor production and poor-quality control and assurance. These were the three key issues of the Mine, but to the laboratory, the human resources or personnel and stock issues were pre-dominant of all the myriad of issues noted by the staff.

It was evident that there was a serious leadership crisis and that to solve the crisis of leadership of the laboratory, effective leadership was required, and multi-leadership style application of transformational and servant leadership, was timely.

Per the post-study, customer service survey evaluation, it was evident that the multi-leadership principles of the transformational and servant leadership application, worked. It was effective in lifting the laboratory from crisis to business excellence. The contract was no more abrogated, but its duration extended, and scope increased. The client admitted trying out the multi-leadership style approach in solving their internal challenges, which was an endorsement of the effectiveness of the application of the multi-leadership style approach in solving the organizational problems.

CHAPTER V: DISCUSSION

PRE-STUDY CUSTOMER SATISFACTION SURVEY

5.1 Discussion of Results

After meeting with the Mine's contract manager, the staff was met and after listening to all their grievances, taking notes, and making appropriate observations, the staff grievances were summed up for confirmation by the staff. Each item on the list created out of staff concerns, and from the discussions with the Mine's contract manager,

the researcher asked if any concerns were left out and all the staff were satisfied that all their concerns were duly noted and registered, which was an indication that they were effectively being paid attention to.

It was imperative to note that the staff was very pleased that someone was interested in their plight for the very first time in the organization. This was clearly one big win for the appropriate leadership approach, and benefit derived from what listening does to staff and their relationship with leadership of organization. They felt relieved due to the cathartic effect by they expressing what worries them and has been disturbing their happiness or peace of mind for a long time. They expressed profound gratitude to the researcher and expressed hope that a change was on its way for the better or the best.

It was also observed that this produced healing amongst the staff and the beginning of building a community, team and organizational family of harmony and synergy just by that approach.

Listening also creates a relationship of trust and an endearment for the leader and confidence in how genuine the leader was. A relationship of trust between staff and managers begins with communication and most of all great listening skills and being able to reproduce what the staff said in words and responsive actions.

The researcher was taking notes and repeating what was said to be sure he got what they were talking about. This act produced rapport necessary for a future effective working relationship between the researcher and the staff. It produced inspirational motivation within the staff, then tension, anger and frustration were replaced with hope, calm and willingness to act.

The staff saw the willingness and sincerity of the researcher to achieve something significant consistent with the stewardship of a leader, a tenet of the leadership under study. And the genesis of an ideal influence was noted, because from the eyes and body language the staff was ready to follow directions given, they were ready to support and cooperate with the researcher to turn around the fortunes of the company for the best.

The next was that, the issues of the laboratory and the Mine via the Contract manager, was communicated to the staff. It was made clear to them that the laboratory was not respecting the contractual obligations, and as a result, the laboratory would be kicked out in two months if the nonperformance persisted. The issues principally involved poor turnaround time of samples submitted to the laboratory, poor production numbers which was about 70% lower than the contractual agreement and poor-quality performance. The effect of this situation on the Laboratory was communicated to them and the effects on the Mine's operations were enumerated to the staff as well.

They were asked if they wanted to be kicked out of the site for poor laboratory performance. There was no guarantee that the new laboratory would work with staff who contributed to the failure of a laboratory, based on history and experience from the region, they might be at a disadvantage if that should happen. In the few instances, where some staff from an outgoing laboratory was used by new or incoming laboratory, there were strong recommendations from the outgoing lab for some good workers. There was no guarantee that the staff's conditions of service would be better if the contract was indeed taken from the existing laboratory and given to a new contractor.

Evidence from the very Mine, suggested that when a new company took over, the conditions of service of the in-coming company was poorer than the outgoing company. And there is the adage that, the devil you know is better than the angel you do not know. Researcher added another adage, which goes like, a bird in hand is worth more than a thousand in the forest. The use of adages and proverbs by the researcher in communication with the staff was deliberate. Adages and proverbs sunk deeper due to the setting and the culture of the laboratory's staff. They appreciated adages more and drew wisdom from such, and they extended some great respect and endearment to the researcher, seeing him as one them.

 The researcher continued that their employers, he believed, had realized their errors and blunders and were prepared to make amends and that was more reassuring, compared to, a new laboratory, which do not know the history of the place. If there was a new laboratory, they might value their services and contributions lesser, and might not addressed their issues with the sense of urgency, that was required. This produced intellectual stimulation that was necessary for the revival of the staff 's willingness to act decisively before the contract was lost. Idealized and superior influence were manifest in that moment.

The researcher continued, if they worked to secure the contract, increase productivity, revenue and thence profit, he, with the support of staff and management of the laboratory, could then negotiate for better deals for them but as it stood then, with negative productivity of -75%, there was no justification for negotiation for an increase in

remuneration. Foresight was used here. At the same time modeling the way towards the future and inspiring a shared vision for all the staff.

The researcher apologized on behalf of the organization for their negligence, insensitivity and admitted that on several aspects which would be discussed with them, the staff had valid and legitimate case. It was within their legal rights for most of the sentiments expressed to be addressed and that would be taken up seriously and addressed.

Those issues that required urgent attention would be given, those that required medium level attention, would get medium level attention and those that had strategic implications would be dealt with strategically. This suggested to the staff that the leader was empathetic, humble, respectful of the staff and very honest and that, the staff could trust him, thus, building trust and awesome relationship between management and the staff.

The researcher reminded the staff that, if the new laboratory took over, it was unlikely, it was going to pay them back for all the years of the unfair treatment, but the present company could, and very likely might, if they worked hard to change the poor state of affairs of the laboratory. Besides, the staff had kept the faith and served the laboratory, despite all that frustration till now, suffered enough, they might as well, give their all. When situations improved, they could not be left out, the laboratory would most likely remember their efforts and contributions. Encourage the heart approach was used, together with sharing an inspired vision, enabling others to act, intellectual stimulation, idealized influence, inspirational motivation, persuasion, building a community of dedicated staff, fired up for positive action, healing and empathy.

The researcher thanked them on behalf of the Lab Management for their

dedication and keeping faith with the organization throughout all these months and years.

The laboratory did not look good, but they played their part, although demoralized and

demotivated, which was understandable. They were praised for not holding any strikes

that could have further destabilized the already bad situation, degenerating into worst and

perhaps, unacceptable levels.

This approach was very encouraging to the heart of the staff. It demonstrated

empathy, honesty, respect for staff. It meant the researcher listens to them. Leadership

tenets such as inspirational motivation, building a community, idealized influence,

persuasion and enabling others to act tenets of leadership were employed.

The researcher demonstrated that he listened to them, and empathized with their

plight, with utmost sincerity, courage, and humility, to admit and concede, what needed

to have been admitted and conceded by the management. Indeed, some of what happened

to the staff and some of the treatments were blatantly unlawful and an abuse of their labor

rights. Idealized influence was in full force by these words. Persuasion, foresight was

employed. And a future was conceptualized that the staff could envisage and imagine.

The method of information or data gathering took the form of group staff meeting,

which was the foundation for a community building and the basis for a future team

building, at the same time, made intellectual stimulation efforts effective and easier. All

were present and heard and not a situation where someone may maliciously misrepresent

the researcher's presentation. The discussions with the Contract manager of the Mine and

the Mine's expectations seemed new to the staff because such information was earlier treated as secrets.

The staff never knew they were in crisis or appreciated how severe it was but noticed the frustration of both the Lab management and Mine management were growing thicker and stronger by the day. The staff could deduce or suspect there were issues, from the frustration and tension all around that culminated into the staff being shouted at and being disrespected by some of the management team on site, thereby managing the pressure and stress from the Mine very poorly. The staff received such situation quite poorly, further making the strained relationship between and staff and lab leadership worse.

The researcher also made the staff know that with the support of the staff, even worse laboratory states had turned better, in the region, and the researcher noted that they were very intelligent and were capable of turning the lab to a success. A combination of the intellectual stimulation and persuasive skills was employed at that instance. This also challenged them to act.

Each of the items of the listed was discussed with the staff, nothing hidden from them because if a leader was going to get the support he requires from the staff, that leader must be opened with the staff. Secondly, the staff needed to appreciate the weight of the situation and hence embrace the urgency of the times that came with such situations. This to the staff was respect that they never had during the lifetime of the laboratory, according to the staff, and they were very appreciative and welcoming of the leadership of the researcher.

It was noted that until the meeting, the staff had no idea that the lab was making huge negatives. So, it was not just the crisis, the lab was poorly performing in all areas of management which was an eye opener for the staff. They apologized to the researcher for the bad state he found the lab and promised they would cooperate and do all they could to redeem the laboratory from crisis and poor performances. They thanked the researcher for his honesty, listening skills and great communication skills and oratory. The empathy expressed was overwhelmingly surprising to the staff. The researcher took all the staff along, they admitted this and were ready to follow the lead of the researcher.

Everyone is unique and hence the approach of interviewing them individually to get their opinions and expectations. It boosted their morale, showed respect to their individuality and hence their individual consideration. It formed the basis of the cordial relationship between the leader and staff body. The cathartic effect was more effective, one-on-one rapport established; you could look into their eyes and body language closely to decode that which was not communicated verbally. People see differently, sometimes, hear differently, understand differently, and remembers differently, the individualistic treatment afforded the researcher the opportunity to ensure that all the staff and the leader were on the same page. It also made pertinent negative natural.

In addition, the suggestion box was used to welcome divergent thoughts and ideas from the staff that were not willing to express themselves before their colleagues and divulge information they deemed confidential. They appreciated the fact that the researcher was doing all possible to listen to everyone, including those who were shy or afraid to do so in public. This decision intensified the staff's trust for the researcher.

The researcher asked for what the staff needed to perform their respective tasks with excellence, aside what they had already communicated to the researcher. What they needed to move into action to fix the situation, the researcher encouraged them to ask questions based on all what has been discussed. He asked them for their unflinching support as he endeavors to fix the situation together with them. The researcher admitted to the staff, he could not do it alone, but he would all the staff, fostering teamwork and harmony, building a community of dedicated staff, assuring them of his stewardship and inspiring same in the staff, producing intellectual stimulation same time.

The leader reminded the staff that he does not know it all. There was always something new to learn. There are two sides to a coin, and both must be considered in making a very fair and balance decision. Somebody might have the answers he might be looking for. He can't do it all, he needed everyone on board. He would also not always be available to be doing what he does, so he needed to train others. There was beauty and strength in people's uniqueness.

He needed to concentrate on what matters most and leave routine works for people hired for that, which would help them and manager in identifying pertinent negative. No idea was stupid and there was something beneficial to learn from everyone and in every situation. This demonstrated awareness of the researcher as a leader and his humility to admit his limitations. It indicated his leadership intention and somehow, the summary of his approach. Those were what underpinned the leadership principles the researcher held and used in resolving varying and challenging situations throughout his career. The commitment to staff growth was also discussed with the staff. The leader or

researcher in this stance was aware of his capabilities and weakness on this journey. The staff saw that as humble of the researcher and the staff was poised for action.

Crisis generally comes because of poor, absent, lack or inadequate effective leadership, appropriate to the situation, time, environment, or people, whether corporate, societal, or personal. Factors that generally trigger crisis include change manifesting in the form of change in leadership, leaders, staff, policies, procedures, processes, methods or introduction of technology or innovation, tools, equipment, change in contract, lack of training, not getting right people for the right positions, increase in contract scope, increase or decrease in production, change in condition of service or lack of it, facility transfer, facility expansion, execution of new contract, poor hand-over of leadership, lack of support from support staff or employees, sabotage, poor relief management or replacement and more. The case study laboratory unfortunately had a healthy mix of most of the above mentioned.

5.2 Discussion of Research Question One

1- How would you evaluate the leadership performance of the laboratory?

        ①   2   3   4

From the survey, leadership performance of the laboratory was rated poor according to the Mine. Leadership which like all organizations and human institutions, is key to the success of the organization. Leadership was clearly missing and per literature review, the consequences of lack of proper leadership or poor leadership are consistent with the crisis and level of poor performance of the laboratory under study. The effect of

improper or poor leadership was evident in this organization before the study and this was rightly noted by the client.

The entire problem as well as the root of the problems in the laboratory was lack or absence of proper leadership in the laboratory. There was lack in the influence requisite for change and at a point the leadership of the laboratory unfortunately, had no followers. A phenomenon that was very predictable in such cases. Communication, which was the life blood of proper leadership, was neglected. Effective leadership was absent, resulting in a disconnection between the staff and followers, which became obvious to the client.

Poor leadership was at the root of the crisis and poor performance. Leadership was not proactive in its dealings with the Mine as well as the staff. Leadership also did not show care, genuine concern for the staff and their contract obligation with the client. This resulted in frustration and discontentment of the staff. This lack of appropriate leadership also created tension, anger, and bitterness in most of the staff especially the older staff. There was no empathy from management for the staff and their conditions of service and situation.

Lack of proper leadership precipitated the lack of support from the support staff, the laboratory staff, from the staff to the management of the organization and then from the management of the laboratory and the client. Again, there was communication break down between the staff and management, management, and support staff in remote places and then the management and the Mine.

There was closed door policy by site management and the reason for that posture was that, they, like the staff, were frustrated with upper management due to what was deemed poor conditions of service. Without good leadership, leaders or managers might never get the full commitment of the staff, there would potentially be chaos and worker disaffection would be inevitable and then, staff commitment absent. Lack of adequate training compounded the problem.

Lack of leadership resulted in lack of concern for staff, lack of support from top management and remote support staff. Teamwork was absent. No cohesion or staff synergy and work harmony. The lack of proper handling of these issues as reported by the staff, indeed, caused amongst many others, as already noted, frustration for the staff. Of course, the lack of concern for the staff would naturally result in poor conditions of service of the staff.

Leadership Approach to Solving Research Question One

The manager was asked to communicate to top management about his concerns. He was asked if he had communicated his concerns to top management, he answered in the negative but added that top management must know about his plight. He was advised to communicate to his superior and Human Resource Manager. He was reminded that if did not communicate his needs or concerns, he could not be assisted. He then did, was promised that they would investigate his situation.

The manager was reminded that his work and very job security was at stake, if they lost the contract, he might be out of job, so if he would not do his job, because he is

78

unhappy or frustrated, then he resigns, however, he ought to have communicated first and exhausted all avenues of redress via every communication links and channels available to him. If he did not communicate to top management, they might not know what his issues were and could not help if they could.

The managers were reminded that he signed and accepted the conditions he was complaining about. He could have voiced out his misgivings before signing his contract, once he signed, he needed to deliver on the stipulation and responsibility of the contract. As the representative of the company to clients and stakeholders, especially on the Mine, he needed to have been a self-motivator and an effective communicator.

The site managers were given training on all the areas that suggested technical and managerial weaknesses. He needed not to have vented his frustration on the staff. Quite aside that, he clearly lacked the right leadership skills on how to manage the staff and he was not technically capable for the size, scope, and pressure at hand. He had challenges with the management of conflicts. He was advised to have raised red flags and sought assistance when he needed one. Site management staff also bemoaned that some senior staff at the head office undermined their authority, this was rightly observed but the site manager was asked what he did about it and he said nothing.

The management team on site seemed scared and wanted to play it safe, so they do not incur the wrath of some superiors at the head office. The situation did not help crisis, it deepened it. It bred indiscipline amongst some staff. This was taken up and discussed with the top management by the researcher during the conference call discussions, he enumerated the disadvantages in such situations and the repercussions

involved in such behaviors, and advised those who were involved in that behaviour, to desist from that since that had dire consequences on operations of the laboratory and its performance.

All should endeavor to respect the hierarchy. That undermining behavior had the potential of enlarging the gap in communication, creating an atmosphere of indiscipline and a disintegrated environment, culminating into a lot of problems for site management. Indeed, this was discussed in a conference call with all support and business managers, who were involved with the coordination of the laboratory.

The issue of lack of support was also discussed broadly and deeply with the entire support team and each was reminded of their role and what was expected of them. And if there were any misunderstandings, the opportunity was given for clarifications. The meeting was done is an open, friendly, and professional manner, moderated by the researcher.

Open door communication policy was effectively instituted by the researcher and the staff took good advantage of it. What was observed was that, when manager did not communicate to the staff or followers, and the doors of communication were closed to them, they found solace in undermining the Manager both to the client and the support staff, which should not have been the case. Again, it made the staff become suspicious and began pestering the manager, so finally, he closed the door, entirely to avoid misrepresentations and what he termed, malicious behaviors of some of the staff.

What was observed was that, if you opened the doors of communication to the staff very wide, after the initial rush, calm would prevail soon after, they would, mostly

not be a nuisance to the leader. Bring up conversations with the staff. It is not just work related conversations, if you wish, but if possible and allowed, seek to know how their families are, how they find their work, their health and other subjects that would suggest that you really cared about their welfare. The leader should do this genuinely.

Listening is a great skill as a leader, we have one mouth and two ears, suggesting we are to speak half as much as we hear. Active listening would suggest empathy, healing on several levels for the staff wellbeing. This would go a long way to enable the staff to act.

On the lack of support for the site management a conference call was scheduled with all support managers, such as Human Resource, Procurement and Logistics, IT, Finance, the Operations Manager and Managing director, where all the concerns of the staff and the client were discussed. Each of the parts that the individual played was communicated to all, noted and solutions invited from the parties concerned. This was preceded by calls to individual support staff to verify the claims by the laboratory.

The urgency of the situation was communicated to them. Some of the support managers were surprisingly not away of the crisis that the laboratory was in. That indicated the lack of communication and the lack of connect between the lab and the support staff. This gap was bridged by the conference call communications, when the call was over, emails was sent as reminders, action plans distributed to those concerned as per the meeting outcome.

The researcher showed empathy, care, and genuine concern for the staff. The researcher was involved at every stage of the change. He communicated with the staff

and the manager was present, witnessed and saw the response from the staff. Training was organized for the staff, which included effective communication.

Supervisors and leading hands were identified, with the assistance of the staff and appropriate training program organized for them. In the bid to empower the staff, decentralization was employed in performance of certain tasks, hitherto this study, were performed by one person. For this study, at least two staff on each shift were trained and equipped to perform those tasks. When those trained gained mastery, they trained the others, themselves.

Workplace and task organization training were organized for all the staff. These formed part of the measures put in place to solve the leadership crisis at the laboratory. The leadership approaches employed in solving this issue were challenging the process, enabling others to act, modeling the way to go in resolving the issues, encouraging the heart of staff to act and do more, inspiring shared vision, enabling the staff to act. At the same time, there was individual consideration, building a community, committing to the growth of the staff, conceptualizing the future and foresight, whilst identifying the leader's limitations.

5.3 Discussion of Research Question Two

2-How do you evaluate the customer service and professionalism of the laboratory?

①   2   3   4

This was also rated poor. From the client perspective, customer service by the laboratory did not meet the contractual agreement. To the client, there was no sense of urgency on the side of the laboratory to meet these targets. The frequent changes of site

managers did not help or solve the issues, not to the Mine or the Laboratory. Several of the Mine's communication to some top management staff of the laboratory during the crisis, ostensibly fell on deaf ears. The client did not notice any seriousness, whatsoever and were poised to get the laboratory off site, by abrogating the contract and giving it to a competitor laboratory, as a result of poor performances, something the findings of the research confirmed.

Again, there was no proper communication from site management and compounded by that was the indifference from the laboratory's top management with respect to the need of the client and the demands of the contractual stipulations. The challenges were well known to all but to the client, the commitment of the laboratory management to solving this, left much to be desired. Three managers were sent out of site mainly because of frustration out of this contractual non-compliance, in a space of nine months. But no credible change was observed by the client consequently.

Maintenance needs and down times such as air supply cut, equipment breakdown, delays in fueling and power outages were not communicated to the client in time although it fell within the purview of the Mine to fix these things. They have direct adverse repercussions on production and workflow of the laboratory, however, there was no much record kept by the case study laboratory, these happened, they were genuine concerns but ostensibly, not the major cause of the about 70% less in production as the case was, before the study.

Turnaround time of the samples were poor, quality control and assurance targets were not met and then the production figures far from the best, although they have

enough samples produced and submitted to the lab, far and above the contractual

obligations. The client in a meeting was asked to prioritize of their issues with the

laboratory in order of urgency. The contract manager noted turnaround time, production,

and quality in that respective order.

Turnaround time was very important for both the Plant and Mining projects as

well as Mineral exploration. It helped the client to make timely decisions to either save

minerals from lost or increase mineral recovery, hence increased revenue via increased

productivity for all departments concerned.

Production was very crucial especially for Mining and Exploration for similar

reasons as noted above, because they sample in large volumes to make a good and quick

decision. And quality was the main reason they settled on the laboratory as a client. It

was a key consideration.

All the mineral departments noted above need great quality control and assurance,

least, production and turnaround time would be meaningless and useless, a waste of time

and indeed a waste of all the resources involved in the production and process cycle.

Although to the researcher, quality control should have been the most pressing, followed

by the turnaround time and production in that order. It only indicated that quality was not

good, it was not as bad as the targets for turnaround time and production, not being met.

The satisfaction survey rating gave the researcher that essential clue. The three, however,

were tackled together, as most are intertwined and there was no time to waste.

When more scopes were added, it was very urgent ad critical, because it suggested

the mine had issues and wanted solutions urgently. The Mine needed the laboratory

results to trouble-shoot, confirm an observation or trend, and mostly that became part of the mainstream analysis. Although they were not part of the main contract from the beginning, the Mine was ready to assist the laboratory in any way possible to ensure the laboratory succeeded.

According to the Contract manager of the Mine, the success of the laboratory was directly linked to the smooth running and prosperity of the Mine as a whole. When the scope was increased and requests were made, there was no communication whatsoever from the laboratory, communicating to the client any reason, limitation or bottleneck resulting in the nonperformance of the laboratory. The laboratory did not communicate whether they could perform the analysis or not, or whether they were facing any roadblocks against results delivery. This still brought the focus back to communication issue and lack of professionalism.

The frustration and sometimes, the anger, from some individuals of the Mine, caused enormous pressure on the site laboratory management and at a point the site management push back the pressure with more frustrating and generally negative and counterproductive actions. And that effect trickled down to the staff, making the staff also very frustrated, angry, and tensed. This culminated into strained relationships between the site management and the staff, and then the site management and client, precipitating into unprofessional conduct, from the laboratory management and staff and the Mine staff as well. The Mine and Lab sides were in a tensed and charged atmosphere of discontentment. At a point the client gave up and sought legal means of redressing the issues.

The laboratory was given less than two months ultimatum, for the laboratory to

perform else, the laboratory loses the contract, this was pre-study. The lab was

functioning at about 30% of what they were supposed to do per the contractual

agreement. And for a Service provider organization whose existence, function, and

reputation hinges on integrity of its results reported, the situation was concerning.

Turnaround time when it delays could lead to loses of Minerals because they would not

be able to decide in time to put in measures to save minerals, without laboratory results.

Production is also a major problem because time is of the essence to Mining and

Exploration departments of the Mine. The investors require the results to help them make

informed investment decision. The Mining concession has an expiring date, and all data

needed to have been collected for evaluation, as to whether, they could Mine or not,

continue exploring or not, where to Mine, which method to employ in mining and what

resources would be needed, amongst many other parameters, coming from the results

from the Mine laboratory. That is how crucial the role of the laboratory was in the

scheme of the Mine's operation.

The contract was to guide both parties that signed to execute what was stipulated

in it. It was legally binding but practically and operation-wise, they were short falls, from

both sides, the Mine, and the laboratory. The Mine appreciated that fact, because there

were times that they could not foresee some of the needs that may evolve in the future.

From experience, the customer service provider must be flexible, opened to short

noticed changes because the main objective of a customer service is to serve the client

and make the client happy, so that the client could make re-purchases or multiple buys or

even recommended to you other customers, based on your great service. Again, a smart customer service provider would welcome the opportunity at satisfying all clients's needs, however and whenever possible to gain more and that was the case with the increase in scope. The Mine per the confabulation with the Contract manager was prepared in any way to assist the laboratory in the execution of its contractual obligations.

Leadership Approach to Solving Research Question Two

The laboratory leader was encouraged to read the contract, at least the responsibilities of the client and the laboratory. This was not done pre-study. This would have given the leader a fair knowledge or idea about the obligations of both the client and laboratory and this would have informed him on what to do and the best approach to adopt in case of any situation. It would have guided him during communications with the client. The contract is useful guide in such circumstances. This assisted in modeling the way for the progress of the lab and the execution of the contract. This also enhanced the awareness of the leader, to know limits that were imposed on him even by the contract.

The information gathered from the Mine's contract manager was discussed with the staff. And each of the elements he raised was discussed and ideas were sought from the staff. The why, how, what, which, where and when as applicable were asked the staff with regards to the information received from the Mine. This approach boosted the morale of the staff, it communicated respect for the staff, they interpreted that the leader respected them enough to inform them about the entire situation, took them along every step, and sought their opinions on what to do or how best to approach the challenges

discussed. This was geared towards inspiring a shared vision, enabling them to act, encouraging their heart as well as modeling the way to go as far as the objectives of the laboratory were concerned. It also showed the staff that the leader listened and respected their views.

It helped all to know their limitations, therefore, creating awareness for all the staff and laboratory leadership. This also helped in building a dedicated laboratory community with strong team building spirit. It helped the leader to observe the issues from a broader perspective and not a key-hole view of things. Indeed, all the advantages of pertinent negative were realized.

Dismissing managers by either the Mine or Laboratory was hardly the best or a solution. Evidence was that after all those dismissals, the crisis persisted and deepened. Investigations were to have been conducted to find out the root causes and solve the issues together, prepared or trained whoever required to be trained and guided, to fix the problem. Investment not done into leadership training as noted especially in the Mining industry is a big culprit to this corporate canker. The consequences of such positions and corporate behaviors were the crisis the laboratory under study, and of course, the poor performance of the laboratory in terms of profitability. For such reasons, this study conducted, and it could not have been timelier.

From the beginning although one could observe the anger, tension, and frustration of the client, it died out once they realize a solid action or commitment by the laboratory was on its way. It was the lack of commitment on the part of the laboratory, according to

the client, that made them count the laboratory out, they were willing to assist and assist, they did.

Proactive behaviors on the part of the laboratory and creativity were employed, and effective communication with the client, aided immensely in the restoration of the strained relationship between the two parties. The relationship between the site management and Mine contacts started improving significantly. The issues created an organizational conflict, but with right approach in the conflict management and effective communication, the tension and anger disappeared.

Supervision was enforced. Appropriate training needs were identified, and adequate training organized for the staff. They were taught essential leadership skills and the staff were very grateful and charged for positive action. Leadership skills were encouraged in all the staff. This approach challenged the process of the laboratory, helped in modeling the way, this showed respect for the staff's abilities and talents, inspiring a shared vision in the course of these actions, thereby encouraging the heart to be dedicated to the course of change, enabling the staff to act, building a united community, and demonstrated the leader's commitment to the growth of the staff.

Whenever one intellectually stimulates the staff as a leader, the staff would go to every length to prove to the leader that they are more intelligent and capable than the leader could imagine. Mistakes should be expected at the beginning, which was normal but with mastery comes creativity, and high-level creativity demonstrated by the staff was unbelievable. When that happened, excellence is inevitable.

When the client requested for scope increase or new test analysis, the lab leader sought for clarification from the client. Once the clarification was done, the lab leader or manager requested for method or procedure from the group, since the laboratory was an international, multi-national, reputable company, there were adequately relevant contacts for that, whilst informing the Operations manager about it.

In the procedures and methods of the laboratory and in agreement with the Mine, or as the contract stipulated, were the materials, tools and equipment required to perform the test. Then the site leader listed what was required to perform the test, and then checked if they were available or not, if the laboratory could perform it or not, if the laboratory had staff strength for that and any other resources required to perform the test. And then that was communicated to the client. If for any reason the test was unable to be performed by the laboratory, the laboratory leader was to communicate same to the client and add reasons as to why it cannot be done. Ask if the client could assist, try to be specific in the manner they could be of assistance. This improved the communication between the laboratory and the Mine greatly. It started creating a harmonious relationship between the laboratory and all the lab analysis stakeholders.

The Mine was indeed ready and willing to assist as the Contract manager earlier indicated. This approached showed honesty and openness of the laboratory and the laboratory's management enthusiasm at satisfying the client.

All the analytical requests the Mine made to the laboratory, was possible and the laboratory was capable to perform the test. So, trials were conducted, and same time, training was organized for the staff involved. This gave the leader an idea of the future,

90

which employed foresight and conceptualization of the future. Clearance was sought

from the top manager in charge of that with respect to his approval and price quotation

communications, the procedures and contract specifications were followed to the latter.

The laboratory manager involved the superiors, especially the direct report who worked

remotely, off the Mine site.

5.4 Discussion of Research Question Three

3- Rate the Turnaround Time (TAT) of the samples per contract of the laboratory?

          ①   2   3   4

Turnaround time challenge for the client was the most pressing and yet, was most

disregarded by the Case study organization. As mentioned, the client needed the results

reported in time to make several critical and urgent decisions that had huge operational

and financial consequences for all stakeholders of the Mine; both directly and indirectly.

They needed the results in a timely manner to measure, call, monitor, moderate, and fine-

tune their processes. All geared towards avoiding mineral loses and optimizing mineral

production and hence revenue. This was the main essence for establishing a Mine and

having investors or stakeholders. So, it meant that the laboratory activities had far

reaching consequences, being the eyes of the Mine, and the lab's actions or inactions

carried consequences that resonated far, wide, and near.

At the time of the study, the Mine had serious issues with mineral recovery; they

just could not make sense of the results and what they got at the end of the day as

production, when reconciled. The monitoring and reconciliation activities of the Mine

were out of gear, with all the issues of the laboratory pre-study. The nature of the ore they

were treating required the quick turnaround time and of course good quality for them to take necessary actions that would increase mineral production and reduce, if not eliminate, financial loses.

Turnaround time (TAT) does not always have a direct correlation with production. It was one of the issues that were explained to the client. Again, it was an issues of information handling and communication. The Mine was not experts in laboratory testing, so they contracted the laboratory to do that for them. So, whenever they were misunderstandings, the laboratory was not supposed to keep mute but to explain to the Mine to their understanding. The non-correlation of Turnaround time and production was evident in an instance, where they submitted 20 samples in 10 submissions. When the analysis they were requesting for could take 50 a batch at a time, and at once. When we put the 2 samples each submission, there was 48 samples spaces left empty in the oven for example and the samples cannot be mixed up with other sample types per the standard procedure. This happened 10 times, thus, wasting 48x10 samples and 9 plus hours delay in just the furnace process, not considering the other processes in the lab's production cycle. With this example, the results might be ready in lesser times, however, production would suffer. That was significant. This eventually informed the client on how they submitted the samples.

Secondly, in the course of testing or analyzing a batch, earlier submitted batch, due to poor planning on client's part, requested we halted one submission and start analyzing the new batches or another batch, which would ostensibly, adversely affect the Turnaround time of the earlier submitted samples.

Third example is that, when they submitted 2 samples, they expected same Turnaround Time as they submitted say 100 samples, this was not practical. Over concentration or too much pressure for unrealistic Turnaround time and production from the laboratory, could compromise quality of work which was clearly counter-productive.

Leadership Approach to Solving Research Question Three

Turnaround time was explained to the client at a meeting and they understood it very well, re-shaping their submission processes, requests, or order behaviour. However, the Mine had other genuine turnaround time issues against the laboratory, which was very valid. One of the projects under the Mine admitted that due to Mining program they ordered for priorities to be given to later submitted samples, however, that should not affect production to the extent that it did.

As noted, the laboratory was operating at a level of about 30% of the production agreement that the laboratory was doing at the time of the study. The situation was clearly out of hands in this regard. For example, solution which should take less than 2 hours per the contract took more than 24 hours, carbon which should take 8 hours maximum per contract, took more than 3 days and Plant solid which should take maximum 8 hours, took more than 48 hours and Mining samples which should take maximum 3 days took more than 9 days. The turnaround time was effectively tackled.

This was also discussed with the staff to know what the issues were, why and what the way forward was. Great ideas were gathered. And they were motivated to act. Training was organized for all staff in their various tasks, and when there was a new scope introduced, they were trained immediately, trials conducted to be sure they

understood clearly the procedures and where issues came up in the course of the preparation, they were resolved before the actual testing started.

The problem of turnaround time was an issue of training but principally, lack of task organization. The staff were not able to organize their tasks and workflow and that was the reason, aside the obvious lack of commitment because of what they deemed neglect or lack of care from management. What was to be done, in what sequence, to save time, concentrate on which tasks before which task. They were trained to organize their workflow, workspace, and work sequence. For instance, in waiting for fusion to be completed in about an hour, staff could be adding necessary chemicals to the next batch of samples and weigh one batch before pouring the fused samples. The same issue was at every stage of the analysis or testing.

Specific training was done after discussion with the staff in their respective sections, after they were asked why they did what they did and if they could try the new changes suggested. And it worked. The researcher before the changes, followed the sample cycle from start to finish confirming the poor turnaround time and production numbers. He noted all the issues in the cycle and began addressing them one after the other. At the Turnaround meeting, the quantities done in other laboratories in the region, and sister labs in the country were communicated to the staff.

It should be noted, however, that before these changes, the staff said they could not improve the turnaround time or production but in the spirit of challenging the process, modeling the way, inspiring a shared vision, enabling the staff to act, active listening

skill, persuasion, commitment to the growth of the staff, stewardship of all and for all, the work organization training were conducted.

There was intellectual stimulation, idealized influence, inspirational motivation, empathy employed in this approach. The researcher delegated to the staff leaders, to also follow and note the duration, question delays, suggest methods or ideas of improvement, make a report on findings after completion. It came to about 30% more than the contractual figures and for some of the test more than 100% above the contractual figures, as per the capacity of the laboratory staff, at the time of study. The researcher however, in the spirit of care and caution at the same time, entreated the staff to work at 20% more in a more relax atmosphere, taking coffee breaks and catching their breath in between jobs.

It was a new era and a changed atmosphere, so the researcher knew, if he forced it too much on the staff, there might be issues with quality, safety and occupational health, after all, the first intention is affect positively the Turnaround time which was solved, the production targeted at 20% above target when the researcher knew they could do more. That increase numbers would come with time, experience, mastery and right motivation.

The motivational aspect had started with just their employment letters and contract delays were resolved within the first week of the study. It was a promise kept, an indication of an improved leadership that cared, that was honest and that was willing to build a team, encouraging the heart to be committed and a leadership that was genuinely committed to the growth of the staff, a leadership they had never encountered as staff, and in ways, they never thought was possible, according to the feedback from the

95

staff. And they expressed their gratitude by working their hearts out to ensure, everyone on the project succeeded.

The issue of late submission and sometimes the field guys of mining department submitting samples without submission sheets was discussed with both client and laboratory staff. Per the laboratory's protocol the samples could not be treated without submission sheet which indicated sample types, dates, sample identification, quantities, and what tests they required on the samples submitted. From this information, the jobs were registered into the software of the laboratory where job numbers were raised, identified, and followed up with.

The client clearly appreciated the atmosphere of positive change; it was surprisingly quicker but pleasantly received by the client and indeed the everyone involved in the project. They embraced and favorably remarked on the openness, honesty, and the vast improvement on communication and when the results of the turnaround time project started manifesting. They could not hold back their excitement, some top-level directors wrote, others visited the laboratory and had some kind words for the researcher, in less than two weeks of the application of the multi-leadership principles study.

Some of the client's executive heads paid an unannounced visit to the lab on the 12th day of the study and encouraged the site management team, especially the researcher, to keep doing the great job. It was a sign that they were happy with the changes, and their earlier stance softened, the Contract manager had updated them on the great results that had started manifesting.

The below table was introduced into the laboratory, to check production and turnaround time, the software of the laboratory was also available, the laboratory staff were taught how they could use that to track Turnaround time of samples and production, but this table presented a comparative view and a quick glance for the laboratory leader.

Table 1.1
"Production Record"

Date	Shift	Sample submitted	Sample Milled	Backlog Pre-test	Samples Reported	Backlog of sample not reported	Comment or observation

For the Plant project which required quickest Turnaround time on their samples, repeat was a contributing factor to delays, so the researcher instead of duplicate, did a triplicate testing, so as to save time on possible repeats, same time ensure and assure the quality of the samples results and then again, the ore types demanded that in the interest of the laboratory and the Mine, we did triple tests before reporting.

All results were sent to the Plant for them to use as they deemed necessary and professional for their calculations and estimations. The samples were not many, hence the question of cost did not arise. This measure avoided delays, increased turnaround time and even more wonderfully, the client was happy to pay for the triple tests, when the

researcher suggested to them, how important the triple test decision was, thus, one extra test. This was negotiated with the Mine and it posed no problems at all. The happy client would not have issues paying a little extra for great service.

5.5 Discussion of Research Question Four

4- Evaluate the attainment of contractual production numbers done by the laboratory.

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As already discussed, the laboratory was performing at about 70% less than the contractual agreement which in all fairness to the Mine was unacceptable. The root cause was lack of proper leadership manifested in lack of commitment because of the leadership crisis and other internal Human Resources issues. Lack of task organization was at the base of this and at the surface, lack of training; technical training in the very task the staff performed. What was observed was that there were certain tests that were done only by the manager himself, so what happens when the manager was busy, absent, sick or on leave, was obvious.

Monopolization of lab tasks and micro-managing which was one of the issues the staff raised against the site management. The Manager did not believe the staff could perform the test. This would be proved to be wrong as all sectional leaders and supervisors were trained and empowered to do those tests that improved the turnaround time drastically, of the samples, as well as the production.

Leadership Approach to Solving Research Question Four

It is important to note that at the beginning of such changes, supervision was principal, follow up was imperative and it was significant to note, that one could not and

98

should not delegate himself or herself out of his or her responsibilities as a leader. The onus would begin, lie, and end with the leader, always. After some time, when there was mastery, the follow up frequency and intensity could be reduced. Lack of supervision was another bane of the production problem, and this was fixed. The supervisors and leading hands were taken through leadership training to assist in their work. They became instrumental parts of the leadership of the laboratory. These increased the supervisors and leading hands' morales as well as the other staff.

It was communicated to the client that, the laboratory had a limited capacity and capabilities because of the infrastructure, equipment, staff, and other resources required to produce. It was based on the contractual agreement that the resources were purchased or acquired. Internally, stock planning and projections were done with the contractual numbers in consideration. When they submit more than what the lab is capable of, there would be inevitably, a backlog. The client should inform the lab ahead of schedule and if possible, include the lab in their planning and sampling forecast communication loop, so we could advise or prepare or suggest ways of resolving the sample overflows. This was taken in good faith by the client and they started keeping the laboratory management in their planning communication loop.

The researcher started resolving this issue of production by meeting the staff as usual. These interactions challenged the process, modeled the way forward same time, inspiring a shared vision, active listening, building community, conceptualizing the future together with the leader. Letting the staff know what the problem was with the laboratory and gathering sufficient information. The staff earlier noted they were doing their best

99

with respect to the numbers and it was clearly communicated that we are not doing what the contract stipulated and drew comparison from sister labs, which produced intellectual stimulation and preparing all of the laboratory team, for stewardship.

The researcher was working with staff on all these issues. He worked through the issues with them and putting his hands to work, to prove to the staff it was doable and to have pride in their work. The staff a humble leader in the researcher, a sense that the leader was part of them, inspiring empathetic feeling as well as pride in the job they did. With the work organization training, coupled with the information they needed to lift the laboratory from negative to positive zone, so we could make right demands of the top management of the laboratory, to resolve the financial related issues they had pre-study.

At this point, top management was already solving some aspects of the staff issues, especially those which had legal implications. And for the other issues, the researcher made solid arguments and defense for management to act. This was not difficult as management was considerate and appreciated the validity of the issues. The researcher wanted to be sure, if big strides could be made in the advancement of the laboratory without immediate financial rewards to the staff and that was confirmed.

The resolution of some few Human Resource and management issues, but principally, leadership issues, played a significant part in this turnaround and production bottlenecks. Communication was improved with the staff, support staff, client and amongst even the management on site and off site. The expression of empathy and compassion expressed by the researcher also went a long way to improve the relationship.

The decentralization of the monopolized tasks improved turnaround time and production at the same time. Two staff in each shift could perform those tasks that pre-study was a preserve of the manager. Just in case one did not report to work, one resigned or in the case of any unforeseen circumstances. Training improved the quality performance of the laboratory.

The staff empowerment decision had a great impact on the production of the samples, because in most instances, the staff took initiative, they did not have to wait for the manager all the time. They made good calls and came up with brilliant ideas. The staff stayed within what they were taught, contract stipulation, laboratory policies and procedures. Indeed, there was some technical competence difficulty with the manager on site in some few analytical tests, but he had avenue to resolve that, it was not communicated to superiors or personalities that could assist him. This situation made him doubt the results, hence repeats tests severally and in some instances, he lacked the courage in sending out some reports to the client. The client needed those results urgently. He was advised to use the procedure, contact the superior or quality manager who was resourceful and available.

Supervisory competence was confirmed by examination after training, to test their understanding and when they passed, they sign training forms and complete competence modules. The sectional leaders and supervisors were selected based on competence and in consultation with the staff, at each section, and the individuals selected were mostly, always unanimously agreed.

They were people who showed leadership skills and demonstrated supervisory knowledge and ability and earned the respect and confidence of their colleagues to effectively lead them. Involving the staff in some or most of the laboratory decisions made them own the decisions and they went the extra mile to ensure the decision succeeded. The same with the processes, anything you involve them in, in the spirit of respecting and considering their views, they owned it, defended it and were prepared to give their 200% best, if possible. It increased their confidence, massage their pride in their job, enabling them to act with passion and love for the job, in an environment of strong vision sharing, encouraging their heart in unison to action and to prosper together as a team.

The approach to boost production was also as a result of challenging the process, long held mentality and perceptions were walls and barriers to progress, and the leadership approach used by the researcher broke those walls, via inspirationally motivating the staff for excellent outcome. The commitment to the growth of the staff was abundantly obvious in the organization, engineering a sense of urgency in the staff, influencing them to change and own the change. A teamwork atmosphere could not be missed in the organization when these steps were taken, when the two leadership principles were implemented.

These measures ensured increased production and turn around time and consequently, the profitability of the laboratory as per the table below:

Table 1.2
"Profitability of the Laboratory"

	Pre-study Jan-June2019	Study Jul-Dec 2019	Study Jan-Dec2020	Study Jan-June2021
Profitability %	-75%	5%	16.6%	32%

5.6 Discussion of Research Question Five

5- How would you rate the quality control and assurance performance of the laboratory?

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The work of Mine laboratory is to produce quality results and meet productive targets in a safe and professionally acceptable environment. The integrity of the laboratory, especially, that of an independent service provider like the Case study organization. The significance of laboratory in the scheme of mining could not be over-emphasized, in that, at every major stage of the mining process, the laboratory was pivotal.

When samples turnaround time delayed, potentially huge amount of revenue could be lost in terms of mineral losses because they would not receive the results that could help them monitor and fine-tune their operation in a timely manner. If production is slow or low, it adversely affected their mining plan, mining timing and making necessary decision to recover the minerals needed. The same was noted with exploration and drilling activities of the Mine under study.

A delay in results is detrimental to the success of the Mine. Even more than these two parameters were quality, as poor-quality performance of the lab, could mislead the

mine which was dangerous and harmful on several levels of the Mine. Even worse than poor turnaround time and poor production was poor quality performance because unlike the two mentioned, poor quality would create double expenditure, in terms of all resources used in conducting the first test, whilst conducting the second and maybe third tests. The samples would have to be re-tested in most cases when quality fails. The confidence of the client would be negatively affected. It could also have had an adverse effect on production and, turnaround time, with all its associated adverse consequences.

It was to mitigate such issues that the laboratory was outsourced according to the information gathered from both the staff and contract manager. Indeed, most big Mining firms hardly manage their own labs for reasons of result integrity and to avoid possible unprofessional results manipulations, and to give investors the requisite and honest state of the Mine for the investors to make reliable, independent and informed investment decisions.

To the question of how the client determines the quality of the laboratory results, the client usually slot in standards, blanks, field duplicates and replicates into the batches submitted to the laboratory and they are tested as unknown valued samples. When results were reported, the client uploaded it into their Quality control software, it generated a graph and results of the graphs interpreted and evaluated. The lab also puts in similar protocols to check their internal systems and processes to avoid sample swaps, sample contamination, sample loses and other non-conformances that could adversely affect the integrity of the results.

The client sometimes, resubmits samples already analyzed under new identifications, to check the Quality Control performance periodically. The client also sends samples to other laboratories in-country and sometimes, outside of the country to check, the Quality Control and hence the reliability of the results reported by the Site laboratory. Performance was deemed problematic, but not as poorly rated as the turnaround time and production for instance, per the pre-study data and Quality control and assurance was part of the issues the client had against the laboratory.

Leadership Approach to Solving Research Question Five

The laboratory system was audited by the researcher, when one was unable to audit, an external or experienced auditor could be employed to do the audit. It is advisable for a laboratory to have at least twice per annum audit. Management audit and technical audits were conducted quickly. All non-conformances were highlighted and action plans with deadlines put in place to solve the issues. The issues to resolve per the audit or inspection were many but issues that required quicker and more urgent attention were given priority. And necessary actions were taken to resolve them. Thus, urgent non-conformances were resolved urgently.

Training, thus, technical or quality training were conducted for each person at every department of the lab, with regards to their task and per the procedures of the firm. Because of the shift systems, off-duties and holidays, time being of utmost essence at the time of study, salient point notices and reminder were pasted in all departments. Per section and task areas, instructions, notices, memos were pasted on the notice boards and

at every section and training were organized for each staff based on activities and task and training needs.

Training matrix was drafted and followed. There were older staffs, who were quite familiar with the system of operation; hence the training did not take that of time or pose no major challenges. Once observations were made, notices were done and training conducted, there were follow ups to ensure the training objectives were met and for most parts, they were. A few numbers of staff were re-trained. That individual approach was useful because people hear differently, understands differently, and might remember, differently. So, it afforded the researcher the opportunity to decode and understand what the staff thought, how staff understood and appreciated the knowledge dissemination and assimilation. That would guide the researcher on the appropriate delivery method to employ in the knowledge dissemination process.

Competence forms were filled by staff after they confirm their competence and training records updated. The approach was challenging the process, modeling the way, inspiring a shared vision, paying attention to the staff in the attempt to understand why they did what they did, creating the spirit of awareness, building a community of knowledgeable staff, commitment to staff growth towards stewardship. Intellectual stimulation and individual consideration were employed in these approaches.

The client was also informed through discussions, the fact that there could be several possibilities of failed quality, that the researcher wanted to conscientize the Mine to be aware and alert. There was the possibility that the Quality Control material values or identifications on the field and in their software could be inconsistent. This could be an

error coming from the field; by the field operators slotting wrong standards in right positions or right standards in wrong positions.

When the client field staff swap standards, this could cause inconsistency in their software and therefore be interpreted as quality failure. Sometimes, the field workers could place standards at wrong positions and that would cause failed standard graphs. There could be issues if, their software was not updated with new standards that the Mine might have purchased, that could also cause failed quality graph in the client's software. If any of the above mentioned transpired, it could render inconsistent the field standards and the standards in the client's system that could result in failed quality.

A meeting was held in an open, transparent, and honest manner, without apportioning blames to the client or anymore. It was just a fruitful conversation. The sources of failed quality performance were quite many and as a human system and institution with its fallibility, these things could not be entirely avoided but could be mitigated or reduced to a very large extent. For instance, when the procedure for getting the replicates and duplicates were wrongly conducted by the client, it could cause quality failure. There could be contamination or lose of quality materials, that could cause quality failure as well. Certain types of course minerals, not fine mineralization materials could cause failed replication or duplication in terms of quality performance when indeed, in cases like this, there would be nothing wrong with the test or system. So whenever, there was a failed quality, both sides were to investigate at their ends and check for deviations. Finally, if the client did not submit a Quality control material but

failed to indicate that in their software system, it could be interpreted as failed quality control performance.

On the side of the laboratory, these possible non-conformance sources were mitigated by strict protocol; there were quality materials that were inserted at positions determined by the software programming. Quality materials like standards or certified reference materials were used, blanks, replicates and duplicates were inserted to also check their systems. Coloring chemicals added to certain designated positions or batches to indicate positioning to avoid sample mix up. At every level and department of the laboratory, systems were put in place to check deviations and controls set up in the laboratory system to detect and correct any abnormalities.

The laboratory could be said to be under constant and continual examination by clients, and it was required to pass, every time the client submitted samples to the laboratory. Four things were to be noted at the laboratory, thus, there should not be any contamination sources or acts that could result in contamination, or loss of samples via wrong preparation of the samples or swap of samples or disregards for procedures at every stage of the testing.

In case there were non-conformance in the lab, there were protocols that were required to be followed, and once that was done, the laboratory could be confident of the results that were sent. The software that was used for some of the projects, did not allow for any manipulations and every action in the system was recorded, saved and backed-up internally and externally. These systems were enforced, and training and retraining were done rigorously by the researcher for the laboratory in all the aspect of the laboratory

testing, from start to finish. Protocols, additional plans, and programs were instituted by the researcher to eliminate any possible and avoidable deviations.

The phenomenon where a few samples passed through the laboratory's software were changed; all samples went through the system. Training in the software use was done for all staff that used the program to help them appreciate the process and the life cycle of the processing of sample for reliable results. When quality is wrong, the production and turnaround time become useless.

The Mine as indicated sent samples to the site laboratory, outside laboratory and even internationally, to confirm results. Most especially when it was not the results they expected. The client was encouraged to let the laboratory know the feedback from such verifications and confirmations and allow the lab to respond accordingly, or take necessary corrective actions, if need be.

The laboratory was encouraged to take part in about three international testing programs; this would solidify their place in the laboratory world, improve their reputation and boost their confidence and repose confidence in the client. Sometimes, this was a contractual requirement. These reports were sent to the client whenever they were received by the laboratory.

Special training on the protocol and procedures were done. Training plans and programs drafted for each staff, it was organized in such a way, which would not have any adverse effect on the flow of work. With records avidly kept. Once training and retraining of the entire analytical processes was completed, researcher observed and followed to ensure the objectives of the trainings were met and then handed over the

supervision to the supervisors and leading hands, leading them and helping them in reshaping the rest of the staff.

These approaches employed elements of leadership such as inspirational motivation for all staff, idealized influence, intellectual stimulation, individual consideration. Processes were challenged and appropriate changes proffered, modeling the way, inspiring a shared vision, enabling the staff to act, creating awareness at every level, building community of experience and empowered staff, motivated and charged to create change, self-lead and lead others towards insightful stewardship and most of all, commitment to the growth of the staff. In all these leadership style applications, the researcher was involved, working with the staff at every section and not just directing, but demonstrating, firsthand, how things were to be done and the reason for behind such decisions or actions.

The training forms were completed, competence module records updated, signed by employees, supervisors, and lab manager. Training was conducted in sample protocol and laboratory policies, methods, procedures, and processes. This instilled discipline and ensured quality performances. The training enabled the staff to spot abnormalities in the processes and alerted the individuals connected or concerned with such deviations, to take quick action or remedy the situation. This improved quality and turnaround time, at the same time increased production by reducing or eliminating the time that could have been spent for quality control and assurance repeats. And by the second week of the start of study, the feedback from the Mine's project heads during our weekly meetings, which was suggested by the researcher and welcomed by the projects' heads, and contract

manager of the Mine, they wondered and asked how the remarkable changes were achieved in less than two weeks.

On the 10th day of the multi-leadership application, they confided in the researcher that they were happy and would favorably reconsider their decision of abrogating the contract and encouraged the researcher to continue the good work. Between the 10th and 14th day, communication of satisfaction was carried to top management of the laboratory about the positive changes observed, encouraged the project, and assured the laboratory of their fullest support, in any way they could. Client confidence improved drastically in two weeks, and their communication and friendliness also improved, indicating satisfaction for job done so far.

Continuous improvement via observations, counsel to staff who needed it, supervision and follow up at all levels or various stages of the analysis. Whenever the researcher spotted any good act, idea, or work, he immediately praised the staff privately and publicly amongst the colleagues and during staff meetings. Researcher kept it straight, professional, and honest. Calmly, and lovingly direct swaying staff back unto the right path. It worked very well. Inviting opinions from staff, practicing active listening; repeating what they said to be sure he got them right, asked them why they did the things they did, revealed great information that would help the leader in resolving the challenges faced. Listen attentively, tried to understand them from their point of view, probed fairly and suggested other ways; better ways, based on their experiences and their temperaments.

The position of the contract was key, the policies and procedures of the company was principal in such discussions and with keen consideration given to the individuality of the staff.

The researcher allowed the staff to express themselves, tried to understand why the staff do what they, how and then the whole team suggested new ways of doing and improving things, to aid the attainment of organizational goals, for the benefit of the firm and staff and indeed, all stakeholders. Ensure the staff understood clearly what is communicated. Mostly before the next shift was met, the previous shift would have done a good explanation of the changes or trainings they received in the previous shift. The staff were using the shift hand over notes introduced by the researcher very well. Productive time was saved, work plan or program made easier.

Notices were posted at appropriate locations. In every department, sections, and areas of work, in addition to notice boards. Procedures were distilled to flowcharts, bullet points, short, visible reminders pasted all over. So that everyone could see, read, and understand. Same information used in the training programs. This is necessary due to shift system in place, leave, offs and rotations. All staff were trained but before then, all had the key information requisite for the change expected in the organization, staff behaviors and work processes.

All updates or later observed behaviour corrected that required communication, were done, and notices made, signed by the manager. Client came around and saw that and they were very impressed to see those notices. By the position of the laboratory, the client observed closely all the happenings in the lab and noticed the changes as they

happen. Some of the Mine employees also sometimes use the laboratory facilities and they were made to respect the procedures too, so the message went around quite quickly.

The situation where just one person can perform an analysis in an organization was changed. Challenging the process, enabling the staff to act amongst others already noted. At least two staff in every shift were trained to do such specialized tasks. Monopoly had no place in the laboratory and was discouraged even within the staff. Everyone shared what they knew in the spirit of inspiring a shared vision and building a community of loving and happy staff. This gave a tremendous boost to the staff's confidence and morale. They observed this as the leader respecting their intelligence and to them, one cannot fix any prize on that.

The staff aspired to advance, to learn, to grow and to improve. So, when such monopoly happened, the staff felt the future looked deemed, but with the open, honest leadership of the researcher, who was genuinely interested in the growth and advancement of the staff. The researcher respected their uniqueness and individuality, the staff were set to soar like eagles, and they appreciated it. Creativity was the result observed and excellence was inevitable in such an environment.

5.7 Discussion of Research Question Six

6- Evaluate the ability of the laboratory to meet your general contract expectation.

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According to the Mine's contract manager, the Mine gave the laboratory a lot of benefit of doubt and too much time than necessary, to address the issues. Just to ensure the laboratory met their contractual obligations. The Mine's contract manager, indeed,

expressed doubt, before the beginning of the study, that the laboratory could come out of the crisis, and redeem its dented reputation before the client. The two-month ultimatum given by the Mine to the laboratory was just a formality. In short, they had ruled the laboratory out and started sourcing for other competitors to replace the laboratory under study. It appeared to the Mine contract manager that the laboratory top hierarchy was not interested in the contract, however, it seemed clear, they were but had no answers to the problems on site.

They had changed about three managers in less than one year before the study began. The client's patience had run out because it was causing them irreparable business damages that had far reaching adverse consequences on all shareholders and stakeholders, directly or indirectly. They could only help, but he added, they could not solve the laboratory's problem, the contract is the guide and they were very busy on many other projects.

The laboratory started with just some few samples, about 10 samples a day, with just 2 staff. This was at the early stages of the laboratory and the Mine, per the history of the laboratory and the Mine according to the Mine contract manager. They were sending their samples out of site for analysis. It was expensive and the Turnaround time and production was not helpful to the Mine plan and scheduling. As the Mine expanded and multi-nationals started investing, the lab staff moved to 4, with about 20 samples a day. By the end of 2016, they were treating about 30 samples a day, with 5 staff according to the Contract manager. The samples were low, equipment and staff few, so the issues were

not observed, or they were nonexistent. They did just one type of test. It was easier, simpler, and straight forward solution testing.

From the beginning to end of 2019, the laboratory moved to three locations by the Mine. The reason was the laboratory was sitting of huge mineral deposits, so the laboratory had to relocate those several times. The samples a day rose to 250 samples with 25 staff, then the woes of the lab intensified and got to unacceptable levels, but they thought it would be ironed out quickly, and by February, 2019 daily sampling went up to 500 a day, with 40 staff. The lab was expanded, thrice, thus, in terms or staff strength and equipment addition and process expansion due to increase in scope with so many test requests for the laboratory. By April of 2019, samples numbers moved from 500 to about 1000 a day. By May of 2019 samples moved to 2000 samples a day and about 110 staff strength and then due to challenges with sampling and loss making, staff reverted to 70 with about 1000 to 1500 samples a day with different tests requested of the laboratory. That was when the Mine's frustration hit the roof and they started mounting serious and maximum pressure on the laboratory, gave them ultimatums and took steps to replace the laboratory, with another laboratory service provider.

The laboratory poor turnaround time, poor production, and average quality control caused the Mine a lot. When these things happened, even the errors of the Mine were squarely placed on the non-performing laboratory, when it might not be so. The consequences of a non-performing laboratory had been discussed extensively under the turnaround time and quality headings. According to the Contract manager, the lab

115

expansion and other changes exposed the inefficiency and cracks of the laboratory management and performance.

Leadership Approach to Solving Research Question Six

The researcher assured the Contract manager all efforts would be made to solve the entire Mine's concerns about the laboratory over a short period of time. The researcher cited instances where appropriate leadership principles had been used to solve even worse challenges in the same region by the same researcher. He asked for the cooperation and support of the Contract manager and the Mine as a whole, in the study, and that the researcher, was optimistic, the fortunes of the Mine and laboratory could turn out excellently. The Contract manager noted he would be more than happy to assist; they, thus, the Mine, wanted the laboratory to succeed, for the laboratory's success is of utmost essence to the Mine. The client has suffered severe repercussions, from the laboratory because of the poor performance of the laboratory, he repeated. He bemoaned how some of the key top leadership of the case study organization never paid a visit to investigate or attempt to relocate to site for some few weeks, to ensure the contract was secured by fixing the lab. The sense of urgency from the level of the Country manager/Managing Director or anyone from the head office, indeed left a sour taste in his mouth. He noted, these are sentiments expressed by the directors of the Mine as well.

The researcher added that if there was anything the Contract manager remembered or wanted to bring to the researcher's attention, he should let him know. The researcher assured the Contract manager that he would, with the team, try to unearth the

root cause of the issues and address them, with the utmost urgency it deserved. From the application of the multi-leadership study, he was of the firm hope that the laboratory team would endeavor to solve the problem. And everyone on the project would learn on this journey.

The researcher wanted to know from the Mine contract manager perspective, which issues to approach first and the reasons, thus, a question of prioritization from the Mine's perspective, and suggestions on how to go about that, if he had. This was imperative because the laboratory was a Mine service provider and there was a crisis and an ultimatum. Time is of the essence, pleasing and gaining the confidence of the Mine, very indispensable. This showed humility, respect and joyous curiosity of the researcher and communicating a teamwork spirit by asking for the opinions and expectations of the client. The researcher knew that before the start of the study, the client discussed the laboratory, possibly talked with other people outside the organizations, or had dealt with labs in the past, and so to manage the contract, he should have some ideas.

The leader needs to listen and develop a helpful and joyful curiosity to learn so that he could update what he knew or how best to approach the situation. The Mine representative was assured by the researcher that the lab would be fixed. The Contract manager also noted, turnaround time, production and quality issues as his priority ranking from most urgent to least urgent. But to the researcher he knew, quality was the most urgent. However, the response of the Contract manager indicated that turnaround time was something that would impress the client most, so the researcher dealt with quality and turnaround time simultaneously. In most cases, when the turnaround time and quality

issues were effectively solved, production issues were resolved naturally. With this important background, the researcher went to work.

The staff had many issues, but the crisis was because of the frustration and pressure from the client. The client is king, their concerns needed to be addressed first, if possible, before turning attention to the other needs of the staff. If both could be solved simultaneously, the best. As noted the researcher, wanted to confirm some principles and so, attention was given to the client's expectation, by addressing task issues, first. These were discussed and the staff was persuaded to accept this. The late and no contract staff received their contracts, within two weeks of the study and that was all that was done for the staff concerns and yet they were so motivated and challenged to solve the issues with the researcher, and the difference was leadership and the approached employed. With respect to the other issues of the staff, those that could be addressed were addressed within one month from the start of the study, by then the three expectations of the Mine had been met, within two weeks.

The top managers of the firm were persuaded to visit the Mine to meet with the client and the staff. It was as if, hitherto, they were afraid of the possible confrontation or tension, or ashamed to face the client, which was not an excuse though. The positive communication from the client and client satisfaction communicated at the top level, went a long way to convince them to visit site. And with the conference meetings, the coaching and advice of the researcher, they visited, and the researcher was advised to moderate the meetings between the laboratory and the Mine, a vote of confidence in the researcher's work. The laboratory management team who visited armed themselves with

answers, and the right approach was well, as agreed in advance. No one from the side of the lab management was allowed do anything or say anything that could discourage, infuriate, or destroy the great relationship that has started.

The lab visitors, who were top managers were oriented on the principles of two leadership principles to guide their discussions. The top management suggested that, they could not afford to do anything or say anything untoward, so they lose the contract. Indeed, the researcher did most of the delivery. He explained amongst others, the steps he used, what he did, and the observation made. It was an educative discussion for all present. Most took notes and asked very good questions wanted to know about the leadership principles and approaches.

The approaches and leadership styles used as discussed under the various headings were all geared towards securing the contract primarily, and then ensuring the staff was satisfied and well-motivated. New policies, protocols, systems, and procedures were introduced during the study.

Training in policies, methods, procedures, processes in quality, turnaround time, production, and Health Safety Environment as well other functions of business. It was consistent with the organization's internal systems and policies and then the contract stipulation, and as per the departments in the organization. Notices, memos, and reminders pasted all over the laboratory. Decentralization efforts embarked on, empowerment of the staff, delegation of responsibilities, follow ups and right motivation for the staff.

5.8 Discussion of Research Question Seven

7- Evaluate the Safety, Health and Environment management performance of the lab?

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Although the major focus was on quality, turnaround time and production. Health, Safety and Environmental (HSE) was rated poor as well. There was no system in place pre-study, in the laboratory after the initial audit. No regards for the laboratory standards in terms of Health, Safety and Environmental (HSE) system. There was no respect for the Mine site HSE by the staff of laboratory according to the Contract manager. This was unacceptable to the Mine, and so once we had the quality issue out of the way, turnaround time improved and production figures significantly enhanced, indeed, beyond what the contract and the client expected.

No Mining company, worth its salt would joke with its Health, Safety and Environment system. The Mine industry is one of the most hazardous industries anywhere in the world. The attention was turned to Health, Safety and Environmental (HSE) Management. With the leadership principles at full effect in the lab and having the commitment of the staff, this was not a herculean task.

The staff was always running into site HSE problems, some of the staff has been asked to leave the Mine site because of that. A lot of messages had been sent to the top management and site management, however, all proved futile. There had been several incidents registered in the laboratory pre-study. No HSE meetings had been recorded and there were no regards for the site HSE rules, no toolbox meeting. Even internal laboratory

HSE milestones not met by the laboratory and there were no HSE Representative for the

sections and department and no HSE coordinator.

The over-concentration on the turnaround time, production, and quality, perhaps,

relegated the HSE and other important functions to the background. Once the three

expectations were out of the way, the lenses were focused on HSE Management by both

the lab and Mine.

Leadership Approach to Solving Research Question Seven

All information gathered from the Mine was discussed with the staff. And they

agreed they needed to act immediately. The staff noted that, this was not communicated

to them as a staff body, just like in the other instances. They were not trained and needed

to be trained. The opinions of the staff were invited, and the suggestion box was still in

force.

Training was organized in the Health, Safety and Environmental (HSE), in Mine

site's HSE policies, programs, procedures and processes. They were not entirely different

from the case study organization's policies, programs, procedures, and processes.

Attendance list created and filled, training records updated, and competence model in

HSE applications recorded too. Training programs drafted locally specifically tailored for

the laboratory.

HSE meetings were held; they held toolbox meetings and good records kept.

Sectional leaders and sectional HSE Representative were trained in HSE programs,

procedures, processes, and policies. And the laboratory took part in both internal and

client's HSE campaigns. Policies and appropriate documentation were managed and displayed, both the Mine and by the laboratory head office representative on HSE.

Shift HSE representatives were elected for each shift and HSE Coordinator dedicated to the coordination of the HSE functions on site was also elected, based on their competence, and dedication. Care was taken to promote staff within, and special training was organized for the HSE coordinator and HSE representatives. These were followed up with and good work was recognized and recommended. HSE person of the month, was initiated, just as most productive staff and best quality controlling staff, with their pictures posted and at the end of year, some incentives were given to all those staff.

This created awareness within the staff, persuasion was employed, the approach helped build a community, the training suggested a commitment to the growth of the staff, stewardship by the HSE representatives and HSE Coordinator. The status quo was challenged, same as the process the existed prior to the study, the way forward was modeled, encouraging the heart to act from the recommendation and praise, inspiring a shared vision and enabling others to act.

The HSE system was instituted in the organization with proper and adequate foundation, which can run without the site management team's direct involvement, and without depending on one person. It was done in a way that the staff would own the system, keep it, and improve on it continually. That proved successful, in fact, very successful. Once the staff was happy, everything change and significant improvement prevailed, because of the good will of the happy staff.

5.9 Discussion of Research Question Eight

8- How effective was the communication lines of the laboratory?

        ①   2   3   4

The communication lines were blocked as per the preliminary observation confirmed by the Contract manager. It was rated as poor. This did not come as a surprise to the researcher. Close door policy persisting and pervasive in the lab was extended to the client. As noted, the pressure was at a point pushed back to the client and staff, and that culminated into break in communication, quickly generating into tension and lack of respect on both sides, for either sides. Increasing the anger and frustration in the system and producing a sour relationship consequently.

This close door policy was confirmed by the staff, which was making bad situations, even worse and worst with time. The site management avoided the client management as much as they could, and were unfriendly, when and if they did. So, no effective communication was obvious, which was a wrong approach and even deteriorated the already bad issues. The top management also was not communicating effectively with the client and the support staff, same. The latter was not concerned. It was as if, everyone gave up on the laboratory, and never cared, leaving the site management to their fate, helplessly.

Support was generally weak or absent in some cases, all these created anger, frustration all over and festered into an unprofessional and toxic atmosphere, which did not have to be. It was as if the support staff and top management did not appreciate the enormity of the issue at stake. Those on site felt the gravity of the situation but they gave

up, since according to them, they did not receive the support they should have. If no one cared, then they could not help it, and management on site was not psychologically prepared for the worst outcome of the situation, their actions, or inactions. The contract was at stake, the very contract that sustained their activities and salaries was at stake, but no one cared, it seemed.

Emails won't be answered most of the times, calls not answered or returned by the support staff. Coordination was absent, for most part, the operations section at the head office, maintained they effectively communicate the crisis to the all, but there was not prove or email traces to that effect, and it was surprising if they never cared about the negative profitability of the laboratory pre-study, which was very obvious to all.

Communication with client was necessary, because per the dictates of the contract and by the nature of the remote citing of the laboratory, the lab would require the assistance of the Mine in one way or the other. Assistance such as cleaning, housekeeping, urgent need of some stock items, waste collection and management and then major maintenance needs, fell within the purview of the client. All these and just by the relevance of effective communication in such situations, required that the laboratory keep an open, honest lines of communication with the client for client relationship and cooperation.

After a while of non-communication, the client also closed the door on the laboratory, they stopped trying to communicate to the laboratory. Thence, deserting the laboratory to its difficult fate and then resorted to the use of legal means to vent their anger and frustration. Sometimes, by being unprofessional towards the lab staff and

management, underpinning all these was the lack of communication and poor performance, that are imbedded in the lack of appropriate leadership for the laboratory.

Leadership Approach to Solving Research Question Eight

As always, this was discussed with the staff and then site management. A delegation was sent to the client to bridge this gap. They were opened and welcoming, they mentioned nothing personal; they just wanted an open lines of communication and the lab performing very well. They re-iterated that they are beneficiary of a successful laboratory, nothing personal, so we could start on a clean slate. The staff was also advised to be calm and polite with the client, friendly, and to be very professional with the client.

Training in effective communication became very necessary for the staff. This training involved the site management team as well as the staff. Training plan drafted; program follow up with, and all staff was trained. Special training was organized for the respective staff leaders, and general communication training organized for all staff. The types of communication, forms, dos, and don'ts of communication especially, as a service provider were discussed in detail. They were given training on how to communicate, encode, decode and other areas of communication and how to seek for feedback.

Follow up on communications was done internally, with the support staff, the top management, and the client. Email addresses were created for all staff that required it, especially the new staff trained to take up senior supervisory roles in the laboratory and the new leaders raised in the laboratory. Throughout the study, no new external staff was

hired to take any role in the laboratory but the very staff in existence, as at the time of study, were trained, developed, given responsibilities and empowered.

Then the conference calls were planned with the Operational management, Country manager/Managing Director, and all the support staff who related either directly or indirectly with the laboratory in one way or the other. At that forum, the problem of the lack or absence of effective communication, the staff challenges and solutions were extensively discussed. It was a very fruitful conference call. And just after the conference call, action plan was drafted by the researcher with deadlines and individuals to close those actions were indicated. Emails were sent accordingly, as a reminder of the roles everyone in attendance was to play. On the same email, reminder email on the salient decisions was noted.

The crisis of the laboratory was clearly communicated to everyone. Strides were made and what needed to be done was suggested by the researcher and that all involved came on same page, assuring everyone in corporation and harmony to improve the communication and this was achieved. The country manager who doubled as the Managing director suggested to be in copy in all request going to support staff for any assistance, at least until the crisis phase is successfully crossed.

Summarized notices of procedures, processes, reminders, memos all formed part of the communication improvement. It went a long way to facilitate this rapid change in the organization. The suggestion box introduction, safety meetings, quality meetings, production meetings and all trainings formed part of the open communication campaign.

It changed the perception of the staff and even the client. This efforts played a significant part in the success of this project.

5.10 Discussion of Research Question Nine

9- How would you rate housekeeping performance of the laboratory?

①   2   3   4

This was rated as poor, and it came as no surprise to the researcher once more. The lab was not cleaned at the time of the study. That was the first thing that caught the attention of the researcher. It was not the purview of the laboratory to ensure cleanliness of the laboratory or its environment but that was not done. But that situation was hardly an excuse for the laboratory to operate in filth and dirty environment. Coming in as a service provider organization, does not give the organization an upper hand, since the organization that provide service of such nature seeks the satisfaction of the client. It might be unfortunate but that was what it was. It could be discussed, however, action ought to have taken by the laboratory, either to get the Mine to respect their side of contract or the lab to take appropriate actions by themselves to get the laboratory and its environment cleaned.

This should have been taken up with the Mine, properly communicated and follow up with the Contract manager. Whilst that was being done during the study, the staff was asked to clean the area they worked, after every procedure or task step was completed. This developed into a culture, that even after the end of the study, it persisted, a good housekeeping culture. The culture of proper segregation of waste and proper

management of waste was instilled in the staff. For waste disposal, by the setting of the lab and contract, it fell within the purview of the Mine and the Mine was asked to do that.

Emails to the client in these matters could be addressed by email to leave evidence of communication, and phone call could also be used or any other agreed means, but from experience, it was useful and wise to leave trail of one's official communication, especially, if it bothers on legalities or contractual provisions. This could serve a leader very well, working as a Service provider.

Leadership Approach to Solving Research Question Nine

The researcher asked the staff, what their impressions were, when they visited a dirty home as an example? Would they respect the inhabitants, or would they drink or eat from a dirty house? They responded in the negative. This approach suggested intellectual stimulation, persuasion, foresight, conceptualization of the future. It presented an idealized influence and inspirational motivation to the staff as well as challenging the status quo, modeling the new way forward, and inspiring a shared vision in the process. The staff was encouraged to clean their area of work, after every activity as much as possible to avoid contamination and other HSE issues.

If the place of work was neat, visitors respected the worker, and developed a good impression of the laboratory, looks at the laboratory and judges it more favorably. It is advisable to always, keep your place of work clean and organized as much as possible. Whether the client sent cleaners or otherwise, the place of work or the area of work must be kept clean all the time. The staff ran with this directive and they witnessed how the

client received that improvement favorably. Cleaners were employed by the laboratory to clean, especially, the surroundings of the laboratory, and whenever, there was no cleaning, they assisted in production, depending on their training, aptitude, and competences.

The Contract manager's attention was drawn to the fact that waste management and cleaning of the lab was not done by the Mine, per the contract dictated. He organized to get the weeding and waste management done. If nothing was done, the laboratory could have taken it up with the Laboratory top management who was directly in charge of the contract execution. Fortunately, it was not the case, it did not get to that extent. Whenever, there was an issue, it was immediately communicated to the client Contract manager, and he responded quickly and very well.

5.11 Discussion of Research Question Ten

10- Please any issue of concern to you, that you would like me to know about?

The Contract manager noted under this heading that the laboratory staff was lazy. The laboratory managers were not serious in the perception of the Mine. The laboratory top management did not show respect for the contract and did not care about securing the contract. According to the Mine, although the intervention of the study was noble, it was long overdue and he doubted any positive outcome of the study, and if any, could meet the ultimatum deadline or change the client's mind. The Contract manager's view and that of the top Mine management team was that, it was too late and might be a waste of time and effort, because the situation of the lab pre-study was hopeless, but he wished the researcher success and he pledged his unflinching support for the study.

Leadership Approach to Solving Research Question Ten

The researcher thanked him for his time and assured the Contract manager that the research would be successful, because similar approach was employed by the researcher, in other Mines, with worse situation than what pertained in the Mine.

He added that if the Contract manager supported the research efforts, the laboratory would turn out fine, and a lasting solution would be proffered for the lab's challenges. Researcher assured the Contract manager that, the top management and site management of the laboratory thought highly of the contract and the relationship, and that is why they sanctioned this study of multi-leadership application. The researcher has a track record of dealing with crisis and poor performing labs like the one under study and they all turned out great, so this case, could not be an exception. Results would be seen shortly than anticipated, so that the confidence of the Mine in the laboratory could be gained, sustained, and even more improved with time.

The researcher employed great listening skills, empathy, healing even for the client representatives, building a community, conceptualizing the future, foresight, persuasion, intellectual stimulation, inspirational motivation, idealized influence, challenging the process and status quo, encouraging the heart to understand and act. The researcher asked the Contract manager during the first meeting, what the Mine expected of the Laboratory, so they could change their minds, and he responded, that perhaps, delivering the contract before the deadline of the ultimatum.

5.12 Discussion of Research Interview Question One

Targeted at extracting HR/Personnel Issues:

1-What are the Human Resources or Personnel issues that you have?

Human Resource (HR) might be a support function in the laboratory, but it was very essential one, in the case study organization. The most important resource in most, if not all organizations is human resource. The department in charge of the management of this resource should be very aware of this reality and endeavor to ensure strict compliance of the company's policies and processes as well as the country laws pertaining to the human resource practice.

Most of the activities revolves around the HR management, but mostly, when there was crisis or organizational decline, the HR is one of the last places, to look at. It is one of the disciplines that require, as a must and a matter of urgency, great leadership or persons with great leadership knowledge and practice to be able to steer the affairs of the organization lest, crisis would be inevitable. The case study organization had quite some serious HR oversights or neglects. Poor communication made the situation even worse. Lack of proactivity on the part of practitioners at the time of study, was also a contributing factor. The identified issues by the staff through all the means of data gathering indicated and confirmed the observations made and would be elucidated in the following paragraphs.

The casual staff was working without casual contracts:

This was found to be correct from the investigations of the researcher, as the Human Resource (HR) department of the laboratory, situated outside of the Mine site, far off in the capital, had no records or evidence contrary to what the staff communicated.

Neither were they copies of such contracts on site. As part of the immediate actions taken in favor of the staff, all those contracts, were sent by the HR for all the staff involved. It was observed that some of the staff were hired from the neighboring towns of the Mine, which was consistent with regulations and practice of the Mine itself, however, the proper HR was not followed. Some staff went for pre-employment medicals but still had no contracts before starting work.

The HR admitted negligence but robbed the site management in, for not pushing enough. The danger was, without contracts, if anything should have happened, such as an accident in connection to any of such staff, the company was going to have a very severe problem with the state and their reputation could be destroyed. Which might be the least of the possible repercussions if there be any untoward happenings. This was also against the laboratory's own global policy.

Indeed, the interest, welfare, and control over the staff in terms of their contract, was something which should have been fundamental and essential, just like the staff's contracts. It was the beginning of the disregard for the staff concerns by the laboratory. The researcher as already noted, apologized on behalf of the laboratory management for this unfortunate mishappening. It should not have happened. It was an admission that broke the ice of anger, frustration, and dissatisfaction of the laboratory staff. The staff begun developing soft stance and started cooperating whole-heartedly by this act.

These acts encouraged their hearts to act, it demonstrated empathy, genuine concern for the staff by the leader, challenged the status quo, inspiring a shared vision, enabled others to act, healed the staff. Persuasion, building a community, inspirational

motivation, idealized influence, and individual consideration were employed in resolving this issue.

Some have been doing the same job as casuals for more than four years, when by law it should not have exceeded two years:

Investigation by the researcher confirmed this, the country laws were straight forward on this. It was to avoid organizations exploiting employees. When employees with casual contract worked for eleven months, they were to proceed on leave and once the leave was over, they could be recalled but that should not exceed two years in total. The law mandated that no firm could use a staff for the same type of work for more than two years, as casual. After two years, the staff should be moved to permanent status of employment. So, the solution was that, all staff who have been casuals for more than two years, were moved to permanent.

The researcher wanted to be sure, if the motivation of the employees at their lowest point as it was, could be revived by great leadership, without any financial inducements and yes, significant changes were observed, even before any monetary incentives or compensations were given to the deserving staff. This changes were made after the desired changes were observed. What the practice should have been was that, after two casual leaves, for the same job, the employee be made permanent staff with a permanent contract. We also had some staff who had been casuals for more than two years. After a month of the commencement of this study, were given permanent contracts, by this time, all the key issues of the laboratory had been resolved.

This was discussed, during a conference call of all support staff who were not working on the Mine but remotely in-country, and others remotely, outside of the country. It was a celebration mood and a pleasant surprise for the entire staff because they were expecting major changes towards the end of the year but not that immediate. It indicated that the organization was ready to listen and prepared to help them. They even did more and worked out their hearts even better, exceeding the contractual numbers and every target set in the laboratory contract.

The staff worked because they had hope, strengthen by an honest leadership and humble leadership, one that would admit its wrong and live to its word, and do exactly as promised. This even intensified the level of trust and improved the working relationship, both horizontally and vertically.

All the issues that had legal implications were rectified urgently. This was strongly advised by the researcher and had the support of all involved in the decision-making process at the meeting. The support team feigned unawareness, which was not an excuse. They had the reputation of the company to protect, and this was an infraction of the contract the laboratory signed with the Mine. It was an internal issue, that the client could have picked it up and that would have been another big issue for the laboratory. The leadership approach was like the one elaborated above with the first HR issue. Some staff had no medicals, prior to their starting work, and proper recruitment procedures per the organization's policy, were not followed:

With a new contract or increase in scope, a job analysis was performed to see if there was any need for re-staffing. Once the number of staff were noted, the staff hiring

request were sent to the human resource department, that would seek various levels of management approval and then once, the go-ahead was given, the positions were advertised.

For most of the mining areas in the region, priority was given to the people from the mining community and that was the case with the mining community where the laboratory under study was situated. When the criteria for selection were not found amongst the indigens of the surrounding towns of the mine, then, other towns within the country could be considered. If still not found in the country, the advert could go international. But the latter was discouraged to a large extent in the country of study.

The case study laboratory was also an international company who had its standards and policies too. And both ought to be balanced and followed. In cases where the corporate policy ran contrary to the local laws, the local laws were favored over the corporate policies. That introduced a bit of challenge where the support HR are not directly involved in the selection process, if the staff could be found in the indigenous towns, the site management handled that. Payments were approved and paid from the HR and finance departments at the head office, so they could tell who was working, where and durations. The HR were supposed to be on top of the issues.

The advertisement for position went through the Community relations office of the Mine, who sends the advertisement to the towns and villages around the Mine, collects the CVs and other documents requested and hands them over to the laboratory.

Interviews were organized, aptitude tests were conducted and then the successful candidates were selected. Interview processes has their flaws but they had not been any

135

other means of employing a more objective mean of selecting the best candidates, this is why, the selection process had a healthy mix of interview and aptitude test, to try and minimize the flaws and possible biases.

The particulars were sent to HR who would then organize the potential staff medical exams. If the staff passed the health screen, they were given employment letters and contracts, which was signed by the Country manager and Managing Director, HR manager, Site manager and the employee. Induction were organized for them at the head office, then another induction was to be organized by the local laboratory, another general and section-specific induction organized by the Mine before the staff was absorbed into the organization and the laboratory. There are other documents that were signed by the staff, such as documents of internal rules, HSE rules, quality control compliance, and code of integrity.

Where any of this steps were eliminated, there was to be a communication from and to the HR to that effect. This system was refined per the suggestion of the researcher and entrenched, strictly followed up with by all management of the organization. In an open, friendly, and productive discussions with HR department members and the Country Manager.

Some according to the staff, skipped some of the steps including the all-important step of medical examination to determine the fitness of the candidate. This is essential because the Mine laboratory has a lot hazards and stress, that the people who are selected to work in a laboratory must be fit and competent. What the staff mentioned was verified

by the researcher to be correct, which was very serious due to the nature of the laboratory work.

The HR and site management checked; the staff brought list of staff who had not done their medicals yet and medicals were organized for the staff who had not had their medicals done. The necessary decisions and steps taken to right the wrongs that transpired in this regard. The leadership approach in the case was not different from the first case as discussed above.

Some of the casuals do not do their 45 days after 11 months contract, but are re-engaged, without completing their leave:

Some of the staff also communicated to the researcher that they do not go on their leave as the country's labor laws dictated. The organization did not respect that. This was found out to be correct. The staff involved were identified and compensations paid out to them for the days the worked instead of enjoying their leave. Those who reported fatigue were made to complete their leaves. Provision was made in the budget for some of the payments, but a lot of the payments were shifted to the following year, of the study. The staff involved were apologies to by the researcher and thanked for their patience and hard work.

Going forward, the process of selection and staffing followed strictly the company's rules and country laws. The steps were discussed with the staff and the changes communicated to all staff. This approach was consistent with the previous approaches discussed. There was proactivity, care for the staff welfare and wellbeing.

Proper leave roaster was planned for all types of staff in the laboratory and strictly adhered to. Any changes were discussed in advance with the staff concerned and management involved.

Most casuals noted their contract termination payment were not paid to them:

This issue, like the others were true from the verification of the researcher. The HR was informed about this and all the findings made as far as HR was concerned. After the eleven months of engagement, the casual's contract ended, and HR paid their termination rights to them timeously. It was found that, the payment delayed in some cases and as at the time of study, there were five of such staff, who had not received their payments, but they were re-engaged without their leave days off. The staff payment was expedited, and measures put in place, to avoid recurrence of such incidents, in this case and all the other valid points identified by the staff.

Delays in payments of financial benefits:

Like the above on payment of casual after the termination of their contract, was this issue of payment delays of financial benefits generally. This was discussed with the HR and financial teams and they outlined some reasons for the delay, some from them, others from payment mediums like mobile money service providers. They were entreated to remove all barriers and roadblocks causing such delays. This was not exclusive to casuals. Staff were encouraged to report any payment delays immediately and it would be followed up with.

Some casuals noted, they do not do annual medical test like they do for the temporary and permanent staff:

Medicals were organized annually as a company policy. However, some casuals noted that they were not included in the annual medical examination. This had no merit from researcher investigations. Casuals per the contract durations, did not take, more than a year. Whenever, a casual was re-engaged after their 45 days leave, they casual was supposed to do a pre-employment medicals if he or she would be re-engaged. That was the reason annual medical checkup were done for temporary staff and permanent staff annually.

Where the casuals were re-engaged without taking their leave, then, they could join the annual medicals, but that would not following the policy or the laws, so that had no merits. The recruitment process ought to be followed and this issues would not disappear. This was communicated to the staff. Approaches used were as clearly indicated in the HR first case.

Some temporary staff noted they started working before signing their contract; contract might come after if lucky, for some, contract never arrives, and they remain as casuals without contracts:

After the casuals, there was the temporary contractors, they like the casuals per the country laws could not exceed two years, working on same task. If they exceeded even by a day, they were deemed to be permanent staff. However, some of the staff went through the recruitment process, and were made to start work before the contract arrived on site, which was illegal per the laws and nonconformance per the policy of the company under study. The staff involved were apologized to and HR brought their contracts as quickly as possible, same time as the casual's contract arrived. HR promised

that would not be repeated and all the staff were encouraged to report any HR needs to the superiors.

Long bureaucratic processes compounded by internal delays:

Some of the staff noted that recruitment process was long and tedious. It was explained to the staff, the process involved and made clear to the staff that, that was the procedure of the company, and as long as it does not run contrary to the nation's labor laws, it could only be improved per the laws and company policies but not erased.

During management meeting, this was tabled for discussion, and then the support staff admitted that sometimes, they forgot. The document might have been forgotten in a file or on a table of an approval official. The researcher advised, that to avoid this incident, the laboratory manager should be copied in all email, and the approval trail should be electronic, so that, all could follow and check delays. This was agreed by all and put into action. Due to the hiring process in force, the local management was encouraged to be proactive with HR requests, so that the timelines could be respected as well as company and country laws.

No annual evaluations done for staff:

From investigation by the researcher, this was found to be true. Each year, there should have been job evaluation for each of the staff, where, the successes and areas of improvement needed by the staff, were to be discussed. Based on same, promotion, increase in scales and categories were proposed or made. But no record of this was found and site manager admitted to this, that it had never been done. The staff were assured

that, henceforth, there would be annual evaluation conducted for every staff, which would be fair, strict, and honest, so all should endeavor to have good evaluations.

If there be bonuses, it would be based on that. Professional development through training needs would be identified. The staff welcomed this and were very happy for that assurance. Due to the changes that had begun, their confidence, trust and contentment with leadership kept increasing, with every promise fulfilled. This was done at the end of each year throughout the lifetime of the study.

Good work was identified and praised immediately, in the same manner, as poor job or attitude corrected immediately but professionally. The researcher remembered that at a period, he did not know, what he knew now hence looked upon the staff was compassion and empathy. That was the way the researcher viewed every nonconformance by the staff, prior to training. It was also an opportunity for the staff to learn new information or knowledge. Every nonconformance provided a topic for training, re-training, and various organizational meetings.

No production bonus payment to staff:

This was consistent with researcher's verification but under the circumstance of the laboratory, the laboratory has been doing negative in terms of profitability. So, the question of production or performance bonus had no substance pre-study. Until the study, the staff never knew the laboratory was under performing, in terms of, contract requirements and profitability. When the state of the laboratory was made known to the staff, they appreciated the urgency of the situation and begun to make sense of the events the preceded the study.

The staff were advised to work hard, and when the laboratory performed well, and improved financially, bonuses would be paid out. Indeed, individual production record book was introduced, as well as group production book. To check both individual and group performances.

During the year of study, the lab moved from -75% by mid-year and ended the year with 5%, which was less than the 18% earmarked for the laboratory, however, for lifting the laboratory from crisis, they had an appreciation or spot bonus, pushed for by the researcher. The staff jubilated when this was done. They were pleasantly surprised and did not hide their joy. The following year, the laboratory moved from 5% to 16.6%, still below the 18% target, but they even had bigger bonuses paid out to them. By the second anniversary of the change, the laboratory contributed 32% in profitability. No change in staff categories and scales:

According to the company's policy category and scales could be changed every two years less based on excellent performance. Categories change when function changes, usually. Scales change if there is good work in a function. Since there were no job evaluations, there could not have been category or scale changes, per company rules. Once more, staff were apologized to, and informed that the categories, would be changed, after evaluations conducted for each staff. And all their contributions would be considered. This was very welcomed by the staff.

Everything was explained to the staff, in an open, honest, friendly, and professional manner. Same was exclusively discussed with management before discussing with the staff. This was the approach for all the encounters with the staff. All

the managers involved were contacted, advised sought, appropriate approach agreed upon, and then communication to the staff done. At the end of the year, evaluations were conducted, those who deserve increases and promotions at various levels were recommended for that, and the recommendations were received and actioned by top management concerned and HR management.

No risk allowances paid out to staff:

This was correctly observed. No risk allowance payment was done. This was paid to them in the very year that the study begun. This was not legally binding on the company, but it was a compensation that management agreed to pay, because some of the staff in the region were receiving this risk allowance pay out. There were several hazards involved in the laboratory work. The sentiment expressed by the staff was that, their expectations were exceeded. The researcher reminded the staff, that because they kept faith with the company, the company was rewarding and appreciating them and whenever, they endeavor to achieve the company's objectives, they would be appreciated. The staff were ostensibly elated.

Electricity allowance not paid to staff like other sister laboratories:

This was not legally binding. However, with the persuasion of the researcher, who made it known that some of the laboratory in the region pay that to their staff, the management staff agreed to pay out to the staff but that would be budgeted for the following year. The following year, this was done as promised the staff.

Accommodation allowances not paid out to staff like other sister labs:

This was also not legally binding on the company to pay, but for good performance and as motivation, the researcher influenced management to pay, this was paid out, in the same year as the study conducted. The company had some budgeted money reserves that could afford that pay out.

Night allowances not paid out to staff according to their labor laws:

This was true as found via researcher's investigation. This was a legal requirement and the company was to pay that to the staff concerned. Calculations were done for staff concerned and this was paid to the staff concerned, the very year of the study. The staff was convinced to expect the past years payment, the following year, where it would be budgeted for. This was done the following year as indicated. This was a good motivation for the staff. They were very understanding and appreciative of the strings of good news to them.

Transport allowances not paid to the staff:

This was not legally binding, but on humanitarian grounds, good conduct and hard work that the staff had started, and as an encouragement and appreciation to the staff, this was paid to them, with the promise that it might be increased the following year to reflect actual expenses. This was done as promised.

Health Insurance not paid out to the temporary and permanent staff:

The company signed up with an insurance company. The arrangement and agreement were that, the staff paid and get re-imbursed later by the insurance company. The staff contributions were deducted at source, but when they paid for medical expenses, they do not get the re-imbursement.

This was brought to the HR attention and this was addressed with all seriousness. In no time, all the claims, predating the study, for those who kept receipts, were re-imbursed. Measures were put in place to ensure that this issue did not repeat. Staff were encouraged to report any of such poor treatments to the superior or management. This was applicable to temporary and permanent staff, not casuals. The staff welcomed this. What was even better was that organization extended the insurance to cover one legal spouse of the staff and their biological children.

Without the staff asking, through the suggestion of researcher, the management agreed to give to the staff periodically, one 25kg bag of rice, oil, sugar, coffee, soap and one crate of eggs, in addition to other incentives, that were not as costly as they were valuable. This boosted the morale, motivation, and the commitment of the staff. No training of staff. No promotion or career advancement for any staff:

With the centralization and micro-management persisting pre-study, it came as no surprise to the researcher that training levels would be very low or non-existence, and the latter was confirmed by the staff complaint. The staff did not appreciate and understand the very task they were undertaking. So, when there were non-conformances, they could not spot it earlier enough, which affected the quality, safety, turnaround time, production and even the morales of the staff. It could be that the site management did not want the staff to progress for fear of their job security being threatened by the staff or lack of trust in the staff's competence. Whatever the reason, as it showed pre-study, it does not work in most cases. Rather, it was counter-productive, and when this persisted, especially, as a

service provider organization of the nature of a Mine laboratory, crisis would be inevitable.

The success of the researcher was largely due to great leadership that came in various forms, which training was paramount. What training does to the staff morale was enormous. The staff if trained to competence, helps the company, and help the manager, in most instances. The staff mostly become loyal to the leader who trained them, from the researcher's experience. And they would not immediately think of ousting the substantive leader who invested so much in their development. The manager works less, stresses less, and he gets the time to concentrate on areas that matters more, for the organization. This also manages the health and sanity of the manager, very well.

The laboratory is an organization, and an industry where one person cannot do it alone. It is impossible, for one person to run a 24-hour Mine laboratory. And a culture of intense, deliberate, and appropriate training, is one of the surest ways to avert crisis of this nature.

After training the staff, the researcher gave the staff the opportunity, to implement the new knowledge acquired. The staff were very pleased. Then after they had mastered the skill, the researcher delegated the task to the staff, thereby, empowering them. It showed them the leader had confidence in their abilities, competence, and intelligence. The staff as was observed by the researcher, appreciated this kind of development even above monetary benefits. They wanted to explore their capabilities and knew it placed them on a good pedestal for future opportunities within the organization or outside the organization.

The training was in all the areas of leadership related to their work in the laboratory. The training of their future growth needs and areas of individual weaknesses of all staff. It was organized in functions such as quality, safety, occupational health, environmental management, technical procedures, and policies amongst others.

The researcher took it further, there was a maintenance engineer, that was to be employed from outside the organization. The researcher recommended a staff within and trained him to take that role, the person nominated and trained by the researcher, became the maintenance person for the laboratory, same staff, rose to become the maintenance person for the sub-region for the same company.

The researcher identified a potential staff within, and he was trained for management role in Occupational Safety, Health and Environmental management, later, the researcher delegated the responsibility of most of the training conducted to him. He was and still useful to the organization, as at the time of study, he was doing Relief management duties in the sub-region, plus the HSE duties. The store person hired before study, was struggling, but the researcher noted her strength was in administrative duties, so it was discussed with her, and she gladly accepted the role of an administrator for the laboratory, whilst someone within the same company was trained, to take up the role of the store manager. He became a model for other store persons in the sub-region in a short period of time.

The most remarkable of this transformation was one chemist who was written off, he was supposed to be the senior most of the staff, as at the time of the research, who was reduced to a driver, because, he was deemed to be incompetent, who could not be used

147

for even the senior chemist duties. In three months, this same chemist, was trained and he was able to relieve the substantive manager when he proceeded on his leave. It became a struggle to get him to leave the driver's role and stock items distribution duties for his real role and potential, this was at the beginning of the study. He told the researcher; he could not do anything aside what he was used to doing. He had very low esteem of himself, because, they made him believe, he was not worth it and not capable. But the researcher worked on him, and in less than three months, the leadership qualities in him, came to live.

The researcher had transformed many young people in the region, like this chemist, but this chemist, was the first, who did not believe in his capabilities, yet, he pulled through. He became the envy of chemists in other sister labs in the region. He became very confident, industrious and an asset to the laboratory.

There was one old experienced chemist who was not interested in leadership opportunity, opened to all by the researcher, later when he saw how newer chemists and all staff were given opportunities, trained, promoted and supported, he later came in to apologize to the researcher, and fell in line, he became very serious but he was not allowed to take the roles of newer chemists already promoted, after about a year, there was an opportunity for a new project, and he was recommended for the senior role by the researcher. To see staff trained by a leader, rise to take up opportunities in various leadership roles, should be a thing of pride for every good leader.

This approach employed tenets such as care from management, empathy demonstration, healing, awareness of staff and management staff, effective and ethical

persuasive, building a community and even going a step further to build a family, working towards a shared goal, commitment to the growth of the staff through listening, training and retraining, delegation, empowerment and promotion. Stewardship was evident, foresight present and conceptualization of the future was a shared imagination to all staff, especially, the staff leadership, enabling staff to act decisively and responsibly. Inspirational motivation was also used and manifested, same as intellectual stimulation, individual consideration, and idealized influence. Throughout the study period, status quo was challenged, in terms of processes, ideas and ways of doing things, ways were modelled collectively, encouraging the hearts, mind and hands of staff to move into productive actions and inspiring a shared vision.

5.13 Discussion of Research Interview Question Two

Targeted at extracting Operation/Production Issues:

2-Why are you not committed to your work as you should? Why are you not able to achieve your production targets?

The feedback from the staff could be summed up as below.

That they, the staff, were not motivated enough, their concerns were never addressed by laboratory management although communicated to site management. Management did not care about them. Management disrespected them. Staff views were not sought after neither was staff listened to. It appeared site management could do it alone, so they allowed site management to fix the issues.

The site management blamed staff for every mishap. Staff was the unfortunate causalities for site management frustration or lack of leadership. There were under-staffed according to the staff. Finally, some noted the air supply cut from the Mine, cut in water, electricity and shortage in fuel supply, slow response to major maintenance needs by the client were issues that ought to be addressed.

All but one of the concerns raised by the staff were valid. The staff thinking or believing they were understaffed proved to be unfounded, they had very poor work organization stemmed from lack of adequate training. The weight of their unhappiness and disaffection for work seemed overwhelming to them and clearly, the lack of proper leadership was at the root. The researcher found this to be correct from his investigations. The observations by the staff above were some of the contributory factors for the poor quality, poor turnaround time, poor production and of course, the poor profitability and crisis the laboratory found itself in. Inability of the entire management team to address the issues noted by the staff caused the poor performance and crisis of the laboratory. Beneath all these factors was, as noted, lack of good and appropriate leadership which the staff and organization needed.

These factors were major contributory factors to the poor performance of the laboratory as well as negative profitability as already observed. This went contrary to the contractual agreement signed between the two parties, thus, the Mine and laboratory. It also pointed to the very low sense of urgency in solving the issues, the raised tensions, the increased frustrations and for some, anger at the workplace which was dangerous and indeed toxic.

The frequent changes in management staff on site was a superficial attempt to solving the issues of the laboratory because the root of the issues was not investigated and addressed effectively. Perhaps, that move was to impress the client that something was being done to address the issues, but it did not solve anything, rather, it complicated the issues the more. Lack of communication, and proper communication for that matter, between management and staff, laboratory, and Mine and the amongst the top management of the two entities compounded the issues. It led to staff discontentment and ultimately, lack or absence of staff commitment. This resulted in the Mine considering another competitor. The Mine felt the laboratory was not serious at finding solutions that was necessary in resolving the issues, and to them the laboratory had exhausted all ideas that could be employed in solving the issues and worse, the working relationship was being strained even further with the lack of proper communication.

The staff were not motivated enough, their concerns then were mostly non-monetary, and the study confirmed this observation. They needed the open-door policy of communication, respect for their points of view or at least to get the perspective of management on happenings in the company with respect to their concerns. They just wanted the opportunity to be heard, but there was none, pre-study. The top management to them, did not appreciate their work or presence or contribution in the laboratory hence made no conscious effort at visiting them at least to listen to their concerns or to give them feedback on their contributions to the company's objective.

Aside the contract of staff that was arranged in the second week of the study, there was no monetary benefits given to the staff, until after about a month or two, when

concrete results of the application of the multi-leadership principles were confirmed. The staff expected some improvements in their conditions of service, after a year of the study, and yet they gave off their best and, in just few weeks, the fortunes of the laboratory turned around for the better. the results were sterling but not the best, because there will always be room for improvement. However, from where the laboratory was pre-study, it was indeed a remarkable improvement.

The critical state of the laboratory was communicated to the staff. Relevant institutional historical questions were asked of the staff. The opinions, views, and perceptions of the staff were sought after by the researcher. Whenever, their views were not strong enough in solving an issues, the researcher suggested an alternative to them and asked what they thought about it, he was that very opened, because he knew, it was the staff who were mostly at the implementation end of it and no one person could it alone.

The staff in all fairness would want the laboratory to succeed, least they would have given up completely and perhaps, sabotaged the company in several ways or caused a lot of union strikes but they did not. The researcher was amazed at how energetic and involved the contributions from the staff were. The staff most times, came up with constructive criticisms either of themselves or ideas on the best way to proceed that save productive time, without compromising on quality or other important parameters.

Whenever the idea was good, the researcher praised the staff and then, went ahead to explain to the staff, how he was going to implement the ideas they suggested, and

asked once more for their opinions and feedback on the suggested approach, the researcher intended to implement.

The suggestion box was useful in this respect, principally, for those who were shy, afraid, or not comfortable because they deemed the information confidential. Indeed, the staff had wonderful ideas and some good solutions, and the approach of leadership used was very welcomed and appreciated by the staff. The staff, therefore, did their best to ensure that the team ideas worked. It was after the changes expected of the researcher, implemented, and began yielding the desired fruits that the researcher recommended the incentives which were part of their requests and concerns, mostly legally binding on the organization to do.

The researcher even went ahead to recommend some incentives which did not cost so much but was valuable to the staff, that would mean a lot to the staff, although they did not ask, they were provided with monthly incentives such air time credits, sugar, coffee, soaps, and every three month, a bag of rice, bottles of cooking oil and crate of eggs. This was to say thank you from management and to motivate the staff to stay the course or do even better. They did, they were so grateful for the gesture and promised to do more and it was obvious the staff, were very content and committed to do all they could to lift the company from negative to positive profitability.

The communication gap was closed effectively, an open-door policy was implemented by the researcher which yielded positive results, the staff opinions were sought after on key decisions. The staff were trained and re-trained in activities and the leadership skills they required to perform better, centralizations of all processes and

153

leadership activities decentralized, and the staff were empowered, to take responsibilities and be responsible for their actions, with informed background. Opportunities given to staff and locals to develop and grow to take up opportunities and get promotions after three to six months of justification of the new role, that they could effectively execute the responsibilities given to them.

Issues that site management could not solve, staff were advised to put it in writing for the support staff or manager concern to respond, also in writing, communicated to the staff, after necessary management consultation has been finalized, with the researcher moderating affairs and communications, and making inputs on the best approach. In all these, the researcher proved that honest communication to the staff, pays off, positively. If management could do it, management was to communicate such to the staff, when and how that was to be done. If management could not, management was to advise the staff on the reasons or justifications. The researcher found this approach of staff communication effective in building trust.

Management showed care for staff by thinking ahead of what the staff would need or want to be happy or satisfied. Even before they asked or ever think about it. It is mostly not the cost, but the value, that matters in such instances. It should not be something that would plunge the company into red, but possibly, a gesture that would eventually and consequently results in moving to company into deeper blue.

Management did not disrespect the staff, or the staff did not feel disrespected because of the leadership approach used. The management respected their input in decision making that is related to their jobs, they were carried along in all decisions that

was directly connected to their tasks and when they were admitted, the researcher communicated in clear terms, how he was going to do implement them.

The staff got pleasantly surprised that although, they believed the researcher had the answers to the issues, he would still ask them and seek their views, criticisms, and opinions on decisions. What was found was that, with this approach, the staff owned the changes and went the extra mile to ensure that changes, plans, and new ideas succeeded, with or without the presence of the leader.

The systems were built into a great work culture, entrenched, and fixed. The leader's presence or policing would not be needed anymore. The micromanagement approach became a thing of the best. The changes became the staff's and they ensured it succeeded and even improved. They staff was listened to, and the researcher was overwhelmed by the information, insights, and perspectives he gathered from the staff, which played a key part in decision-making to see the company turnaround for the best.

The humility of the researcher was endearing to the staff. the leader acknowledgement to the staff was great, it communicated to the staff that he could not do it alone and needed the staff and all concerned to work as a team to reach the objectives of the firm. This was what the staff expected, and this was part of the tenets of the multi-leadership styles applied by the researcher, so it fit in perfectly. He took the staff along at every stage, directed them and watch them implement the changes. The supervisors used the same approach that the researcher employed at the supervisory levels, and they had same amazing cooperation from their peers, teammates, colleagues, and subordinates.

The researcher as noted in the survey responses, observed the issues at stake and based on the Mine contract manager notes, made the staff know, what the challenges were, what the staff did well and where they fell short, tactfully. What even shocked the staff, was that, the researcher also admitted to what the laboratory management also did wrong or right, and what measures could be taken to resolve the issues at both end. It really was a cascade of causes, underpinned by lack of appropriate leadership. The staff were not to blamed; the systems needed to improve through appropriate leadership. The staff were viewed as not the cause for the woes of the organization but equal partner in business.

The staff was not treated as casualties but as new leaders of change, requisite for the moving the organization to another dimension of business prosperity and putting the days of crisis behind every stakeholder. The staff and leadership could visit the moments of the crisis, just to pick a lesson or two and not to carry the weights or negative energy from those crisis period. A good leader does not blame others, he rather takes responsibility. He does not bring people down; he builds the staff up. He does not exert his frustrations or blames his failures on others. He is a leader or chosen as one to lead, to influence followers and solve problems. A good leader is a good people manager, not people destroyer. He looks for the latent talent in followers and polishes them up for greater good.

The staff realized that when they were overwhelmed with the lack of planning or self-leadership, manifesting as abysmal self and work organization, easy jobs become very herculean, and results in accidents, poor quality and stress-related ailments. The

staff realized that they were not understaffed as they earlier thought, but rather poor organization, lack or poor training, poor communication in the organization were at the roots of the issues. Indeed, some departments were over-staffed, but the staff were re-organized to achieve superior results in terms of all the indicators of laboratory performance.

These leadership approach inculcated leadership tenets such as challenging the process; because once that is not done, one could not institute any changes, modelling the way, enabling others to act, inspiring shared vision, encouraging the heart of all in the team to act towards the realization of shared objective. The leader listened actively and attentively, the leader showed empathy and care, resulting in healing to deeper levels in the staff and leadership of the organization, the leader was aware of his abilities and limitations and that of the staff and made efforts to address them, he used compelling positive persuasion in his approach, building community through communication and openness as well as honesty through integrity.

The leader throughout the application was passionate about the commitment to the growth of the laboratory staff, exhibited stewardship, foresight and conceptualization of the future, where he saw the organization going, certainly crisis-free and profit making organization for the good and happiness of the staff and indeed or remote and direct stakeholders. The motivations as a leader were inspirational to the staff of the laboratory as well as the client who were monitoring the successes and changes in the organization during the period of the study.

The researcher as a leader, demonstrated idealized influence, intellectual stimulation and individual consideration and these yielded great results, in terms of turning around the hopeless situation of the organization to business excellence and in the course, regained the confidence of the Mine, so that, they extended the contract expiry date and even increased the scope of contract of the laboratory, which was awesome to witness as a leadership researcher.

The leadership approaches used in solving these, were no different from how the approaches employed in resolving the productivity, turnaround time and quality issues in the pre-study customer survey discussions. Some of the concerns raised by the staff informed some of the approaches used in solving the issues that the staff raised.

The air cuts, fuel shortages or delays in refueling, power cuts and delays in maintenance by the Mine were valid, but not a major contributor, in this case. These issues persisted even after the changes had been made, but the laboratory was able to exceed the targets. It could have improved the targets insignificantly, but it was not the cause of the crisis, although it required attention.

However, this was presented to the client in an open meeting suggested by the researcher, that the laboratory management met with Mine contract representatives once a week. In the meeting, this in addition to other issues were tabled by the researcher, the Mine admitted they had those issues and were working seriously to resolve them and that it was even a burden to them, even more than the laboratory. They assured the laboratory that they were working on it and it would be resolved. Most of these issues persisted even to the end of the study but frequency was reduced.

The lab was advised by the researcher to keep records of the down times, and indicated how it affected quality, turnaround time and production or HSE, indicating in real terms and quantitatively how these affected the laboratory performance and communicate that via meetings and emails or any other acceptable channels of communication by the both parties, thus, the client and the laboratory.

The transformational and servant leader in this case, the researcher, employed the tenets of these two leadership in achieving the objects mapped out under this heading by listening, seeking feedback from staff, noting which would be implemented and how it would be implemented and seeking the criticisms and opinions of the staff, pulling the staff along through every stage of the change process and leadership principle application, thereby making the changes and new decisions, easy via staff ownership to those changes and decisions, because there were part of the decision making, it was their collective ideas, and so they did all they could to ensure it got systemized, entrenched and monitored for effectiveness and efficiency.

The leader used empathy, care, attentive and active listening, creating awareness of staff strengths and weaknesses, and what needed to be done to balance any lack, he used persuasion, building a family; not just a community, instilling stewardship in the staff and leading by example, conceptualized the future along with the staff, challenging the status quo, modelling the way, encouraging the staff to act towards a shared vision, enabling the heart and minds of the staff to act in unity of a shared purpose. The leader's motivation was inspirational, an idealized influence necessary for the staff to change their mindset and embrace the objectives of the organization as theirs. Intellectually

stimulating the staff, to dig deep and come out with creative ideas and guiding them to

think outside the box and make timely decisions that could help the company and

themselves as individuals grow, thence, manifesting, individual consideration.

5.14 Discussion of Research Interview Question Three

Targeted at extracting QC Issues*:*

3-Do you have adequate training for the job you do? Do you understand the task you

perform?

The unanimous response was a negative, indicating they had no training and even

if they had, it was inadequate according to the staff and this, the researcher, verified as

correct. They lacked the understanding in the task that they performed, which was a

recipe for disaster, especially, for an organization such as the laboratory, whose contract

is mainly hinged on integrity, arising out of the quality jobs expected of the laboratory

organization, in terms of precision and accuracy.

Quality control and assurance was not good which misled the Mine and had

serious consequences on the operations and productivity of the Mine. Making mining

unprofitable, that could lead to Mine closure or even legal actions by investors.

The approach not entirely different from the approach employed under the

discussion of quality improvements section of the customer satisfaction survey responses.

Firstly, the staff were supposed to know what the standards and policies were, with

respect to quality. And that was the first training given to individuals in the respective

section, in connection to their tasks. Then a detailed step by step procedural audit was

conducted and the gap, filled. The staff were trained to understand what they were doing as task, how to spot non-conformances, correct it or communicate to superiors immediately.

The entire quality management system was demystified for the staff, who now ask questions, seek information, or seek clarifications where need be. Then trail tests were conducted so they saw the difference, the researcher actively and physical took part and demonstrated what was expected of the staff. In event that the leader could not, he could always ask for resource persons or trainers to visit and do the necessary, so that all the quality concerns of the staff could be addressed sufficiently. Through this effort, processes and tasks were decentralized, right staff empowered to undertake certain monopolized tasks and through same approach, new leaders were raised out of the staff, and they were promoted subsequently, after, excellent execution of their responsibilities.

The leader put system in place to monitor and control this processes and changes, so that, there was no deviation. The leader should not delegate himself out of his responsibilities, so he should periodically follow up with updates, this is one of the characteristics of any great organizational leader. A good leader develops others to empower them, lest, there would be no need, for development. Once development is completed through training and practice, the leader is to delegate and empower the staff. Training was done beyond quality control and assurance as noted, into all the functions necessary to see staff advance in their career in laboratory management and operations, as well as, other departments and functions, that might not be directly connected to quality management system.

The sources of error from both the part of the Mine and laboratory had been discussed extensively namely, sample nature, sample loses, sample gain via contamination, non-correlation between field samples or slotted QC samples and software loading, process loses or contamination or wrong positioning.

The staff were trained in the use of the software for laboratory Information Management System and access given to a lot more staff, but they were trained and tried before this action. All the testing was done in the software program, to ensure traceability and help in the auditing process. This was also useful in case there were disagreements, and to increase turnaround time, quality performance and remove data entering errors associated with excel use and possible figure manipulation by the client or lab, of the laboratory results.

Supervisors and leading hands were selected, trained, retrained, roles delegated to them, tasks were decentralized, and staff were empowered to act professionally and understand every level of testing and procedures involved in the workings of the laboratory. Staff were praised immediately when spotted, once poor work was spotted, the attention of the staff concerned was drawn and training organized to fix and communicate that tendency to all without mentioning or embarrassing the staff concerned. The notices, memos, and communication board created were used to disseminate such deviations.

Some of the leadership principles applied once more were communication and listening skills, creation of awareness amongst all staff, building of a community, family and a system that could ran without the presence of the leader, commitment to the staff

development and growth, stewardship, foresight and conceptualization of where the organization was headed towards, intellectual stimulation, individual consideration, idealized influence, inspirational motivation, challenging the status quo thus, process, mentality of staff, and how things were done around the laboratory, showing the staff, alternatively improved ways of doing things effectively and efficiently, modeling the way for the staff to follow, encouraging and enabling them to act decisively and independently, inspiring a shared vision in the process.

5.15 Discussion of Research Interview Question Four

Targeted at extracting IT/Lab Software Issues:

4-Is there any IT/Software challenge that you have?

There was not much severe issue in respect of IT/Lab Software. There were stated as some staff not able to access or log into the software, the staff also noted they have not had adequate training on the software program, why most of the tests were done outside of the program and lastly, there were incidents of frequent virus infections on some of the computers.

On this subject, there were just a handful of staff who had minimum training in the software use and rarely any knowledge in the navigation of the software. The reason most of the laboratory testing were done and reported via simple excel and data manual entering and possible manipulation on both sides, the Mine and Laboratory. The tests done and reported outside of the software was a clear breach of the contractual agreement between the laboratory and the Mine and the laboratory protocols itself.

163

There was remote access introduced so that the IT of the laboratory could access the laboratory server remotely and fix issues, do maintenance and necessary back up. A visit was organized for the IT representative to visit and help identify issues of the laboratory and communicate same with site management and suggest solutions or fix urgent matters, the IT Manager had never visited the laboratory, after the first installation of the software for the laboratory. A visit was arranged for the IT Manager to visit in a month, to check, service or maintained all IT needs. Fortunately, the Mine's IT were willing to assist, except that they would have nothing to do with the laboratory's server, which was understandable, they were within the contractual limits. Not only was the report on some staff's inability to log into the software, sometimes, the pool of staff who could access and work with the software was increased.

For the difficulty in access, the access numbers was increased because from experience, the researcher knew that when some log in but refused or forgot to log out of the system, and the number of access limit was exceeded, others could not access the Laboratory Information Management System software. Training was organized and reminders were sent out to the staff. Staff were informed and reminded of these mishaps.

All staff had a fair knowledge of the software and how to fix petty issues without having to wait or rely on site manager for such, if there be any problems, they were able to fix it themselves and as a new procedure, report on whatever actions and observations they made whilst solving the software or operational issues connected to the software.

All the sample reception, testing, results and reports were done in and with the lab software, which helped better the turnaround time, ensure quality and traceability,

production and all the benefits that firms stood to derive from a proper laboratory information management systems software. Afterall, that was a contractual obligation of the laboratory to ensure tests were done and reports were to be generated via the software.

The virus infections usually came from introduction of external drives such as pen drives, slotted into the computers. This was communicated to the staff, to use the emails and group folders instead of pen drives. Then ports for pen drives on the computer were disabled to discourage the staff from using external drives in the System Units of the computers.

All these were communicated to the staff, before the implementation of the solution and were told of the rationale for such actions and the consequences, if those actions were not taken. Then training and retraining were organized for the staff who needed to be trained based on their task and training needs. Then the staff was empowered to those who showed promise, excellence, and responsibility to act or lead effectively.

Communication, and listening attentively and actively, were used by the leader in resolving this issue. Training, respect for staff considered, building a community, commitment for staff to grow through empowerment, idealized influence, intellectual stimulation, challenging the process, modelling a new improved way that all staff could identify with, enabling and encouraging them to act, inspiring a shared vision, were all employed by the leader.

5.16 Discussion of Research Interview Question Five

165

Targeted at extracting Purchasing Issues:

5-Any stock order issues that you would want to bring to my attention?

The country manager was livid at Human resource manager during the meeting, but was even more livid with the Procurement manager, the researcher calmed tempers and explained to all, that it was not a fault-finding mission but a solution-oriented one. The meeting was not to apportion blames, but to communicate the seriousness of the crisis, and the repercussions at stake, and the role that each player was to play in finding a lasting solution to the problems. After the meeting, when there was any negligence or lack of support or irresponsibility, the appropriate sanctions could be applied but for now, we are looking at the application of these two leadership principles in solving these issues and, positive initial signs were witnessed at this point. It was shocking that the non-operational team feigned ignorance. We were interested in unearthing the root causes and finding solutions and not punish anyone, we needed to learn some lessons to avoid repetitions in the now or in the future, in the case study organization or any of the laboratory that they supported or ought to have supported.

Amongst some of the issues noted, were lack of priority setting, poor organization of work and orders, lack of follow up from the team, absence of sense urgency in most of the support staff that worked remotely in the capital.

Training and re-training were proposed by the researcher in all areas of weakness identified. Tools and programs that would enable them to organize, prioritize and execute

their responsibilities effectively were immediately organized for the team involved, including the management staff.

The only externally added staff, whose sole responsibility was to ensure that stock do not ran out, especially the critical stock items. Critical stock items as far as the laboratory was concerns were items, whose depletion, would force the entire laboratory process to halt, that would be a breach to the contract. Thence, such items were emergent and needed. Noncritical could be akin to wants, whose depletion the lab could ran for a while, non-emergent, wanted. The additional procurement staff was based in the capital to coordinate all the critical needs of the laboratories in the region and collaborate with the respective laboratory managers, on the stock orders required. Excess urgent stock items were stored in the capital in case of unforeseen circumstances, such as the corona virus pandemic, which slowed down drastically the entire ordering process.

Some stock items order sealing were lifted to increase the quantities, due to their urgent nature. Data was collected from all the sister labs and average was obtained, and the percentage was agreed upon, bearing in mind, sample numbers and inventory coverage; thus, how long the stock would last when they arrived on site, and the time it took to order. The excess was stored in the capital as proposed by the researcher, so that, all laboratories in the region could feed in, if need be. This introduced excels such as the one below:

Table 1.3
"Critical Stock Monitoring"

Essential Stock	1	2	3	4	5
STOCK LOCATION	Container 1	Container 2	Container 3	Container 4	Store
STOCK CODE	1600	1501	12	1610	1400
Consumable stock item	CRUCIBLE 50G	POT	CUPEL 7a	Flux	Lamp AAS Gold
Unit of Measure	crate of 1500	crate of 1640	box of 300	bag of 25kg	each
In Stock (Actual)	0	27	456	1473	19
Monthly need	12	14	240	625	3
Holdout months (Inventory coverage)	0,00	1,93	1,90	2,36	6,33
4 months need	48	56	960	2500	12
6 months need	72	84	1440	3750	18
Expected stockout date	11/Jul/21	06/Sep/21	06/Sep/21	19/Sep/21	17/Jan/22

The Holdout months inventory coverage was formulated, just as the Expected stock out date. The stock ordering processes was improved as a result of suggestions proposed by the researcher through open communication and adaptation by the procurements team. Ideas such as the originator of the order, which was the laboratory manager should be in copy in all email communications from start to delivery of the stock items and feedback on the quality and customer service. The procurement team in addition were to update the laboratory stock manager and laboratory manager on the status of all orders, local, in the region and thirdly, outside the region twice a week, preferably on Mondays and on Thursdays of every week.

The direct representative of the procurement team in charge of the laboratory, came to the Mine, for a period of one month, to learn about the items the laboratory requested and get familiarized with the hectic and demanding nature and environment in which the laboratory was operating, this helped a lot, as it gave the procurement person,

first-hand information and experience of the tough nature of the Mining environment and conditions.

Stock item storage facility on Mine was increased for the laboratory as well as storage facility at the capital, on the advice of the researcher and adaption by the support team. Stock reports generated for local, in region, out-of-region for weekly, bi-weekly and monthly reporting.

It was resolved that any delays coming from any quarters should be immediately reported to the Business manager and the Country manager.
Local orders that should take a day to 1 week maximum could take up to 9 months to arrive:

This was correct per researcher's observations, some even lasted longer than the nine-month stated. The person in charge showed no sense of urgency because they had no idea what the use was or what the process was, or the nature of the laboratory processes were in the scheme of the Mining operation. The order request might have been forgotten in the lines of approval, sometimes, follow up by laboratory manager not responded to, that was negligence. Site was advised to do forecast of consumption based on tests to be performed and orders to be done, follow up judiciously on all orders, and whenever there were delays or negligence, inform the Country manager.

Secondly critical stock person was hired by the laboratory for the region to coordinate all the needed critical orders for the laboratories in the region.

Stock monitoring excels such as indicted above in Table 1.3 was introduced for site manager to monitor levels of stocks especially critical stock, stock register was

169

periodically updated of all received, transferred and consumed goods, as well as new orders, and reports were generated on weekly, some bi-weekly and others, monthly basis.

It should, however be noted, that like all changes, it takes time and comes with its own challenges, there were drastic improvements, but still challenges with the orders, although minimal but significant to note, hopefully, with time, there would be mastery and discipline enough, to eliminate all obstacles. It was lack of organization on the part of the procurement person, and the laboratory manager would have to send several messages as follow up, to get what the laboratory wanted, the Country manager was largely kept out of the loop for obvious reasons, but with time, he would be made aware if the standard is not improved or remains the same. Training helped the procurement person in many ways and the visit to site was an eye opener for him, which came handy in the discharge of his duties.

Lab was unable to get assistance from sister-labs when in need:

The way it worked in the laboratory was that each lab ordered for itself, which made sense. One laboratory could not order or consider other laboratories when placing its orders. So, when one laboratory runs out, another laboratory rarely comes to the rescue. That was the reason the laboratory in the capital, centralized in a sense to hold extra or emergency or critical stock quantities were done as suggested by the researcher and this was a creative solution, for most of the ordering problems for the region. 20% above order was allowed for all critical stock items for the region. And the extra stock orders were stored in the centralized stock. This was to ensure that they would not be any running out on the items. Bearing in mind that the laboratory did not need to keep a

heavy stock or heavy networking capital, which is the amount needed to run a business over a period of time, it should be as low as possible per the company strategic objectives.

Out-of-country orders, which should take 1- 3 months maximum, sometimes take a full year, making stock management difficult:

Investigation showed that sometimes they exceeded the one year. The centralized stock was helpful in this respect. Same with the stock monitoring tools that was put in place also helped a great lot in this direction. Laboratory was encouraged to do about 40% plus the normal orders, agreed by the Country Manager, to accommodate the shocks that came with the unplanned sample surge by the client and order delays. The corrections were made in the subsequent orders, in case, the stock items were not used.

Stock ordered from within Africa, should take about a month, could take 6 months before they arrive:

Communication of findings were sent to partners and suppliers of outside or in region orders, to consider the changes and make arrangement to improve the delivery times for the laboratories orders, which was taken in good faith by the suppliers and they obliged the laboratory's request.

More containers were acquired to store some items on site of the laboratory, and some kept in the capital town of the country, the centralized stock. This was so because

when the numbers increased the stock item consumption also increased, and there was a direct correlation between the increased scope in the extended contract and more stock items needed to execute the contractual agreement.

It was observed that most of the delays came from in country procurement team and not suppliers, except that there were few situations that were out of the suppliers' control like a pandemic or an unrest in any of the transit countries for example.

The follow up by the site manager and store manager, selected and trained within the staff, of all orders, was helpful in solving this challenge. The monitoring measures in place was a fantastic idea, thus, the programs and email copying of order originators, which was the site manager and site store manager.

The main stock monitoring excels which was incomplete was completed by the site manager and store manager, a book was introduced to aid physical stock registration and control consumption of all stock items. Monitoring software was suggested by the laboratory, however, top management assured site laboratory, they were working on acquiring one, they were sorting out few issues such as software licensing fees but they would consider it.

No substantive stock manager, so no inventory controls, just provisions made end of month:

What pertained pre-study was chaotic and a mess of stock management, for want of better words. Unit of measures or quantities problems, the stock excel not updated, inventory counts not done, the excel not maintained, indeed, not used. What the laboratory did was quite unacceptable in standard stock management per the laboratory

stock management procedures, and not having a competent person to manage the stock made bad matters worse. They resorted to making estimates and provisions of monthly stock used which was woefully, below the actuals, that even made the -75% laboratory performance inaccurate, meaning the lab was doing far worse than that figure and it was masked. Whether deliberate or otherwise, the investigator could not confirm that.

When proper stock was taken, it was discovered that huge amounts were not accounted for, but we could not trace when the actual issues started. This also meant that the 5% that the laboratory ended with in the first year of study, could have been far more, when the two leadership principles were applied in solving the issues of the laboratory.

Like noted, a staff was identified from the staff, and trained to take up that responsibility that helped the laboratory and made the staff very happy at the same time. Inventories were taken, each week, on critical stocks and bi-weekly on the rest of the stock to identify shortages of stock materials in real time and take appropriate actions. Provisions were rarely used, and a procedure was instituted to check this, which included, items whose prices did not arrive, before items got used. 10% more than the old price in the stock system was used as estimated and provisions made within the month of usage. This stock provision based on suggestions by the researcher rarely happened. Reception, used, transfer, damaged and obsolete goods in the stock, as well as all orders were appropriately controlled, managed and reported on, in their respective reporting times to finance and procurement teams, with Business manager and Country manager copied in such emails.

Poor ordering processes resulting in late ordering, poor stock forecast (items and quantities), and wrong items ordered, wrong quantities ordered- higher or lower than requested. And wrong unit of measure in ordering process. Some items ordered were deleted or removed by support staff without contacting site management:

On the suggestions of the researcher, there was no deletion or removal of orders since the order originators were always in all ordering communications and they cross-checked the orders throughout the ordering process, if it was as requested. With the new store manager in charge, items were counted to check if the units of measure were consistent with the one recorded on the stock register.

Stock register was maintained, updated, and kept in shape, throughout the period of study. Due to the effective stock systems introduced by the researcher, poor orders, haphazard orders, late orders and all its associated issues were eliminated and became a thing of the past, especially from the perspective of the laboratory. The laboratory pushing and doing follow ups. Orders were now placed in advance. The centralized stock of the laboratories in the region, also was a timely intervention and impacted positively on the good stock management within the region. This was replicated in all other sister labs in the region and beyond and it worked very well.

With the stock order originator in copy, when there were issues of lower stock orders, over stock orders and appropriate replacement of orders, with the orders, when the ones ordered had ran out of suppliers' stock, the laboratory manager was available to advise on what actions to be taken by the procurement agents. Appropriate purchasing number and order identifications were recorded and kept. This was done for every stock

items to avoid confusion. The supplier identification and coding were also placed beside each stock item. On the general stock control sheet, was a formula to check the inventory coverage for each items, so that, with the quantities left, forecast on usage, and ordering times involved up to delivery time, new orders were placed.

When stock materials arrived, the site did a comprehensive check and made a report on items received, conditions of receipt and if the unit of measures or quantities were consistent with what was ordered and a report on each item, as and when received by the laboratory were made with all who needed to be in copy, copied.

Pictures accompanied items that were new or the procurement agent in the capital was not aware of, to avoid confusion. Detail information added to each new stock, and same information with its stock code, were updated on the stock register.

Poor Internal orders, since no proper stock count, correct orders were not made:

The approach used in terms of stock system introduction, new store manager hired and executing his responsibilities as outlined above on the stock management aspect. On the advice of the researcher, this order was fixed. Accurate orders in terms of correct items, correct quantities, per forecast were ordered just in time, and the laboratory did not run out on any critical or non-critical items, ever since the systems proposed by the researcher in agreement with all the managers concerned were implemented.

No competent stock ordered made resulting in duplicated orders making the stock heavy in terms of net working capital:

The centralized store person for the region, working in harmony with new laboratory stock manager, and indeed all site managers, solved this problem. The very approach to the above stock issues, had a ripple positive effect on this issues as well.

According to the researcher's advice, stock items that were slow, obsolete but could be used by other laboratories or client were sold to the lab or client. Making the heavy stock light, in terms of quantities and amount of money locked up in the stock. The stock sales, reduced the stock levels by almost 50%, making the stock light, filled with items that would be useful to the laboratory, reducing net working capital of the laboratory and making inventory management easier. All unwanted stock orders, duplicated stock items, stocks that spent many years in the stock without use were sold to other labs or client. Before orders were made for the other labs, the list was sent to other labs, to check if they had excesses in their respective labs, if no, then the orders were placed. If yes, then arrangements were made between the laboratories for stock transfer. Orders not judiciously follow up with:

The laboratory was following the stock orders initially but stopped after a while. Site management, at a point gave up on stock follow up. And principally, according to site management, based on non-responsiveness of the procurement team. They just got confused and discouraged or forgot to follow up on orders emails. The laboratory was waiting for the orders, only to find out after months, the orders had not been done. With the new system put in place, the site management or the order originator were in the copy throughout, so this tendency was reduced to the barest minimum. The laboratory still had to send out reminders to get the orders progressing.

The follow ups were being done by the laboratory, they had the Country Manager to the rescue, if it was getting worse and once, he intervened, everyone sat up. This avenue of the Country manager involvement was rarely used, no one wanted to be responsible to the colleague's dismissal. The most important point was, there were great improvements made by the procurement and site teams in this respect. There were no shortages, whether or local, regional, or international orders. The few orders that were followed up with, they were either no response or proper feedback from procurement. No sense of urgency on the stock ordering process by support staff:

To solve this issue, there was twice a week, report exchanges on the status of all orders, which the laboratory religiously followed up during the period of study. With the appropriate communication, this was checked and improved. The Country manager was involved in this issue. Once all were made aware of the severity of the issue and the consequence of such actions, all fell in line. The site visits also helped. The new store person and the procurement collaboration improved this issue. The new centralized critical stock person did his job. There was harmony of action, synchronization of efforts in the procurement and ordering processes for that matter. The periodic stock reports introduced helped in solving this issue. Training in stock item identification by store persons and organization of work training also contributed to this success. When feedback delayed within 48 hours, the Country manager was to be informed. Dishonesty in support staff, procurement communicated they ordered but the laboratory after waiting for several months would realize, they have not placed the order:

It appeared the comfort of the big city lives, contributed to the support staff who were working remotely or off-site of the laboratory, not to appreciate the urgency of the laboratory situation. The communication channels created by the researcher and the parties involved in the procurement process, improved this process.

The procurement agent sometimes, out of getting the laboratory off his back, lied to the manager that an order been placed, when in fact, it has not been ordered. This was eliminated by the originator laboratory management involved at every stage of the order.

The procurement agent was reminded, that lying in these matters, were dismissible offences because it constituted dishonesty and lack of integrity per the company's code and should never be repeated. The site visit by the procurement players, added to the effective resolution of this problem.

Sometimes, when the laboratory order arrives at the head office, it would be given to another laboratory without discussing that with anyone:

That was to say when laboratory A's order arrives, sometimes, the items were given to another laboratory, sometimes out of error but most times, deliberately by the procurement team, to cover up their mismanagement and disorganization. With the new system of ordering, originating laboratory in all the communication connected to their laboratory, this became an issue of the past.

With the controls in place and new staff trained and hired for the respective roles and the closer collaboration and harmony, this feat was achieved and the problem, eventually, eliminated.

Some items of the laboratory when they arrive are transferred to another laboratory without communicating to the laboratory manager who ordered it:

This was principally due to lack of adequate space for stock items on site. This was a follow up and an extension of the previous problem highlighted in the previous issue above. To avoid shortages, the centralized stock in the capital was helpful in this direction, in the same vain as, keeping the laboratory manager in copy in all the email trails connected to the orders placed. The laboratory manager was very much updated on all orders and outstanding orders as well.

Extra containers purchased for the laboratory, stationed on site, provided enough rooms for the stock items that the laboratory required. Therefore, reducing the propensity of laboratory items, lying in the capital to be transferred to another laboratory with or without the laboratory manager's consent.

The centralized stock for extra of critical stock and other fast running items was also useful in solving the issue. As it would ensure that laboratories do not get into the emergency situations that would force them to act in the manner as noted and just discussed.

Procurement persons have no clue of the items they are ordering, and they are not bothered:

Procurement persons who have very good idea about the operational needs of the businesses in which they work, were mostly superior and deliver very excellent results as compared to those who had no idea and did not bother knowing or getting familiar with the stock items they do order. That does not mean that the procurement person ought to

have had operational experience as always, a pre-requisite, however, it was a pre-requisite for the procurement agent to be intelligent, discipline, organized and professional in his or her dealings, in this case, with the laboratory under study.

The on-site training of the procurement agent helped a lot in this regards once more, the month visit ensure he got very familiar with most of the stock items in the laboratory and then an overview of the operational processes at the laboratory. Once unsure of the item, a picture was sent to the procurement agent for verification, clarification, or confirmation before a new order made.

Prices arrive very late; for instance, items used in 2020's prices could come in 2022:

This was also one of the causes of the major dips in the financials of the laboratory. New items were received and because no proper records were kept, the items were used and they were not considered in the month-end evaluation of the financials, thence, rendering the negative profitability of the business, an under-estimation, which further, eroded a big chunk of the gains made especially in the first years of the leadership principles application.

A separate record was kept for all such late price items, and closely monitored and this time, although rarely, when it happens, items used were accounted for, in addition to the actual stock used, received or transferred, this was another component that was recorded. Indeed, as noted, 10% plus the normal price was booked against such items and consumed, in the very month that the items were used. That was to say, that, the 5% that the laboratory ended with at the end of the first year, could have been far more, had these

issues been solved pre-study, but as one would observed, that is nature of business and the business of the laboratory, as it pertained to then.

Procurement procedures are not communicated to the laboratory:

This came to light during the interview sessions but was highlighted during the deliberations in the meeting held amongst the management and support staff. The researcher drafted procedures together with the procurement team, who fine-tuned the procedure, and that was distributed to every staff connected to ordering or procurement processes.

All the steps were dissected by the researcher and noted all the bottle necks involved and created a good procedure that was accepted and adapted by the company. Hitherto, there were no written procurement procedures or procedure communication. The researcher communicated that to the staff on site, concerning the procurement process and indeed, the store manager, supervisors and leading hands were trained

Any delays in the chain of order processes, the Country manager ought to be informed.

5.17 Discussion of Research Interview Question Six

Targeted at extracting Stock Issues:

6-Do you have any stock material, tool or equipment shortages whilst working?

Sometimes, we have shortages and when machine breaks down client maintenance delays were the feedback collected. Under this question, the Mine had come to the aid of the laboratory on several occasions until the communication broke down pre-

study. The approach and details of action has practically exhausted above. This was an extension to the previous purchasing problems.

Store person identified and trained from amongst the staff, maintenance person was also identified from within and trained to take charge of the maintenance needs, although contractually, it fell within the purview of the client, the laboratory could not wait for the client, any further. Although maintenance and record books were kept going forward and discussed with the client, the laboratory took charge of the maintenance needs of the laboratory. It was a great decision and a productive one.

The stock as explained was being monitored, controlled, managed properly, with centralized stock person hired. In the absence of the software, excels were created to monitor various parameters that assisted in controlling, monitoring, record keeping, updating, and reporting on stock management as well as ordering systems. Necessary documentations on stock movements, in and out of the laboratory were kept by the site laboratory management.

Great communication skills such as attentive, active, empathetic listening skills was used. Persuasion, building community, commitment to the growth of the staff, foresight, stewardship, and conceptualization of the future were employed as well. Inspirational motivation, individual consideration, idealized influence, and intellectual stimulation were all employed in the approach used. The process was challenged, the way modelled for all the staff, encouraging the heart, mind, and hands to act, inspired a shared vision, enabling the staff to act in harmony as a team in the attainment of the company's objectives.

5.18 Discussion of Research Interview Question Seven

Targeted at extracting Safety, Health and Environmental Issues:

7- Were you inducted or trained in Safety, Health, and Environment management?

The staff noted they were inducted by the Mine before they got the ID cards, but no induction by the lab, no training in Safety, Health and Environmental Management ever, in the laboratory, were the feedback from the staff when asked about the HSE management system of the laboratory.

It was strange to the researcher but there was no record debunking the claims by the staff. To solve this issue, three levels of induction were introduced, Mine induction, Plant induction and Laboratory induction. There was even sectional induction for each of the staff in each of the sections of the laboratory. With all these induction were various risk assessments, through hazard identifications related to the departmental tasks and environment concerned.

Quality, Safety, Health and Environmental Management (QSHE) office was created and one of the staff trained to occupy that role. Roles surrounding the functions were given to him as his responsibility and he had adequate training in the policies, procedures, processes of quality, safety, health, and environmental management. QHSE representatives for each shift and each department were elected, to coordinate the QSHE activities and to entrench the culture of QSHE in the laboratory.

Records of all indicators and documentations were kept in the laboratory. Training matrix created with the QSHE officer, in consultation with QSHE representative,

approved by the site laboratory manager, affixed, and communicated to all staff and roaster created to ensure all the staff underwent the training.

All issues of QSHE were resolved urgently and those that require immediate or urgent communications, were passed to all staff during toolbox meetings, done daily. Weekly group meetings and end of month special QSHE meetings.

The lab that was despised when it came to QSHE matters by the Mine, became a model in the entire Mine and especially, the standard for other Service providers on the Mine. On the anniversary of the introduction of these changes via leadership application study, the laboratory had clean slate on all safety infractions. The Mine consulted the laboratory on matters of QSHE.

Training organized for all staff on QSHE policies, systems, procedures, and processes. Appropriate records kept and files updated both manually and electronically and backed up. Commitment to the growth of the staff, attentive, empathetic listening skills, generally good communication was used. Persuasion, building a community, foresight, stewardship, and conceptualization of the future were employed as well. Inspirational motivation, individual consideration and intellectual stimulation were present in the approach used. The process was challenged, the way modelled for all the staff, encouraging the heart, mind to create and act, enabling staff to act in harmony as a team in attainment of the company's objectives.

5.19 Discussion of Research Interview Question Eight

Targeted at extracting Financial or administrative Issues:

8-What are the financial or administrative issues you have relating to your job?

This was perhaps, the department with the least of the issues concerned with the laboratory. All observed by the staff were verified to be true by the researcher.

Delays in payments for all staff categories:

These issues were raised in the meeting with support staff and this was resolved. Permanent staff paid through the banks, temporary staff also through the bank and casuals were paid through a bank product, and those who had bank accounts, furnished the administration with it, and the banks were used for them as well. Paying by hand, was phased out urgently.

Delays in transfer of petty cash to the laboratory:

This was discussed, and it never re-occurred during the period of the study. The laboratory as most businesses require petty cash to run operations effectively. Especially a laboratory that was far off from the head office. The finance manager noted the bottleneck and it was discussed and agreed to, that the bank would be used, instead of mobile money product being used or by sending individuals with the money, which was too risky, it was not safe and never the best option.

Financial reports delay:

The financial team explained that sometimes, they forgot. The laboratory management is kept in copy in all the approval levels to ensure the right things are done at the right times to ensure that the monies were sent, as soon as possible. A day of the week, within the first week of every month was agreed, that on that day latest, the report would be sent. So that the relevant management decisions could be taken in time and for

the interest of the laboratory. To the end of the research, this was kept to and never deviated from.

Communication, especially the listening skill was in full force in the resolution of this financial issues of the laboratory. The process was challenged, new way modelled for the payment of the staff, which motivated and encouraged the staff to work more productively and effectively. Inspiring a shared vision, enabling others to act, intellectual stimulation, empathy, care, persuasion, and others were employed here too.

5.20 Discussion of Research Interview Question Nine

Targeted at extracting Leadership or Management Issues:

9- I assure you of strict confidentiality. Confide in me, I am here to help. Is there anything you would like me to know about the Management and Leadership of this Lab? The responses of the staff were summarized as per below.

Site manager unapproachable, it appeared, he was angry before arriving at work each day

Management not interested in the welfare as the staff

Management never asked for staff's views, suggestions, or opinions

Some indicated they would use the Suggestion box system for this response. All responses in the Suggestion box related to site and top management, all summarized under this heading as well.

Site Manager did not care and was disrespectful of the staff

Aside the start of contract, no HR or top management staff ever visited site and none visited site for staff's sake or interest.

Manager on site practiced close-door policy on communication and was sometimes, hostile to the staff.

Too many changes in Site managers, and managers, who come on site, were not good managers according to some of the staff.

Micro-management of site management, no training, no delegation of duties and he disrespected their intelligence or did not trust their capabilities, whilst he did not give opportunity for the staff.

Staff not alerted or prepared ahead of changes or lack of training in the respective staff jobs that they performed, before, changes happen.

Some staff noted lack of strategic planning and leadership in management of the laboratory.

Most of these concerns were addressed by the tenets of the leadership under investigation, and so it would be noted that the staff's concern was considered in the researcher's approach to solving these issues.

The new leadership mentality was to approach the staff and not sit back to be approached, to hear the staff out, to help if the leader could and together sought solutions; genuinely concerned about the staff. The staff were not part of the frustrations of the leader and they could not be blamed for the mishaps, it was a leadership failure and the responsibility fell back on leadership. In problem is usually the solution and hence proper leadership, being the solution in these cases.

With new leadership, management showed utmost interest in the welfare and needs of the staff. They showed care, they supplied staff needs even when the staff had not requested for or anticipated, but management did, and the staff were pleasantly surprised.

Almost every decision taken, the leader consulted the staff, worked through it with them, listened to the staff concerns and fears and factored them in the approaches he employed. Great ideas came out of such interactions, and the staff felt very needed, valued, understood, important and respected for those acts. The result was evident. The staff saw and experienced new great leadership, that which showed genuine concerns for staff needs, leadership that cared, respected staff personalities and their abilities, boosting their motivation and commitment to the organization's goals, and the staff exceeded every target set. Going beyond the expectation of everyone who followed the success story of the laboratory.

Visits were arranged for each of the support functions, the Business manager and Country manager. They visited site, but this time to mainly meet the staff. The staff had appreciation for management and praised for the researcher, indeed, there were commendations from both the side of the laboratory management, the staff and the client for the researcher.

Doors were opened, never closed to the staff or the client. There was even a pro-active approach in every aspect of the leadership application. The staff did not just become friendly, same as they client, both became family. A family united by a common goal, motivated by right leadership, to achieve the hitherto, unattainable feats.

Micro-management was discouraged and eliminated from both the management

and staff perspectives. There were a lot of training organized, delegation and

empowerment to the staff. Opportunities for growth given to all staff, promotions for the

deserving staff. The staff attested to the effective of the leadership principles used by the

researcher and applauded the strategic thinking, intelligence and superior leadership and

management skills exhibited by the researcher during the study.

These were achieved through communication, negotiation, empathetic listening,

healing for staff and for the leader, awareness, persuasion, building community of

motivated and committed staff who were ready to be stewards to themselves and their

colleagues to meet company's objectives, conceptualizing of the future together with the

staff. He also employed inspiration and motivation, idealized influence, intellectual

influence, individual consideration, challenging the process, modelling the way,

encouraging the heart and mind to perform its optimum, and enabling others to act

purposefully, all towards inspiring a shared vision.

5.21 Discussion of Research Interview Question Ten

Targeted at extracting any other issues that might escape the researcher or get to know

what is important to the interviewee:

10- Do you have any questions for me? Is there anything you would like me to know?

No one had ever bothered to ask the staff or know what issues they had, they were

grateful. Staff expressed hope that the researcher would help them resolve the issues

identified. From site management, they bemoaned the lack of support from staff and

support staff, poor conditions of service, specifically, small amount of salary, incompetent staffing to them, nepotism from the side of top management at the head office, undermining of the laboratory manager by colleague management staff and some top managers, some of the top management staff supports some indiscipline staff, some managers working remotely and most staff had no regards for hierarchy, lack of commitment from staff, too much staff absenteeism, permissions, lateness and frequent sick leaves of staff. The crisis changed nothing within the support staff and laboratory staff, neither did it change anything with the top management, pre-study.

The problem of the laboratory was lack of effective leadership, manifesting in broken communication lines and closed-door policy. Lack of support from the staff, the client, top management, and all involved in the laboratory, all instigated by poor leadership of the laboratory. There was lack of genuine care for the welfare of the staff, resulting in strive, tension, frustration, anger, and non-commitment of the staff. No training for staff, no sense of urgency to solve the crisis, lack of delegation, and empowerment for staff. No cohesion, no teamwork, weak synergy amongst many were some of the issues.

To solve the issue of undermining, indiscipline, lack of respect for hierarchy, the researcher introduced the organogram for the laboratory below, namely, Figure 1.2 created by the researcher, approved by the Operations Manager and Country Manager.

The shifts were handled by the leading hands, who reported to shift chemists, the shift chemists reported to QSHE Representative or officer, then then QSHE officer reported to Chief Chemist. The Chief chemists reported to the Senor chemists, then the

190

senior chemist reported to the Assistant manager and the Assistant manager reports to the Lab Manager, the Assistant Lab Manager reports to the Laboratory Manager, the laboratory manager reports to Operations Manager and Operations Manager reported to the Country Manager. Due to the history of the laboratory and the sensitivity of the store and maintenance offices and fact that, they were new offices in the laboratory, there were made to report to the Lab Manager or his Relief. All staff were to respect the hierarchy, but when there were no feedback on their request, they could follow up the hierarchy to the Laboratory Manager, who exercised open door policy, especially, if the issue were very urgent, personal or confidential in nature. Communications were managed in the laboratory, and the laboratory manager could send it up the hierarchy, whenever, necessary. The below diagram was the organogram that was proposed by the researcher for the adaptation of the laboratory to enhance communication throughout the laboratory and to instill discipline amongst the staff.
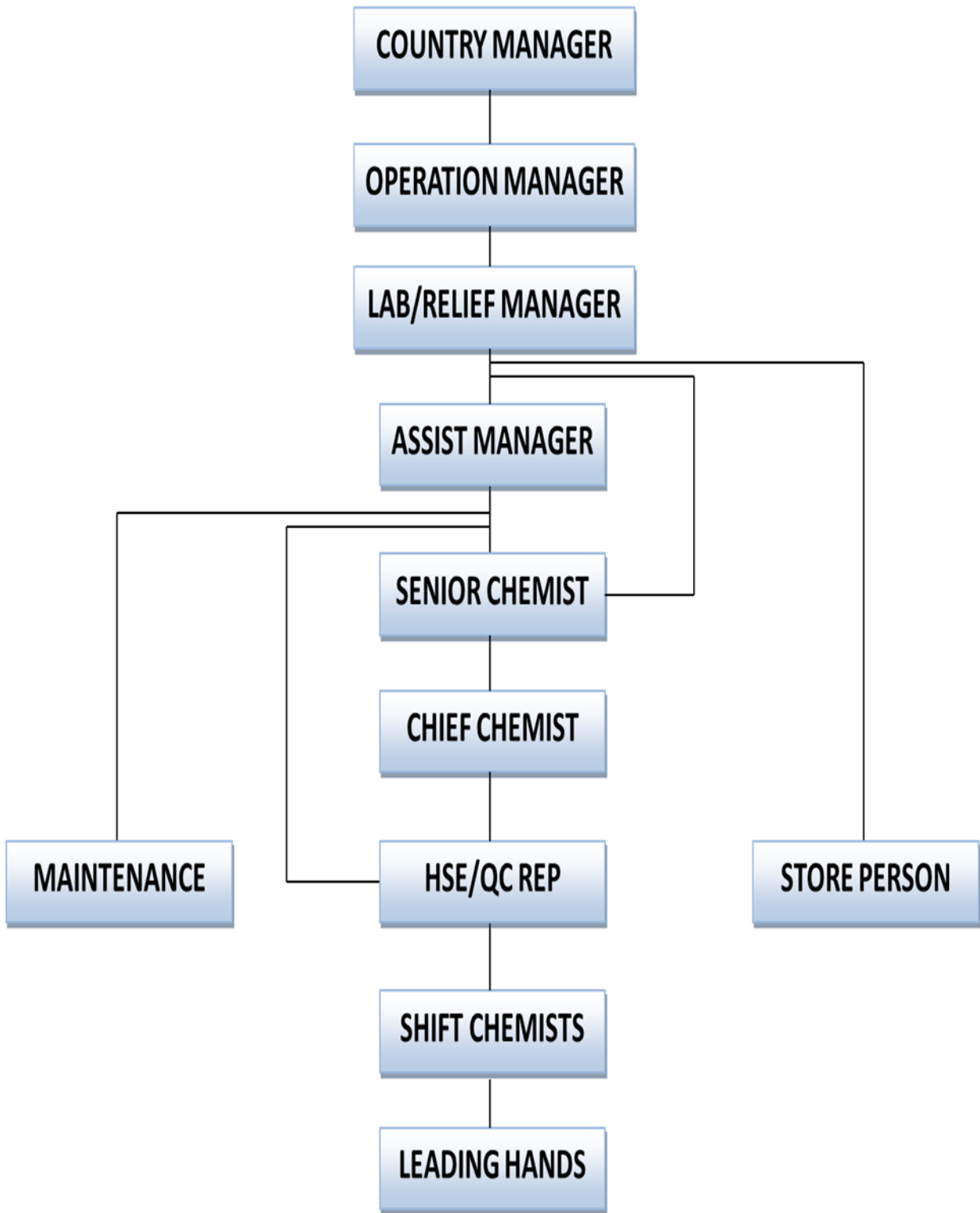
Figure 1.2
"Organogram of the Laboratory"

192

What was missing was lack of good leadership, one that was appropriate to the environment, staff, and client, and once the right leadership principles were implemented, all those issues, were sorted out. And it turned out great.

5.22 Discussion of Post-study Customer Satisfaction Survey Question One

1- How would you evaluate the leadership performance of the laboratory?

     1   2   3   ④

This was rated excellent by the client. This was an assessment of the application for the two leadership principles in the laboratory, which pre-study times, was facing serious performance crisis, poor financial performance and came very close to losing the contract.

A lot has been discussed about the leadership approaches used. The retaining of the contract, expansion of the scope of the contract with its improved parameters, targets and indicators and the laboratory's ability in surmounting all the myriad of issues and even exceeding all contractual agreed stipulations in that short space of time, justified this rating. What was more was that, the financial standing of the laboratory improved drastically, to the excitement of the staff or all stakeholders of the laboratory. This financial prosperity also reached the Mine, in all the areas that the laboratory activities affected. All these great results were indication of the effectiveness of the transformational and servant leadership tenets applied.

5.23 Discussion of Post-study Customer Satisfaction Survey Question Two

2-How do you evaluate the customer service and professionalism of the laboratory?

     1   2   ③   4

193

Knowing very well the relationship between the laboratory and Mine was mutual. Thus, the laboratory succeeded when the Mine succeeded and vice versa. The Mine wanted and desired the success of the laboratory in the execution of the contract, whilst the laboratory also wanted the Mine to succeed in its pursuit, the customer relations were key in the attainment of this goal. Communication was the major vehicle employed in ensuring that this became a reality for both the laboratory and the Mine.

All animosity dropped, open doors of communication engineered by the leadership of the researcher, in the laboratory. Challenges were discussed in a professional and courteous manner. The Mine were committed to the success of the laboratory, contrary to earlier perception held by the laboratory team on site, pre-study. This commitment of the Mine was demonstrated at different times and at different levels of co-operation and collaboration between the Mine and the laboratory.

The Mine was viewed as a business partner for success and not a catalyst of laboratory's failure. They rated this very good, although they did not suggest ways of improving the very good, in the form of suggestions, ideas or plans, they held that it was an area of that require consistent, continuous improvement. However, they had no issue with the state of customer service and professionalism, the laboratory was doing all as expected of the lab, during the study. They indicated they were pleased with the state and level of customer service and professionalism of the laboratory, we only need to sustain it, and if possible, improve on it.

5.24 Discussion of Post-study Customer Satisfaction Survey Question Three

3- Rate the Turn Around Time (TAT) of the samples per contract of the laboratory?

194

1   2   3   ④

Turnaround time was rated excellent by the client. They noted it was beyond excellent, not just for this category, but indeed all rated as 4 because the laboratory exceeded expectations by great margins. For this case, the turnaround time for all the analytical tests. To levels the client thought it was not possible to attained. The laboratory set another bar of excellence.

The turnaround time varied with tests, but in each test category, the laboratory exceeded the estimated or expected timing per the contract and they had no complaint whatsoever, but praised and encouraged the laboratory to maintained those high standards that the study application had introduced.

5.25 Discussion of Post-study Customer Satisfaction Survey Question Four
4-Evaluate the attainment of contractual production numbers done by the laboratory.

1   2   3   ④

This question on the production target of the laboratory per contract received an excellent evaluation, just like the turnaround time, it was exceeded by far margins; what the contract stated. It was the case every time the samples were increased both in quantity and in scope, the laboratory shocked the client by exceeding their expectations. Some production exceeded 100%, some could go up to over 800% for some of the tests, others even more, if more samples were submitted to the laboratory. This situation and the turnaround time pleasantly surprised the client. They were due to the short span of time that it took to attain that feat, for the great changes that produced such great results.

Interestingly, in no time, the pressure from the client pre-study, subsided, and they were not able to keep up with the contractual numbers that they agreed sending to the laboratory. All the client's backlogs at their end were cleared, they even reached to other sites, that they managed, and shipped samples to the laboratory but all those were cleared in no time, with excellent production, turnaround time and great quality performances. Sadly, at a point, the hours of work of some staff begun dwindling and later, the number of staff must be reduced due to low sample submission volumes, to stay afloat as a business. They were recalled when normal or high samples submission was resumed, we did not need so many people to do the reduced volumes of work that came to the laboratory.

5.26 Discussion of Post-study Customer Satisfaction Survey Question Five

5-How would rate the quality control and assurance performance of the laboratory?

1   2   3   ④

The client was extremely satisfied with the quality control and assurance performance of the laboratory hence, rating it 4, as a product or result of the study. The client's quality control and assurances standards, materials, blanks, replicated and duplicates were checking great, and reconciliation was great according to the client. The graphs correlated, corresponded and were consistent with what was observed on the field and as per their expectations. All their reference materials came back great for them and all proficiency tests came back very good. They added that, it was so good to the extent that if there were any discrepancies, they automatically knew, it should come from their end, as client and not as a laboratory.

196

The researcher, however, held the view and communicated same to the laboratory, that quality control and assurance was what hallmark of the laboratory, and it was one of the most important areas where continuous improvement could not be over emphasized. Therefore, high standards ought always to be maintained. The client was very satisfied with the quality control and assurance performance of the laboratory during the period of study. They were pleased with the positive changes introduced by the application of the two leadership principles.

5.27 Discussion of Post-study Customer Satisfaction Survey Question Six

6-Evaluate the ability of the laboratory to meet your general contract expectation.

1   2   3   ④

With all noted above, it went without saying that their assessment of this question would be excellent. It was evident because all the contractual agreements were exceeded. The initial perceptions were proved wrong with the brilliance of the laboratory's performance during the study. The laboratory exceeded the production, turnaround time, quality control and assurance, HSE, which were the major issues of concern for the client.

As a prove of regain of confidence in the laboratory, the client increased the scope of the contract, the contractual numbers, or volumes of sample submission, extended the initial duration of the contract, in a contract renewal process. They did not cancel or abrogate the contract as they planned and communicated to the laboratory pre-study. They noted that thanks to the multi- leadership application study, the laboratory turned

things around for the best and exceeded every target set for the research and for the

contract. The client's imaginations were exceeded.

5.28 Discussion of Post-study Customer Satisfaction Survey Question Seven

7-Evaluate the Safety, Health and Environment management performance of the lab?

1   2   ③   4

Safety, health, and environmental management matters were one that the client,

like the question on customer service and professionalism, believed there was the need to

sustain and continuously improve. They rated this as very good because they held the

view that, continuous concentration be given to that, lest, all the gains might be eroded by

just one simple blunder. With the QSHE officer selected, trained, and empowered to

execute all the functions of his role, without fear or favor. The selection once more with

the collaboration of the staff, of QSHE representatives for each section or work shift,

identified and gave appropriate training in QSHE policies, procedures, processes, and

systems of both the Mine and Laboratory.

Authority and responsibilities were delegated to them, they were empowered to

act in accordance to the contract and policies of both the laboratory and the Mine.

Systems and records were maintained and updated, follow ups done, right and effective

communication in QSHE passed unto the staff, staff were listened to, and their view

adopted, if great and useful for the advancement of the laboratory in the achievement of

its goals and steps of adoption or implementation outlined to the staff.

According to the client, the laboratory during the study became a model, not just for the Mine but other contractors on site as well. The laboratory was commended and used a standard and reference point, during meetings and conferences on the Mine.

The researcher agreed with the client on the view, that this is one areas of continuous improvement, in that if the laboratory got complacent, it could spell doom for the laboratory, just like the quality control and assurance performance. He recommended that consistency should be ensured by the laboratory, and every avenue to improve the system must be put in place, encouraged by the leadership styles under study.

5.29 Discussion of Post-study Customer Satisfaction Survey Question Eight

8-How effective was the communication lines of the laboratory?

1   2   3   ④

Communication was rated excellent by the client assessment. Communication had been the blood line for all effective leadership style, and it was during the study of the application of the multi-leadership skills in the laboratory. None of the feats achieved by the leadership styles applied could have been possible without effective communication within and without the organization under study. Effective communication became a significant backbone in the achievement of the multi-leadership styles application endeavor by the researcher.

At every state, stage and level of the study, communication was the vehicle used and effective communication ensured a safe and successful arrival at the destination, the goals of the study. Just before, during and after study, communication was effectively significant. Through communication, the relationship between laboratory management

and client, laboratory management and top management, laboratory management and laboratory staff, laboratory management and support staff on all three stages of the study was successful. The client was impressed with the effective communication employed by the researcher as a leader in resolving the laboratory issues. An observation, they continually noted and praised.

5.30 Discussion of Post-study Customer Satisfaction Survey Question Nine

9-How would you rate housekeeping performance of the laboratory?

1   2   3   ④

Although the cleaning of the laboratory; both inside and its environment fell within the Mine's purview, the laboratory could not wait for the Mine to do the needful, but to take proactive steps in fixing the issues, whilst the laboratory chases the Mine up, and professionally reminded the Mine, of that responsibility. It was needful the laboratory took that decision because a dirty laboratory reflects very poorly on the laboratory and had an adverse effect on the laboratory's performance.

The staff were encouraged to continuously clean their workstations after each test and cleaners were later hired by the laboratory to clean the environment of the laboratory. When the cleaners had no cleaning to do, they gave support to the production teams based on their competences. Hence the rating of excellence in this category by the client.

A neat laboratory contributed to good quality control and assurance and even safety, health, and environmental management. A dirty and disorganized laboratory was a messy lab, not appealing to the eyes or heart of any visitor, creating a messy work environment, and an unsafe work conditions that could result in various accidents. A

dirty lab affects the perception of visitors and clients negatively, irrespective of the amazing analytical work being done at the laboratory. Therefore, cleanliness of the laboratory always, was non-negotiable, in the view of the researcher. So, the researcher with the leadership principle application created a healthy culture of cleanliness on the staff's personal level and then inside and outside of the laboratory. Waste segregation and good waste management practices were introduced to the culture of cleanliness as well. This was the background for the excellent laboratory evaluation on housekeeping by the client.

5.31 Discussion of Post-study Customer Satisfaction Survey Question Ten

10-Please any issue of concern to you, that you would like me to know about?

The client noted, "the evaluation 3.9/4.0 given after assessment indicated that the laboratory was performing at a superior level, excellently. Ever since the study of the multi-leadership application began. We as a client are very happy and satisfied with the results and impact of the study. We have firsthand, witnessed the effectiveness of the transformational and servant leadership styles application and we have already taken notes and lessons from the researcher and incorporated it into our system, and it is showing great promise.

We express the hope that this would be sustained and if possible improved for the smooth running of the laboratory. Considering the abysmal nature of the situation in the laboratory before the study and the laboratory achieving this level of excellence due to the leadership application study of the researcher. A study whose great effect started in less than two weeks of its application was worthy of note, commendation, and

recommendation. And we thank you (the researcher) for the study, knowledge dissemination and the amazing impact of your study on the laboratory and the Mine in general."

This was an amazing testimony from the client. Looking back at the frustration, tension, and anger in the system pre-study. This was communicated to the staff by the researcher, who shared the praise and attributed the success of the research to the good work and collaborative efforts of the staff, he could not have done it alone.

CHAPTER VI: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 Summary

This research paper sought to investigate and establish that multi-leadership principles were adequate in solving the organization's myriad of problems or otherwise and to demonstrate how multi- leadership principles (Transformational and Servant leadership) approaches could be employed in resolving real life industrial problems. To the extent of lifting an organization from crisis and various organizational changes to business prosperity with maximal effectiveness. To do this, we needed to know what the problems of the organization were, the factors and situations that triggered the organization's challenges, failures, or successes.

These two leadership styles, thus, transformational and servant leadership, according to most research works done on them, were superior evolutions of the leadership development and effective in causing the requisite positive impact on groups and organizations and hence their consideration.

The method employed in this research were qualitative (meetings, calls and interviews) and quantitative (customer satisfaction surveys) in a case study approach of a Mining Service Provider, a Mine Laboratory.

The methodology employed enables the researcher to get to know what and how the client thought and felt about the performance of the laboratory before this study (pre-study), and the interview gave the researcher the factors that contributed to the unfavorable fate of the laboratory pre-study. That culminated into crisis and negative profitability of the laboratory and the losses of the Mine itself, consequently. Again, the observations made by the researcher, through his investigations, enabled the researcher to fill in the gap and provide important clues on the severity of the situation and how best to apply the leadership styles.

The research was very successful, and the researcher was very satisfied with the outcome. In that, after the information gathered from the client and staff, using the principles of transformational and servant leadership, the abysmal pre-study evaluation of the laboratory by the Mine turned into great approvals and commendations of the laboratory by the same Mine. The contract was not abrogated but rather expanded and the contract duration extended during the application of the multi-leadership in the laboratory.

The Mine regained confidence in the Service provider lab and at the same time, taking the laboratory from negative to positive profitability, continuously and incrementally, throughout the period of the study. The Mine and laboratory became very happy, as well as, all stakeholders. In the application of the leadership principles in

203

finding solutions to the organization's issues, it was observed that the study positively enhanced everyone who was involved in the study to be better at what they do by learning, observation, training and learning from failures, even the Mine admitted to this. The Mine rated the laboratory very highly, in excellent terms, a far departure from the very poor performance evaluation pre-study.

The study confirmed that Transformational and Servant leadership strategies were adequate and effective at solving the organization's problems.

6.2 Implications

The goal of the paper was to investigate, demonstrate and establish that the application of multi- leadership principles, thus, transformational and servant leadership, with the right approach was useful and effective in solving various organizational challenges and therefore, could trigger organizational success. This research showed that all the goals set out pre-study were achieved, making a good case for the multi-leadership tenets application and confirming that the right application of transformational and servant leadership principles in the case study organization was effective and thence, successful. These methodologies and approaches outlined in this study could be replicated in other organizations, to either achieve same, similar, or perhaps, even more superior results.

Secondly, the study could also increase the knowledge base in both academia and the corporate world and finally, this study would further advance research into leadership and management, especially, in its practical application in business organization.

6.3 Recommendations for Future Research

Future research could look at the application of other single or multiple leadership theories in different industries, to confirm and demonstrate their effectiveness or otherwise.

Again, future researchers could also investigate the application of the transformational and servant leadership theory combination, for their effectiveness in solving industrial problems. They could be tested in other industries or multiple industries.

6.4 Conclusion

This research paper sought to investigate, demonstrate and confirm after application, the effectiveness of the application of multi-leadership principles thus, transformational and servant leadership tenets, at taking a business organization from crisis and business challenges stemming from several organizational changes to business excellence.

The expectation of the research work was that, at the end, the following objectives would be met:

- Some factors and situations that lead to organizational challenges, failures or successes would be identified and elucidated.

- How multi-leadership principles, methods or approaches are appropriately and practically applied in solving real corporate problems, thereby,

contributing to organizational successes and superior business
performance

- Researcher could confirm that Transformational and Servant leadership
  strategies were adequate and effective in solving the organization's
  problems.

The researcher begun the study by first getting a lay of the ground via information
gathering, that would be useful in the methodological approach in solving the
organizational issues. Based on the information gathered, and the typical functions of the
laboratory, a client satisfaction survey was conducted by the researcher. Among the
information required of the questionnaire were the leadership performance of the
laboratory, customer service and professionalism of the laboratory, turnaround time
(TAT) of the samples per contract of the laboratory, production obligations, quality
control and assurance targets of the laboratory, ability of the laboratory to meet the
general contract expectation, Safety, health and environmental management performance
of the lab, the effectiveness of communication of the laboratory, cleanliness of the
laboratory and any observation or information the client would like to let the researcher
know about.

In the evaluation of the Mine, the laboratory was rated poor in terms of all the
criteria of performance, except quality control that received an average evaluation via of
customer satisfaction survey pre-study, which was a quantitative methodology. The client
was very unhappy and gave uncomplimentary remarks about the laboratory performance

pre-study. A demonstration of their frustration, the tension, uneasiness, and anger in the laboratory's atmosphere could not be missed.

The key areas of concern for the laboratory were noted and prioritized for action. It helped in the identification and definition of the problems or factors that resulted in the poor situation of the laboratory and then the necessary tactical and strategic plans and actions devised in addressing the issues with the tenets of the two leadership styles.

Then attention was directed to the staff of the laboratory, factors or situations information gathering took the form of interviews, which was conducted in a free, conducive, comfortable means and environment, with qualitative methodology. It gave rise to many problems that the lack of appropriate leadership caused in the laboratory, that in turn resulted in the client losing confidence in the laboratory, giving ultimatum to the laboratory to perform or lose the contract to a competitor in few months before the study began amongst other undesirable outcomes.

The interview brought to fore issues such as poor conditions of service, no social payments, disregards for company policies, procedures and standards in recruitment and management of staff, some poor HR practices, unethical conducts by few, unfair practices and general delays in payment, lack of support from lab support staff, lack of commitment in finding lasting solution to the lab's problems.

On the question of lack of the staff commitment at attaining company's objectives, the staff noted issues such as lack of care and support from management, management relationship challenges, lack of proper communication was a big one, wrong leadership mentality, lack of team work, training, delegation and empowerment.

207

On QC, the staff blamed the lack of adequate training and retraining as the cause of the poor state of the laboratory pre-study. The same lack of training was observed in the software challenges they had, in addition to log-in issues and the frequent virus infections of the labs systems.

Aside the Human resource and personnel issues, the purchasing and ordering issues were indeed many, both required good attention. The issues included under orders, over orders, wrong orders, order delays, poor stock practices, poor stock forecast, poor stock management, poor consolidated order distribution, lack of integrity by some few support staff, lack of concern or lack of sense of urgency by support staff and poor follow up culture, some of these issues were mainly from support staff who worked remotely of the Mine region. On site, the absence of a competent stock person in conducting proper inventory and professional stock management. On the financial question, they were delays in payments and financial reporting.

The leadership of the laboratory interview question was approached as performance of the laboratory question in the survey, which exposed the root cause of the problems of the laboratory, that was lack of the adequate and appropriate leadership in the laboratory resulting in leadership crisis. The staff bemoaned closed-door communication policy by management, unapproachable management, no care from management, no team work, no training, micro management by site management, undermining by some support staff, nepotism, staff cover-up in relation to some management support staff, lack of support and co-operation by management and some staff.

The approaches employed were guided by the tenets of principally the two leadership principles, transformational and servant leadership, under study. The tenets used included ten principles of servant leadership by Robert Greenleaf namely, listening, empathy, healing (especially from the effects of events and situations pre and during the crisis situations of the laboratory), awareness (of the leader and the followers or subordinates' limitations and abilities), persuasion, building a community, commitment to growth of the people (staff), stewardship, foresight and conceptualization (of the future).

Kouzes and Posner's postulated some tenets of transformational leadership namely, challenging the process, modeling the way, encouraging the heart, inspiring a shared vision, and enabling others to act, that were employed.

The four elements also known as the 4is of transformational leadership, developed by Bernard M. Bass, which are individual consideration, intellectual stimulation, idealized influence, and inspirational motivation were employed concurrently with the tenets of the servant leadership and vice versa, in resolving each of the issues identified via the research.

It was imperative to note that effective, clear, and concise communication was of significant aid, in the attainment of the objectives of this research. It proved to be the life, on which the leadership tenets survived and prospered.

After the application of the tenets of the leadership styles under study, the laboratory which was performing poorly, a lab that received final two-months ultimatum from the Mine to either turn things around for better or lose the contract, did not just turn

things around, but received commendation and became a model organization for the Mine in many respects, contract was maintained and not only that, crisis was resolved from the roots. The contract as a result of the research successes got expanded to include more quantities and increased scope, bringing in even more revenue to the laboratory. In less than two weeks of the study, the results made the client reconsider their earlier decision to abrogate the contract and top Mine management began sending positive and encouraging messages to the laboratory management.

The Mine that rated the laboratory poor or lowest in almost all but one questionnaire item, rated the laboratory 25% or less pre-study client satisfaction survey, same Mine rated the same laboratory 97.5% post study customer satisfaction survey, the difference being the application of the multi-leadership principles, thus, transformational and servant leadership.

Irrespective of the huge cost hidden in poor stock management over the years pre-study, rectified in the first year and some significant back dated tax deductions to be done in the second year of the study, the laboratory which was performing at -75% in terms of profitability, year-to-date before the study began, ended the year with 5% profitability, which was about 80% improvement from just before the study started, the following year of the study, it moved from 5% to about 16.6% year-to-date, which was about 320% improvement of the previous year-to-date despite all those mandatory deductions, and then, by the second anniversary of the study, the laboratory did 32% which was about 100% more than the previous year-to-date and at the time of writing, the figures were looking up and in the very deep blue.

In summary, with the post-study customer satisfaction survey results, the securing of the contract, the increase of the contractual numbers as a sign of double confidence in the laboratory and an endorsement of the effectiveness of the leadership principles applied, the laboratory becoming a model in the Mine for other business organizations and the significant financial performance of the laboratory from its previous consistently negative performances and the culmination of it into crisis pre study, one could confidently conclude and confirm that Transformational and Servant leadership strategies were adequate and effective in solving the organization's problems. With all the objectives set out achieved, the researcher could confirm the research was a great success.

It was hoped that with this success, this study could contribute to knowledge and understanding of the subject of leadership in both the academia and corporate worlds and advance further study of leadership, especially, in its practical application.

Finally, the results and lessons gathered and drawn from the research, could be replicated in other organizations beyond the African continent, and even outside of the Mining sector, with either same or similar challenges.

APPENDIX A

SURVEY COVER LETTER

Date:

The Contract Manager of (Mine's Name)

Dear Sir,

211

REQUEST TO CONDUCT RESEARCH AT [NAME OMITTED]

Please I am currently reading for an Executive Doctorate in Business
Administration Degree from the Swiss School of Business Management in Geneva in co-
operation with the Faculty of Economics & Business of the University of Zagreb,
Croatia. In partial fulfillment of the award of EDBA, I would need to write thesis out of a
research. This research study is entitled: The application of multi-leadership styles in
steering an organization from crisis to business excellence. Part of the study entails
research to obtain data in the form of interviews and customer satisfaction survey. The
study will test the application of chiefly, the transformational and servant leadership
principles in solving the mirade of problems that plaque the laboratory.

Aside the financial benefits that would come with the success of this research to
all stakeholders, there is the peace of mind and contentment that is expected for all as a
result of a favorable outcome of the research, an efficient and successful laboratory. All
stakeholders involved especially, Management staff would learn a lot, as well as the
researcher, which would be of mutual benefit.

The researcher undertakes to assure participants of the following:

• To maintain participants' confidentiality.

• To protect your rights and welfare, i.e. to ensure that no harm comes to you and

your company as a result of your participation in this research.

• To present information and transcripts used in this research in such a way as to

maintain the participant's dignity and if in doubt, to first consult with participants.

• The participants are free to withdraw from this research process at any time, if

the need should so arise.

• No manipulation or withholding of information is involved in this study and

• To make available to participants the final copy of this research publication.

Bearing the above in mind I humbly request of your permission to conduct research at

your company.

Yours sincerely

_____

Isaac Onasis Osei Appiah

EDBA-Student

APPENDIX B

INFORMED CONSENT

Dear: *(Name of participant)*

Title of research study: The application of multi-leadership styles in steering an

organization from crisis to business excellence.

Principle investigator: Isaac Onasis Osei Appiah

Supervisor: Dr. Anna Provodnikova

Personal advisor: Dr. Miroslav Silic

Brief introduction and purpose of the study: In partial fulfillment of the award of EDBA, I would need to write thesis out of a research. This research study is entitled: The application of multi-leadership styles in steering an organization from crisis to business excellence. Part of the study entails research in order to obtain data in the form of interviews and customer satisfaction survey. The study will test the application of chiefly the transformational and servant leadership principles in solving the mirade of problems that plaque the laboratory. The researcher would like to establish if the application of the two leadership principles is effective and adequate in resolving real-world business problems and demonstrate how.

Aside the obvious financial benefits that would come with the success of this research to all stakeholders, there is the peace of mind and contentment that is expected for all as a result of a favorable outcome of the research; an efficient and successful laboratory. All stakeholders involved especially Management and staff would learn a lot, as well as the researcher, which would be of mutual benefit.

Outline of the procedures: This letter of information and informed consent will be allocated to you, which will require your consent prior to being interviewed. Please be aware that the interviews must be voice-recorded for transcription and data analysis purposes. Follow-up telephonic interviews may be held to pursue additional issues arising from the data and to clarify emerging trends.

Risks and discomforts to the subject: There will be no risk or discomfort to you for your participation in this study.

Benefits of the research and benefits to you: The study will determine all the factors that contributed to poor performance of the laboratory and how to fix them using the Transformational and Servant leadership principles of leadership. It is expected to take the laboratory from crisis and unto the path of business excellence, which would benefit the staff-possible improved conditions of service and leadership, the Lab and the Mine, and indeed all stakeholders of the Mine directly and remotely.

Reasons why the subject might be withdrawn from the study: You may stop participating in the study at any time, for any reason you may decide on. Your decision to stop participating, or to refuse to answer questions, will not affect your relationship with the researcher or anyone linked with this research.

Confidentiality: All information you supply throughout the research will be regarded as confidential and your name will not appear in any report or publication of the research. The data will be safely stored in a locked facility, and thereafter it will be carefully terminated.

Remuneration and costs of the study: No financial compensation will be awarded to any participant involved in the study. And no financial contribution will be required from relevant participants.

Persons to contact in the event of any problems or queries:

Supervisor: Dr. Anna Provodnikova, +41(022)5087796

Personal advisor: Dr. Miroslav Silic, +41(022)5087796

You could also contact the Swiss School of Business and Administration, Geneva.

Statement of agreement:

I,.........……………………......................(full name) ....……………..(ID number), have read this document in its entirety and understand its contents. Where I have had any questions or queries, these have been explained to me by Isaac Onasis Osei Appiah to my satisfaction. Furthermore, I fully understand that I may withdraw from this study at any stage without any adverse consequences to my future in this company. I, therefore, voluntarily agree to participate in this study.

Participant's name (print)…….…………………..............

Participant's signature....…..…………….................... Date…………..…

Researcher's name....………..…………………….....

Researcher's signature.......…………….................... Date……………..

Witness name………………….....……….....................

Witness signature………………….......................... Date……………..

Thank you for your cooperation and participation.

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APPENDIX C

INTERVIEW GUIDE

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Targeted at extracting HR/Personnel Issues:

1-What are the Human Resources or Personal issues that you have?

Targeted at extracting Operation/Production Issues:

2-Why are you not committed to your work as you should? Why are you not able to achieve your production targets?

Targeted at extracting QC Issues:

3-Do you have adequate training for the job you do? Do you understand the task you perform?

Targeted at extracting IT/Lab Software Issues:

4-Are there any IT/Software challenges that you have?

Targeted at extracting Purchasing Issues:

5-Any stock order issues that you would want to bring to my attention?

Targeted at extracting Stock Issues:

6-Do you have any stock material, tool or equipment shortages whilst working?

Targeted at extracting Safety, Health and Environmental Issues:

7- Were you inducted or trained in Safety, Health, and Environment management?

Targeted at extracting Financial and Administration Issues:

8-What are the financial or administration issues you have relating to your job?

Targeted at extracting Leadership or Management Issues:

9- I assure you of strict confidentiality. Confide in me, I am here to help. Is there anything you would like me to know about the Management and Leadership of this Lab?

Targeted at extracting any other issues that might escape researcher or get to know what is important to the interviewee:

10- Do you have any questions for me? Is there anything you would like me to know?

APPENDIX D

CUSTOMER SATISFACTION SURVEY GUIDE

Overall Rating…..

Please select the corresponding number below

1Poor   4**Excellent**

1-How would you evaluate the leadership performance of the laboratory?

1   2   3   4

2-How do you evaluate the customer service and professionalism of the laboratory?

1   2   3   4

3- Rate the Turnaround Time (TAT) of the samples per contract of the laboratory?

1   2   3   4

4-Evaluate the attainment of contractual production numbers done by the laboratory.

           1   2   3   4

5-How would you rate the quality control and assurance performance of the laboratory?

           1   2   3   4

6-Evaluate the ability of the laboratory to meet your general contract expectation.

           1   2   3   4

7-Evaluate the Safety, Health and Environmental management performance of the lab?

           1   2   3   4

8-How effective was the communication lines of the laboratory?

           1   2   3   4

9-How would you rate housekeeping performance of the laboratory?

           1   2   3   4

10-Please any issue of concern to you, that you would like me to know about?

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