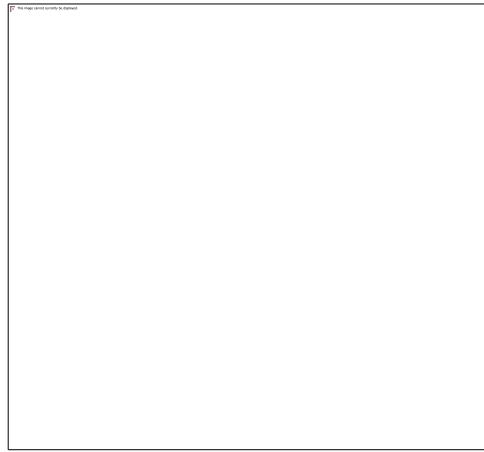


**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**FACULTY OF COMMERCE**

**DEPARTMENT OF ECONOMICS**



**SUPERVISOR: DR NKALA**

**DEVELOPMENT OF A SUPPLY CHAIN MANAGEMENT MODEL FOR MANAGING  
SUPPLIER COMPLAINTS IN MINING ORGANIZATIONS IN ZIMBABWE.A CASE  
OF MUROWA DIAMONDS.**

**BY**

**NATASHA TARISAI KAMBIZI**

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE HONOURS DEGREE IN PURCHASING AND SUPPLY  
OF BINDURA UNIVERSITY OF SCIENCE EDUCATION .FACULTY OF  
COMMERCE.**

## **DECLARATION**

‘An analysis of a supply chain management model to reduce supplier complaints in mining organizations a case of Murowa Diamonds’ is my own work ‘I, Natasha Tarisai Kambizi, hereby declare. It is submitted as part of the requirements for the honors degree in purchasing and supply. I, the undersigned, guarantee that this thesis is my own original work that no other university has requested it for a degree or examination, and that, to the best of my knowledge, all sources have been properly referenced.

**KAMBIZI NATASHA TARISAI, FULL NAME**

**AUTHOR: N.T.KAMBIZI .....**

**DATE: .....**

## **DEDICATION**

My loving parents, siblings, and friends who have been so encouraging throughout my time at Bindura University of Science Education deserve a special thanks for their support. I dedicate this thesis to them. Without their support and kindness, I would not have been able to finish this degree program. I would also like to thank myself for not giving up through all the hard times I faced especially when I lost a parent in the course of finishing my degree early this year.

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## **ABSTRACT**

This dissertation examines the supply chain management model in mining organisations with focus on reducing supplier complaints .Supplier dissatisfaction often arises from issues such as communication breakdowns, contractual disputes, payment delays and logistical influences .By analysing current supply chain practises through stakeholder interviews and questionnaires, the study identifies and proposes strategic improvements. This research contributes to the existing literature by providing actionable insights into optimizing supply chain management in the mining sector.

## Title

An analysis of a supply chain management model to reduce supplier complains in mining organisations in Zimbabwe: A case of Murowa diamonds.

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## CHAPTER ONE

### 1.1 Study Background

In the year 1980 after Zimbabwe attained its independence, the government of Zimbabwe adoption of policies which was meant to correct the imbalance that favored white settlers in terms of mining rights (Aflabo, Kraa & Agbenyo, 2020). According to the Chamber of Mines of Zimbabwe (2020), there was a law that was enacted to regulate the mining activities in Zimbabwe titled the Mines and Mineral Act (chapter 21: 05). This law had a flaw in that it provided the minister of mines and mining development an excessive amount of power to come up with unilateral decisions regarding Zimbabwe's possibilities for mineral output, which has far-reaching and extremely negative effects on both the economic and social fronts (Alrosa, 2020).

Arnastauskaitė, Ruzgas & Bražėnas (2021) posits that Zimbabwe is blessed with abundant natural resources such as diamond, gold, coal, iron ore, chromium ore, vanadium, asbestos, nickel, copper, lithium, tin, and platinum group metals; nonetheless, it is unable to attract major foreign direct investments. Zimbabwe's principal source of foreign currency and the country's largest export is the country's reserves of gold, platinum group metals, and diamonds. In Zimbabwe diamond mining companies such as Murowa diamonds, Anjin and ZCDC are licenced to mine diamonds. After having more than tripled its capacity, RZM Murowa today is among global top 10 diamond mine enabling the company to become one of the biggest exporters and foreign currency generators for Zimbabwe. Murowa diamonds produce predominantly gem-quality diamonds and reasonable quantities of large 'special' stones.

As denoted by Begashaw (2018) Murowa diamonds mine is also known as RZM Murowa and the company is a 24 hour open pit mining operation. The company began its production in the year 2004. Its present name-plate capacity is approximately 1.2 million carats per year of gem-quality diamonds that are mostly white in colour (Begashaw, 2018:212). The company increased its production by a factor of more than three in the year 2016 and it is said that Murowa is now ranked among the top 10 diamond mines in the world, which has allowed it to become one of the most

important sources of revenue for Zimbabwe both in terms of exports and foreign currency (Cui, Xu, Wu, Sun & Zhao, 2023). In the year 2019, the company changed its name legally from Murowa Diamonds to RZM Murowa to represent the new strategic direction that the company has chosen.

RZM Murowa have embarked on various projects as a social responsibility and their operations impacts six communities namely Mutambi, Mhototi, Murowa, Indaba and Davira and Sese (Cui et al., 2023). The mining company has decided to buy building materials and computers which they intended to donate to Baradzanwa Primary School thereby taking the 270 learners and 9 teachers into the digital age. The donation is in alignment with the new developments in the educational sector that promote the use of Information Communication Technologies a rarity in rural Zimbabwe. Murowa diamond have assisted in the completion of a new maternity waiting room and supplied water to the building. RZM Murowa also refurbished Murowa Health Centre providing electricity, equipment, plumbing and supplies. To achieve its infrastructural development programs and social responsibility goals the company has been awarding tenders to various suppliers such as Ab Mining & Equipment Supplies and Crush Tech systems to mention but a few. In some instances Murowa Diamonds Company have been delaying to process payments to their suppliers due to late approvals by the company administrators. As a result most of their suppliers have been complaining about how payment delays is affecting their business operations. This study therefore formulates a supply chain management model aimed to reduce supplier complains at Murowa Diamonds.

## **1.2 Statement of the problem**

Murowa diamonds is experiencing an increase in supplier complains. The last procurement meeting at Murowa Diamonds Company revealed that suppliers are delaying in supplying goods and services to Murowa because they are complaining about late payment processing. Suppliers have sent various complaining letters to Murowa Diamonds raising their concerns. This situation compromises business operations and achievement of set objectives at Murowa Diamonds. Procurement department have attempted to engage the senior management of Murowa diamonds but the efforts were unsuccessful. This study therefor formulates a supply chain management model aimed to reduce supplier complains at Murowa Diamonds.

### **1.3 Research objectives**

The main aim of the study is to develop a supply chain management model aimed to reduce supplier complains in mining organisations in Zimbabwe using Murowa diamonds as a case. Secondary objectives are as follows

- i. To explore the nature of supplier complains against Murowa diamonds.
- ii. To investigate factors motivating supplier complains at Murowa diamonds.
- iii. To reconnoitre challenges arising from supplier complains at Murowa diamonds.
- iv. To formulate a supply chain management model to reduce supplier complains at Murowa diamonds.

### **1.4 Research questions**

- i. What is the nature of supplier complains at Murowa diamonds?
- ii. What factors are motivating supplier complains at Murowa diamonds?
- iii. What challenges are arising from supplier complains at Murowa diamonds?
- iv. What supply chain management model can be developed to reduce supplier complains at Murowa diamonds?

### **1.5 Hypothesis**

$H_0$ : There is no association between the nature of complains and suppliers.

$H_1$ : There is an association between the nature of complains and suppliers.

### **1.6 Significance of the study**

The study contributes a supply chain management model to reduce supplier complains in Murowa Diamonds mining organization. This study also contributes to literature on managing supplier complains.

### **1.7 Delimitations of the study**

Murowa Diamond Company will be the focal point of this study. Employees that handle supplier complaints and supply chain management concerns, such as supplier relationship specialists, procurement clerks, procurement officers, warehouse clerks, warehouse managers, and procurement managers, will be the study's target group. This study will add to the corpus of information already known about supply chain strategies

## CHAPTER 2

### LITERATURE REVIEW

#### **2.0 Introduction**

This study relates to the development of a supply chain management model for managing supplier complaints in mining organizations in Zimbabwe: the case of Murowa Diamonds. This chapter shall outline literature review of the study guided by objectives of the study such as to determine factors motivating supplier complaints in mining organizations, to establish the effect of collaborative relationship on managing supplier complaints in mining organizations, to examine the effect of contract negotiation on managing supplier complaints in mining organizations and to evaluate the effect of monitoring supply chain on managing supplier complaints in mining organizations. In this chapter theoretical review and empirical review shall be provided. Other aspects such as conceptual framework shall be outlined.

#### **2.1 Definition of key concepts**

##### **2.1.1 Supply chain management**

As stated by Kroenke (2020), supply chain management is a type of management that is responsible for managing all of the interactions that take place between a firm and its numerous suppliers. It is possible to implement this management style in any kind of business structure. For the purposes of this conversation, the term supplier refers to any business or organisation that engages in the act of selling anything to the company that is responsible for the operation of the SCM application. Priority is given to the achievement of the primary objective of supply chain management, which is to improve the efficiency and performance of activities that involve many organisations. This is because the provision of extraordinary value to consumers takes precedence over the achievement of this primary purpose.

In the past, the organisation focused the majority of its attention on the customer. However, with the advent of global sourcing for operations that are not essential to the business, the significance of the supplier has significantly expanded throughout this time period. The transactional approach

was the one that was utilised the majority of the time, and an adversarial strategy was put into action in its relationship with the suppliers. Despite this, Sheth and Sharma (2020) found that the development of information and communication technologies, total quality management, and industrial restructuring prompted a shift in consumer behaviour away from transactional methods and towards more cooperative ones. This shift occurred as a result of the combination of these three factors. When one party acts in opportunism, the other side receives fewer benefits as a result of the circumstance. This is in contrast to the situation in which the two parties collaborate closely with the suppliers. At the turn of the twenty-first millennium, diplomatic providers are more dependent on their resource base and the technology that they produce. According to Webb (2020), corporations are depending on their suppliers to cut their prices, enhance the quality of their products, and develop innovative goods and processes faster than their competitors. Additionally, they offer access to a wide range of technologies, markets, and information, which is yet another manner in which they contribute to the value of an organization (Chen, 2019). Several of these issues have contributed to the pressure that has been placed on businesses to execute strategic management of their suppliers. First, the researcher investigates the ways in which the term has been conceptualised and quantified in previous empirical study. After that, the researcher defines supply chain management in accordance with the definition that was previously established. This explanation follows the one that came before it in the previous sentence.

In accordance with Olendo and Kavale's (2020) definition, supply chain management is defined as the strategy and technique that is utilized in the process of communicating with supplier chains (Matunga et al., 2021). Virtual manufacturing, also known as supply chain management (SCM), is an all-encompassing design that involves declaring what they want from a supplier and managing the communication between firms in order to meet the required needs, as stated by professionals working in the supply chain. Through the utilization of virtual machines (SCM), it is possible to bridge the gap that exists between an organization and the end customers of that organization. A great number of businesses are suffering financial losses as a direct consequence of issues that have begun to manifest themselves within their own network chains.

We have experienced difficulties in the movement of goods and services as a result of these problems. As stated in Matunga et al. 2021, it is recommended that businesses in this condition build and apply practices for supply chain management in order to raise the efficiency of their supply chain. This recommendation is made in order to improve the firm's supply chain. This is due to the fact that it will assist firms in increasing the efficiency of their supply processes. It has been determined by Hughes et al. (2020) that the primary reason for the organization's incapacity to achieve the objectives that it has established for itself is the inefficiency and poor performance of the supply chain system. In addition to this, he asserts that firms who a supply chain network process that was interconnected had generated more money than those organizations that gave the supply chain process a lower level of care. This is because interconnected supply chain processes are more efficient. Moeller et al. (2022) define value management as the process of carrying out actions such as constructing, stabilizing, developing, and dissolving partnerships with in-suppliers and observing out-suppliers in order to generate and enhance value within these connections. This definition is similar to the one presented in the previous paragraph. Value management is described as the process of carrying out these actions in order to develop and enhance value within these connections. In other words, value management is the application of these activities.

The practice of generating value through the observation of out-suppliers is another activity that can be referred to as supply chain management (SCM). The findings of a study that Johnson and his colleagues carried out in 2022 revealed that it is feasible for both parties to maintain their relationship. Furthermore, Giannakis and colleagues (2020) highlighted the fact that both parties involved in supplier partnerships are committed to maintaining a long-term connection. This was emphasized in their research. The fact that this is the case means that both parties have a vested interest in developing a tight working connection with one another in order to maximize the benefits that they receive for themselves. The implementation of this strategy would necessitate the manufacture of joint products as well as the distribution of any cost savings that would be achieved as a result.

According to Benah and Li (2020), the phrase supply chain management refers to the ongoing communication that takes place between a company and its numerous suppliers. There are many different suppliers. As a result of the fact that it is founded on long-term comparable interests, the

connection that exists between a customer and a supplier who is focused on quality management has a tendency to be exceptionally close. Quality management is the focal point of the connection, which is why this is the case. The findings of Al-Abdallah et al. (2023) led them to the conclusion that supply chain management ought to have both long-term and short-term goals that it ought to strive to achieve. Because of this, there are goals that are both short-term and long-term in nature. This is a direct consequence of the situation. Williams (2022) suggests that a company should make it one of its long-term goals to improve the efficiency of its production operations, discover new ways to deliver added value to its customers, expand its market share, and boost its profitability. These are all goals that should be prioritized. Alternatively, Wisner and Tan (2021) propose that short-term objectives should be centered on reducing cycle times, increasing productivity, and reducing inventory levels. These are objectives that should be prioritized. These three topics constitute the core subject matter of this essay.

Furthermore, Zsidisin and Ellram (2021) argued that collaborations with selective suppliers result in mutual benefits such as decreased overall costs, increased customer satisfaction, flexibility in dealing with changes, increased productivity, and long-term competitive advantages in the market. These benefits are all a result of the relationships that are formed between the parties involved. It was discovered that these advantages accrued to both of the parties that were participating in the collaboration. Value management (SCM) is an occupational practice that provides a framework for creating and maintaining connections with providers, according to another theory that was proposed by Lii and Kuo (2020). This theory described value management as an occupational practice. In the form of a hypothesis, this theory was given to audience members. According to Liao et al (2022), this phenomenon also takes place when buyers and sellers in an industry form business alliances with the intention of earning a competitive advantage by utilizing one another's reserves in order to achieve a competitive edge. This is done with the intention of gaining a competitive advantage.

Disassembling SCM into its component parts has also been done by a number of other researchers in attempt to gain a deeper comprehension of the phenomenon. Mwangi (2020) asserts that the successful completion of a connection between a buyer and a supplier is dependent on the simultaneous fulfilment of a number of different conditions. This is the case since the connection

must be successful. There are many instances of these elements, some of which include the capacity of an organization to adapt, the involvement of employees in the acquisition of the firm's programs, and the absence of significant variances in the technology that is utilized and the industry in which a company operates. According to Prajogo et al. (2020), the strategy that an organization employs to manage its connections with its customers and suppliers has a significant influence on the value management strategy that the organization employs, and as a consequence, the operational performance of the organization as a whole.

There are five primary measures that act as components of supply chain management, according to Mwangi (2020), who states this in a manner that is comparable to what was just discussed. Among these are the enhancement of the quality of the suppliers, the decrease of the lead times for the suppliers, the establishment of trustworthy relationships with the suppliers, the involvement of the suppliers in the creation of new products, and the emergence of the suppliers as partners or developers. In addition, the author is of the idea that supply chain management is a relationship that is interdependent. However, in order to reap benefits for both parties, the connection must first be formed and then maintained through strategic collaboration.

### **2.1.2 Supplier complaints**

According to the definition provided by Awan, Kraslawski, and Huiskenen (2018), a supplier complaint is an allegation that the company has violated the compliance code. According to Latino, Menegoli, Lazoi, and Corallo (2022), it can be a means of expressing displeasure in relation to the product or way of operation, which can have an effect on the way in which the provider does business. This dissatisfaction can be expressed verbally, in writing, or electronically. Typically, complaints from suppliers are brought about when there is a discrepancy between the payment claims that a supplier has made for a product or service and the delays that the company has experienced.

## **2.2 Theoretical framework**

### **2.2.1 Commitment Trust Theory**

Trust and commitment are the crucial connections in the transaction between parties that ultimately results in relational cooperation, according to Morgan and Hunt (1994), who founded the

commitment trust theory and stated that trust and commitment are the important linkages. *Organisational Behaviour and Human Decision Processes* was the publication that featured Morgan and Hunt's hypothesis when it was brought to light. This action was carried out within the confines of the commitment trust theory that was being put forward at the time.

Furthermore, Robert and Shelby (2017) discovered that the two persons got at the understanding that their primary focus should be centred on two separate aspects: trust and commitment. This was the conclusion that they reached after additional debate. To a certain extent, commitment can be defined as the extent to which an individual is able to establish and sustain close and consistent ties with other people. Commitment is a term that may be used to describe anything that is of the utmost importance and can also be described as such. Another approach to describe it is as a tremendous want to keep a connection alive, as stated by Kamarul and Tan (2015). This is another method to characterise relationships.

Because individuals rarely make promises to connections that do not have value, the amount of commitment that the suppliers have to the company is a reflection of the quality of their relationships (Margareta, 2016). This is because people seldom make their promises to connections that do not have value. The fact that this is the case suggests that commitments are not subject to a great deal of modification. In their study from 1991, Meyer and Allen distinguished between three separate types of commitment: emotional commitment, ongoing commitment, and normative commitment. When it comes to commitment, the type that is most closely related with feelings is known as affective commitment. Calculative commitment refers to the pledge to maintain a cooperative relationship that is based on the expenses involved and other economic considerations. This commitment ensures that the link is maintained.

There is another name for this concept, and that is the ongoing commitment. A buyer creates a normative commitment to a supplier when they feel required to maintain a cooperative relationship with that supplier. On the other hand, a consumer develops an affective commitment to a supplier when they identify with the manufacturer and form an emotional tie to the manufacturer. The

formation of an emotional relationship to the suppliers is the first step in the development of affective commitment in a consumer.

According to the findings of Doney and Cannon (2017), trust can be defined as the extent to which the various stakeholders in a supply chain believe each other to be credible and beneficial as individuals. It is also possible to define it as the tendency to rely on a trading partner in whom one has faith. This is another possible definition. Another way of stating the term is that it defines the following as the five components that make up trust: being dependable or reliable, being honest or candid, being competent, having a partner orientation, and being polite or friendly. This is still another way of putting the definition. On the other hand, Sako (2015) operationalizes it in three different dimensions: contractual trust, which is based on the belief that the other party will fulfil its promises and act as agreed; competence trust, which is based on the belief that the other party will be capable of doing what it has promised; and trust in goodwill, which is based on the shared belief that the other party will act in accordance with the agreement.

In accordance with Bolton (2016), trust is what provides one party with the assurance that the other can be relied upon, and it is both a precondition for collaboration as well as a result of it. Having trust in one another is what enables one side to have the assurance that the other can be relied upon. Trust, to put it another way, is the factor that makes it possible for people to actually work together. Furthermore, he is of the belief that trust can be demonstrated by having faith, reliance, or confidence in the respondent with whom one is working, and that it is perceived as the willingness to refrain from engaging in opportunistic behaviour. In his perspective, trust may be expressed by having faith, reliance, or confidence in the respondent with whom one is cooperating. He believes that this is the best way to demonstrate trust. The provision of excellent input by suppliers who are both dedicated and trustworthy can lead to an increase in output, which is because of the fact that dedication on the part of suppliers can result in improved output. When there is confidence between buyers and suppliers, there may be less of a need for buyers to check the deliveries of suppliers and the quality of inputs. This is because buyers and suppliers know each other well. Furthermore, if there is mutual confidence between the two parties, there may be less of a need to implement punishments in the event that the inputs are of a lower standard of quality. The authors Robert and

Shelby (2017) state that trust can play a role in laying the groundwork for longer-term results such as increased quality, decreased transaction costs, and timely delivery.

### **2.2.2 The network theory**

The network theory was created by Harland (1996), who emphasised that a network is a certain type of relation that brings together a predetermined group of individuals, things, or events. It is also believed that Harland was the one who came up with the notion. According to Kumar (2019), network theory is one of the most significant guiding principles for purchasing and supply management that has emerged over the course of the last few decades. The term network theory will be used to refer to this concept. It is generally agreed that the network theory is the most fundamental theory that can be used to describe the interactions that take place between organisations and their customers, suppliers, or consumers. This is due to the fact that the network theory is predicated on the concept that every human is connected to every other individual through networks.

Initially, the concept was explored for the entirety of the decade that encompassed the 1970s and 1980s. Initially, it was a strategy that focused on interactions between just two companies, which is sometimes referred to as strategic alliances. However, it has since grown into a strategy that places an emphasis on several partnerships with various counterparts throughout the supply chain.

The supply chain is a complex network model, as stated by Ali et al (2019). The specific context of the model is established by the relationships that exist between the various members of the network. The supply chain is a network that makes up the supply chain. Following this, Acutt et al. (2004) clarify that the term network refers to two or more organisations that are engaged in long-term collaborations with one another and that operate in conjunction with one another. In other words, a network is created when two or more organisations work together.

In addition, it was discovered that there are a number of assumptions that lie behind the surface. These assumptions include the notion that a central placement of a company within a network may contribute to a competitive advantage, as well as the notion that enterprises share information and knowledge with their partners (Ali et al., 2019). These two ideas were found to be erroneous after

further investigation. Both of these hypotheses were found to be incorrect after further investigation. Additionally, in terms of the contribution to the process of acquiring something, one could claim that the theory is applicable to the points in the process that are considered to be the most critical decisions. This is because the theory is applicable to when the decision is made. Another facet of the concept that has the potential to be challenged is this particular component. The idea can be put to use for demand planning through the establishment of strategic long-term partnerships, which is the way by which the idea can be put into practice. Specifically, this is due to the fact that the concept simplifies the process of resource allocation, which is carried out.

Additionally, businesses that are a member of a network have the option to select their suppliers from a bigger pool of prospective candidates. As a result, these businesses may even be able to guarantee the delivery of components that are essential to their operations. As an additional point of interest, it is generally acknowledged that the ties that currently exist between businesses may be depended upon. Accordingly, the relationships in question contribute to the value addition on both sides and further simplify the decision regarding the selection of the right supply strategy. This is a consequence of the fact that this is the case. As a conclusion, the network theory offers a contribution to the fourth choice point, which is the negotiation. This is due to the fact that organisations that are a part of networks attempt to participate in long-term contracts, which allow for the formation of strong ties between the counterparts. One manner in which the network theory helps to the decision point is through this particular example.

### **2.2.3 Logistics Value Chain Theory**

Michael Porter (1985) proposed the idea of viewing a manufacturing organisation as a system that includes inputs, transformation processes, and outputs. This model, which he later established, is known as the value chain model. Michael Porter was the one who initially put this idea out there. Investigating all of the corporate actions involved in turning a concept into a sellable product or service is made possible through the use of the value chain, a business model. In a perfect world, companies would be able to employ the value chain model to strengthen their position, expand their profit margin, and boost efficiency while cutting costs. A key conceptual underpinning of this model is the process perspective of organisations, which in turn forms the basis of the value chain model. The transformation processes and final products rely on inputs, which include

resources like money, labor, materials, equipment, buildings, land, administration, and management. The transformation processes and the end products may rely on these inputs, among others.

Derived from Michael Porter's Value Chain Analysis model, this model aims to aid logistics companies in recognizing important tasks, discovering new opportunities for profit growth, and generating customers and businesses that add value. These factors collectively contribute to the competitiveness of core logistics. The original goal of developing this model was to provide a framework for logistics firms to better understand their customers' needs, find new opportunities to increase profits, and locate critical projects.

It is named after Michael Porter's value chain analysis model, which he developed. To run their operations, businesses must invest in the infrastructure and information platform that support them. You can't do business without this. Some ways in which organizations might accomplish this aim include building a distribution network, developing their e-commerce platforms, and exchanging information on deliveries. Important as the formulation of operational operations is, these ancillary tasks are critical to their success. Because it is their responsibility to provide value for the profit resources of third parties, and they do just that.

The value chain framework mainly consists of the following elements: incoming operations, operations, outbound logistics, marketing, sales, and service. Management of human resources, technical advancement, infrastructure, and procurement and purchasing make up the framework's tertiary components. After identifying its main and secondary activities as well as its sub activities, and after investigating the efficiency of its operations at each step along the chain, an organization is considered to have conducted a value chain analysis. By analyzing the value chain as a whole, we can reveal its interdependencies, trends, and other interesting features.

The origins of the concept of a value chain can be found in the process view of organisations. This perspective proposes that companies, whether they provide goods or services, should be seen as systems composed of subsystems, with inputs, transformation processes, and outputs unique to each subsystem. The idea of a value chain originates from this perspective on organizations.

Money, labor, materials, equipment, buildings, land, management, and administration are all resources that must be acquired and used in order to create outputs, transform inputs, and transform inputs again. Funds, manpower, supplies, machinery, structures, and terrain are all instances of such resources. Both expenses and profits are affected by how efficiently the value chain activities are carried out. While processing their inputs into their outputs, most businesses do hundreds, if not thousands, of separate actions. The value chain describes this procedure. All businesses are obligated to engage in these activities to some extent, and they can be broadly categorized as either primary or support activities. Both types of activities can be seen as essential to running a business.

### **2.3 Factors motivating supplier Complaints in mining organizations**

Companies cannot survive for long without their suppliers, and unhappy supply chains don't stand a chance (Latino et al., 2022). When suppliers have issues with organisations, most of their concerns centre on the slow processing of payments for goods given. Companies in the supply chain have choices in the modern, cutthroat business environment regarding the location of their operations and the vendors they work with (Awan et al., 2018).

However, there are several factors beyond maintaining a steady flow of business that make a company's treatment of its suppliers and their complaints crucial. The preservation of supplier rights and regulatory compliance are two of the many important advantages that accrue from properly handling supplier complaints (Chiparo et al., 2021). On top of that, remember that efficient handling of complaints can provide valuable data that can help your organisation identify where it needs to make improvements (Yan et al., 2019). Finally, a company's brand and reputation can be better protected by effective and timely complaint management.

A lot of businesses use third-party providers for supplier assistance and complaint management (Butt, 2019). When dealing with supplier complaints or disagreements, most organisations fail to get to the root of the problem (Munyimi & Chari, 2018). A variety of human and technological errors, disagreements, and violations of agreements can arise (Durach et al., 2020). Businesses should use tools like Pareto charts or fishbone diagrams to find out what went wrong and then

figure out how to stop it from happening again. Furthermore, they should gather relevant evidence to back up their analysis and avoid biases and assumptions (Jiang et al., 2019).

According to Durach et al. (2020), a study was carried out in Sweden by Yang and Li (2016) in the context of complaint processing. The study aimed to identify the elements that impact the effectiveness of complaint handling in the manufacturing industry through a multiple case study. Manufacturers are changing their business structures to maintain a competitive edge and establish long-term relationships with their suppliers through delivery. The speed and accuracy with which a corporation handles customer complaints is a key performance indicator. In order to identify the most important factors impacting the effectiveness of complaint handling in the manufacturing industry, it is crucial to start by investigating the company's internal management of complaints. The failure to address supplier complaints can have a negative impact on an organization's reputation, since some suppliers choose to share their tales on media platforms (Yang and Li, 2016 in Durach et al., 2020).

According to Shao et al. (2018), once a company finds the root of an issue, it needs to tell its supplier about it quickly and clearly. Using a formal and polite tone, the organisation should refrain from condemning or accusing its supplier in any kind. Furthermore, the company should show appreciation for their perspective and express interest in working together with them to resolve the issue (Patrucco et al., 2022). A company can communicate with each other using email, phone, or video conferencing, depending on the complexity and urgency of the situation. Beyond this, it is important for a corporation to document all of its correspondence and consistently follow up until the issue is resolved. Communicating clearly and promptly is crucial for having relationships that are efficient and fruitful, whether in a personal or professional setting (Durach et al., 2020).

The business should have a meeting to figure out a middle ground that works for everyone. It then proceeds to negotiate a fair and mutually beneficial remedy with its supplier after communicating the root cause (Zhang et al., 2021). The business should pay greater attention to the worries and needs of both sides rather than focusing on the demands or stances of one side. In addition to being flexible and creative, the organisation should look into all the options and possibilities that the company has.

## **2.4 The effect of Collaborative Relationship on managing supplier complains in mining organizations**

When companies enter into long-term buyer-supplier relationships, it is reasonable to anticipate that they will be able to accumulate benefits that will have a positive impact on the performance of their organisations. This is a prediction that can be made with sufficient certainty. This is due to the fact that there is the potential for the accumulation of benefits that are more likely to be in the organization's best interest when long-term buyer-supplier agreements are in place. An explanation of some of the potential advantages that are anticipated to be brought about as a consequence of the relationship that exists between the buyer and the supplier is provided in the following paragraphs:

### **2.4.1 Information sharing and disclosure**

Using data from 239 enterprises in Pakistan, Awan et al. (2018) came to the conclusion that SRM made it possible for both the buyer and the supplier to accept and respect the cultural norms of the other. The successful management of complaints relied heavily on its ability to facilitate the flow of information. According to Butt and Ahmad (2019), a reduction in the number of complaints received from suppliers can be achieved by the adoption of a more cooperative working relationship between firms and suppliers and the implementation of comprehensive communication. As a consequence of this, supplier relationship management, which is more commonly referred to as SRM, offers a platform that makes it possible for the purchasing firm and its suppliers to communicate in a more transparent manner. Additionally, it makes it possible to address disagreements when they are still in the infant stage, thereby limiting the influence that they have on the relationship as well as the overall success of the organisation. This is a significant advantage.

### **2.4.2 The process of reaching choices through group consensus**

One further advantage that was brought to light by Onyango (2015) was the fact that both parties involved in the relationship had the opportunity to take part in the decision-making process together. The authors of this study described this advantage as the degree to which one party infiltrates the organisational limits of the other party with the purpose of increasing the performance of both parties' respective organisations. When it comes to information sharing,

collaborative decision making is one of the most challenging methods since it necessitates an exceptionally high level of confidence and transparency from the individuals who take part in it.

According to Onyango (2015), this process frequently includes the maintenance of information flow, the assignment of resources, the problem-solving, and the compilation of detailed activity reports, inter-organizational strategic decisions, and plans. In addition, this process also includes the assignment of resources. According to Sjoerdsma and van Weele (2015), the process of making decisions together would start with a discussion about the path that should be pursued by the development of a new product. This would be the first step in the process. At the centre of this discussion would be the course of action that ought to be taken. Buyers and suppliers would work together during times of economic volatility in order to make judgements that would have the least harmful influence on the operation of both organisations as is practically possible.

#### **2.4.3 The system of dividing supply chains into different groups**

An organisation that manufactures products will collaborate with a wide variety of suppliers, including those who supply raw materials, spare parts for repairs and maintenance, general items, and even service providers. Due to the fact that production calls for a diverse assortment of parts and components, this is the case. Although Tangus (2015) agreed with Onyango (2015), he emphasised that one of the benefits of supplier relationship management is the ability to classify suppliers according to the degree of significance they play in the supply chain. This is one of the advantages presented by supplier relationship management. However, Onyango (2015) highlighted that one of the benefits of supplier relationship management is the capacity to identify essential suppliers. This is one of the advantages of the management of supplier relationships. It was as a result of this that the organisations were able to successfully handle the complexity and heterogeneity of the broad supplier base that they had.

Additionally, it is totally feasible to devote a sufficient amount of resources to the maintenance of the connection. This is something that may be done. Diirr and Cappelli (2018) noted in their presentation at the Hawaii International Conference on Systems Science that organisations are able to select a certain sort of partnership by taking into consideration the identified possibility for joint effort, the reality that they are confronted with, and the agreements that they have already

established. Based on the fact that organisations have the ability to choose a particular kind of relationship, this was the conclusion that was reached. Tangus (2015), who suggested that businesses have the capacity to choose the kind of relationship they have with other parties, finds this to be consistent with his results about the interaction between businesses and other parties. As a result, this will provide a road map for how the relationship with the supplier will develop in order to achieve a common aim for both sides, which will ultimately result in improved organisational performance.

#### **2.4.4 Programmes for Suppliers and Providers**

Supplier development was described by Bai and Sarkis (2016) as an intentional effort made by the purchasing organisation to give resources to its suppliers in order to improve the supplier's performance and capabilities. This definition was found in their study. According to the results of the research conducted by Bai and Sarkis, this definition is accurate. As stated by Bai and Sarkis (2016), there is a distinction that can be made between the tangible and intangible aspects of the development of suppliers. There are differences between these two categories that can be discerned. The creation of tangible suppliers needed a variety of different practical measures, such as investments in the capital equipment of the supplier as well as investments in people, which may have involved the transfer of technical staff to the supplier. These expenditures were necessary in order to establish tangible suppliers. In addition to that, there were attempts that were more practical incorporated. Despite the fact that training for employees of suppliers may be required for intangible supplier growth, growth in suppliers may still be possible. As a result of this, the supplier will be in a position to supply high-quality raw materials, which, in turn, will assist the purchasing organisation in accomplishing its predetermined goals of providing the client with a high-quality final product. This is as a result of the fact that the provider is the one who is accountable for carrying out the development project.

The term supplier development investment was used by the authors Bai and Sarkis (2016) to refer to this concept. In addition, Tangus (2015) emphasised that SRM made it feasible for businesses to design supplier development plans that were based on enhancing the capabilities and performance of the supplier. This was a significant contribution to the field of supply chain management. He stated that this was one of the most significant advantages that SRM offered. At the end of the day, this resulted in the purchasing organisation being able to fulfil both their

immediate and their long-term requirements. Because of this, the purchasing organisation was able to increase their organisational performance, which improved their ability to fulfil the requirements of their clients in a timely manner.

Pradhan and Routroy (2017) state that supply development has been slowly obtaining an overwhelming level of popularity among manufacturing organisations in India. This popularity has been growing at an alarming rate. The reason for this is mostly due to the several significant advantages that supply development makes available. These advantages include reductions in the amount of time required to develop new products, enhancements in capacity utilisation and product quality, and reductions in the cost of production. In their research, Bai and Sarkis (2016) found that although while both parties involved in the development programme stood to benefit from the programme, buyers and suppliers were hesitant to commit resources to these development projects unless they had a clear vision of how they would benefit commercially from the investments. However, despite the fact that both parties involved in the development initiative stood to gain, this was the situation. It was the case that this was the circumstance, despite the fact that those who participated in the growth plan stood to get an equal amount of benefits.

Decreases in both the quantity of inventory and the expenses have been observed in 2.4.5 Munyimi and Chari (2018) found that they agreed with Kumar and Rahman (2016)'s assessment that supply chain management (SRM) assisted businesses in lowering their inventory levels through the implementation of methods such as JIT (just in time), and that it also shortened the amount of time it took for those businesses to bring their products to market. This was discovered in the course of their research on the telecommunications industry in Zimbabwe. Companies working in the private telecom market were able to achieve significant cost reductions as a direct result of this breakthrough, which allowed them to achieve their goals. According to Zenir, Findikli, and Celtekligil (2018), the utilisation of supplier relationship management through strategic partnerships not only led to a substantial reduction in costs, but it also improved the amount of time it took for new products to be introduced to the market, increased productivity, and enhanced product quality. All of these benefits were achieved. As an additional benefit, the implementation of this management style resulted in a considerable reduction in the amount of time that was required for the introduction of new products to the market marketplace.

#### **2.4.5 New product development**

A definition of new product development was provided by Nguyen et al (2018). This definition states that new product development is the process by which market opportunities are translated into products that are then made available on the market. According to the findings of the study that was carried out by Sjoerdsma and Weele (2015), the implementation of supplier relationship management systems makes it possible for companies to involve their suppliers in the process of manufacturing new products. This is due to the fact that suppliers are able to make a contribution to the process by providing technical advice that takes into account both the availability of the intended raw materials and the technological advancements that have taken place on the supply side. One reason for this is that suppliers are able to contribute to the process by providing technical assistance. This is one of the different reasons. When the new product is successfully introduced to the market and is positively received by customers, the company as a whole as well as the individual suppliers will benefit from this new development. The growth in the quantity of production that was carried out by the corporation was matched by an increase in the demand for raw materials from the numerous suppliers that the company had.

#### **2.4.6 The management of potential hazards to the business**

Business risk relates to the vulnerability of a company to various circumstances that have the potential to have an impact on the bottom line of the company's financial status (Mazikana, 2022). This may be the result of internal causes or external sources, such as a change in regulatory requirements or changes in the connection with suppliers (Jones, 2019). External sources may also be responsible for this. Risks that are involved with running a business may be broken down into two main categories: market risks and operational risks as well.

Companies that have good supplier relationship management are able to better manage their business risks through collaborative learning and organisational sustainability, and they are also likely to enjoy superior organisational performance (Neumuller et al., 2016). This is because a strong supplier relationship management system allows for better risk management. According to the findings of the research conducted by Dubey et al. (2018), this was the conclusion that they arrived to regarding the impact that supplier relationship management has on the economy. During

the course of their investigation, Dubey and his colleagues arrived at this observation as a conclusion.

According to the findings of Williams and Hausman (2017), the initial step in the process of managing risks in a business is to conduct a risk analysis. This study should also involve the identification of risks, the classification of risks, and the evaluation of risks. Taking into account the results of their investigation, this is how it should be. It is recommended that the subsequent stage of the process be carried out once the organisation has established the level of risk that it is willing to consider. According to Williams and Hausman (2017), the efficacy of the business risk assessment was mostly based on the thoroughness of the initial business risk identification and risk classification. This was the case according to the findings of the study. According to the results of the business risk assessment, this was the most important aspect that contributed to its success.

## **2.5 The effect of contract negotiation on managing supplier complaints in mining organizations**

According to the findings of Ayantoyinbo and Oguntola (2018), the University of the Redeemer in Nigeria is exceptional when it comes to using appropriate negotiation as a procurement strategy. This is a significant factor that contributes to the institution's capacity to accomplish its procurement objectives. For the purpose of determining whether or whether there is a requirement for staff training that is more precisely targeted towards the administration of contracts in Uganda, it is necessary to first determine what is already known about the subject matter. Authorities in charge of public procurement have consistently devised and put into action strategies to address capacity gaps that exist in both the process of awarding contracts and in the management of those contracts. It is possible to discover these deficiencies in both the process of awarding the contract and the process of managing the contract themselves. The research conducted by Cherotich (2014) indicated that state corporations employ contract management practices that are effective and have a beneficial impact on the operational performance of the state businesses. Contract management methods, such as acceptance management and contractor monitoring, management of contractor relationships, contract administration, contract closure, and dispute resolution, have the potential to have an impact on the operational performance of state-owned businesses.

Research was conducted by Hsiao, Purchase, and Rahman (2022) to study the influence that buyer-supplier relationships and the purchasing process have on the performance of supply chain operations. In the form of a conceptual framework, they presented their findings of the investigation. The research that is being done to determine how efficient supply chains are is making tremendous progress, and it is anticipated that this trend will continue. A substantial number of businesses are currently searching for methods that will help them to improve their performance measurements. This is being done in response to the unpredictability of commercial markets and in order to more effectively govern the operations of their organisation.

The performance of the retail supply chain in Taiwan and other Asian countries has not been the subject of a substantial quantity of empirical research. This is the case in several Asian countries. In their study, Hsiao, Purchase, and Rahman (2022) explored two features that have an impact on the retail supply chains that are now in place: buyer-supplier relationships and purchasing processes. Additionally, they investigated the antecedents of these qualities that are significant to this particular cultural setting. Relationships between buyers and suppliers, as well as purchasing methods, are included in these aspects. A number of objectives were intended to be accomplished by the research that was carried out by Hsiao, Purchase, and Rahman (2022). These objectives included determining the antecedents that were associated with each determinant, determining the determinants that have an effect on the performance of the supply chain at the retail level, and providing a conceptual model that is suitable for this particular environment.

The continuity of ties between customers and suppliers throughout the various phases of the supply chain is one of the characteristics of supply chain integration that is regarded to be among the most important, as stated by Hsiao, Purchase, and Rahman (2022). This is one of the aspects that is considered to be among the most important. The establishment and maintenance of mutually beneficial partnerships at each and every stage of the supply chain is becoming an increasingly important requirement for the achievement of significant economic success. The retail industry is notorious for having a high degree of volatility. This is mostly attributable to the rapid changes in client demand as well as the unanticipated moves in the market. In light of the fact that, this can be connected to.

The fact that there is environmental variance also draws attention to the reality that the global business environment is riddled with unpredictability at every turn. For the purpose of their examination into the influence that supplier relationship management has on the performance of an organisation, Denhere and Choga (2022) selected the plastic manufacturing business in Harare as a case study. The coordination, collaboration, and information exchange that takes place between an organisation and its suppliers is referred to as supplier relationship management, or SRM for short. For example, an organisation may coordinate with its suppliers. The phrase supplier relationship management is shortened to this for the purpose of brevity. Denhere and Choga (2022) conducted research for businesses in the plastic manufacturing industry in Harare with the primary objective of determining the influence that efficient management of relationships with suppliers may have on the overall performance of an organisation. This was the primary emphasis of the research.

Denhere and Choga (2022) found that businesses operating in the plastics sector had a number of benefits associated to the management of their connections with their suppliers. These benefits were the consequence of the management of their relationships with their suppliers. These benefits included the sharing of information to suppliers as well as the involvement of suppliers in the creation of new products. In addition, supplier participation was encouraged. These advantages produced a beneficial contribution to the overall performance of the businesses, which was a result that was favourable. However, businesses that were involved in the production of plastic also faced difficulties in managing their relationships with their suppliers, which, in turn, had an impact on the efficiency with which their organisations carried out their operations. The performance of the companies themselves was impacted as a result of this particular circumstance. It is possible for organisations to receive unwelcome replies from their suppliers if they fail to fulfil their responsibilities within the context of the relationship between the buyer and the supplier. This has the potential to be a source of difficulties for the company.

## **2.6 The effect of monitoring supply chain on managing supplier complains in mining organizations**

The three primary aspects of supply chain performance management are monitoring, measuring, and assessing the performance of a supply chain in respect to goals and objectives that were defined in the past. It has been said by Sharma and Luthra (2016) that effective management of supply

chain performance can be of assistance to organisations in identifying areas in which they have room for improvement, resolving concerns before they become major issues, and establishing more robust connections with supply networks. In the same spirit, Singh and Singh (2017) emphasise the need of keeping open lines of communication with one's suppliers in order to fill their expectations and to ensure that any difficulties are fixed in a timely manner. This is done in order to guarantee that any issues are rectified.

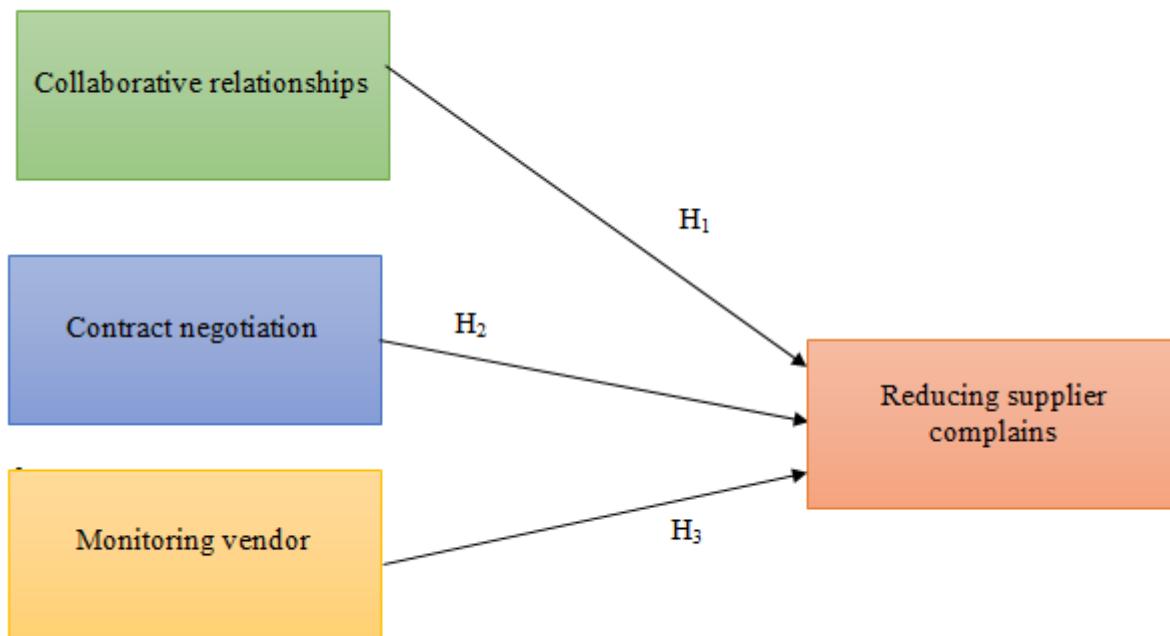
In light of the fact that it is already general information that supply chain performance is significant, recent research has demonstrated that the significance of supplier performance to business operations is something that should not come as a surprise. The vast majority of organisations that are employed in the procurement process are of the belief that their efforts have resulted in improvements in the performance of their suppliers. Because of the expanded scope of value points that are the focus of rivalry between firms and their suppliers, contracts have grown more complicated and contentious. This is a direct effect of the rising significance of value points. It is not uncommon for there to be a significant gap between the responses that stakeholders provide to supply chain performance surveys and the actual performance of the supply chain that is being questioned.

In light of this, there is a significant opportunity to work together with the supplier and to go well beyond the scope of what is generally covered in supply chain performance management.

## **2.2 Conceptual framework**

This section presents a conceptual framework adopted in this study

### Independent variable (supply chain management model)



**Figure 1: CONCEPUAL FRAMEWORK**

**Source:** Prepared for this study

From figure 2.4 above it can be seen that elements of supply chain management such as collaborative relationships, contract negotiation and monitoring the supply chain can ease supplier complaints.

### 2.7 Empirical evidence

Research on supplier complaint management was carried out by Kervinen (2020). Someone will file a complaint if they feel that no one is prepared to fix a problem that has arisen. Whenever a supplier keeps quiet about an unpleasant experience, the firm runs the danger of losing out on a chance to improve and expand. Maintaining current suppliers should be the primary goal of complaint management, but it should also serve as an incentive for suppliers to voice any issues they may be having (Kervinen, 2020). In order to keep our current suppliers, this is essential. Two viewpoints on complaint management were examined in Kervinen's (2020) research: customer complaints and service delivery complaints. The processes and systems for handling supplier complaints were examined as part of the continuous improvement and problem-solving effort. Because they were so seldom, complaints were considered to be low on the list of priorities

according to the interview results. The disinterest stemmed from the fact that the monthly complaint-per-buyer rate was practically nonexistent.

The relationships among SCM, operational flexibility, ownership structure, and firm performance (FP) are examined in Amoako-Gyampah et al. (2019) through the lens of moderated-mediation interactions. The study was carried out in the country of Ghana. Researchers distributed 250 surveys; however, only 185 were returned with completed forms. A national university in Ghana distributed the surveys to companies, students in the supply chain and operations management department, and those in the executive MBA programme. Their findings demonstrate that operational flexibility mediates the relationship between supply chain management and company performance. Further, their mediated and moderated studies show that SCM has a greater impact on domestically owned businesses' performance than on foreign-owned businesses. Based on these results, it seems that investments in supply chain management will have a greater impact on locally owned businesses than on those with foreign ownership. Since quality, innovation, and delivery are all aspects that might function as intermediaries, they proposed that future research employ these indicators instead of operational capability. Among these metrics are innovation, delivery, and quality.

Kosgei (2016) delves into how supply chain management impacts an organization's overall success. Kenya was the site of the research. The researchers settled on a technique called cross-sectional study. A total of 82 respondents were chosen to provide answers to the relevant study questions from the target demographic of 272 KQ employees. Stratified random sampling was used to choose the respondents from KQ's several departments because it was believed that they would have different characteristics. The major tool for gathering information for the study was the questionnaires that were distributed to the participants. Another important finding from the study is how firms can boost their performance by using SCM techniques correctly. Kosgei (2016) argues that companies should show their dedication to supply chain management by establishing systems to track, analyse, and assess performance on a strategic level. Benah and Li (2020) looked into how manufacturing companies in Ghana fare after adopting Lean Supply chain management (LSCM) strategies. They used a questionnaire with few free-form questions to gather information for their study. Additional study will be conducted on the 200 questionnaires that were submitted.

For this study, we used IBM SPSS 25 and IBM AMOS 24 to evaluate the survey data. To investigate the connection between the two sets of variables, researchers used the Structural Equation Modelling (SEM) method.

The results of the structural investigation showed that manufacturing companies in Ghana were significantly and favourably impacted by Just-In-Time Delivery (JD), Supply Partnership (SP), and Supplier Flexibility (SF). The study's overarching goal is to fill a gap in the existing literature by providing empirical evidence of how lean supply chain management strategies impact manufacturing company productivity in Ghana. Since LSCM practises were the sole focus of this study, the authors conclude that additional research is necessary to determine the effect of other domains on company performance, including transportation, human resources, and warehousing. Avery et al. (2014) examine how supply chain management techniques affect the performance of purchasing organisations by comparing the US and China. The research sites for this study included both China and the USA. A total of 352 individuals filled out the survey.

Secondary and primary sources were both utilised to conduct the research. The study found that purchasing firms in China were better off when their customers were committed. In contrast, American purchasing firms' success was boosted by buyer dedication and shared values. While these results do point to some regions of China's social capital as having disproportionately high levels of importance, it's important to note that cultural differences between China and the US could explain in part these differences. Prajogo et al. (2012) investigated the complex relationships between supplier management practices and the operational success of businesses. Primary data sources were crucial to the research. A total of 232 Australian manufacturing companies provided data for the study. Using the methodology of Structural Equation Modelling (SEM), the researchers simultaneously tested ten possibilities. The results show that many operational performance metrics are affected by various supplier management practices.

Quality performance is positively correlated with supplier ratings. Tobacco manufacturing organisations' long-term viability can be enhanced by efficient supply chain management (SCM), according to Adesanya et al. (2020). This inquiry made use of a single case study involving a global tobacco company. Tobacco lobby employees who are conversant with sustainable supply chain management (SCM) and are using a range of tactics to improve sustainability performance

were the subjects of our interviews. A semi-structured format characterised the interviews. According to the study's findings, a procurement team's ability to communicate with various functional units is critical for implementing green virtual machines. The results also add to what is already known regarding how sustainability affects supplier segmentation and multi-tiered supplier management. Due to the limited sample size, additional research is required to draw any firm conclusions on the generalizability of the results.

In his 2017 study, Mwangi looks into the relationship between supplier management and the operational success of Kenyan sugar companies. A descriptive methodology was chosen by the researcher to carry out the investigation. All thirteen of Kenya's sugar companies with active supply chain departments were considered part of the study's population of interest. Main data for the analysis was collected using questionnaires as the data gathering instrument. The analysis was conducted using SPSS, and the results were presented through graphs, charts, and frequency tables. Research in Kenya's sugar industry found that operational efficiency improved with increased information sharing, trust-based relationships, and supplier participation in new product development (NPD). The study's author recommended that sugar businesses foster supplier engagement in product development and establish an effective framework for the information interaction between buyers and suppliers. Organisational operational systems must be made as reliable as feasible for firms to attain operational excellence.

To learn how KMC influences company-supplier relationships and how it boosts corporate performance, Tseng (2014) did research. The researchers in this study used a survey as their primary research tool. Primary sources were the backbone of the research team's data collection strategy. A list of the 500 biggest firms in Taiwan, compiled by the China Credit Information Service (2011), was the only source used for the samples. A random selection of corporations was made from this list. Findings indicate that KMC positively affects business performance, with SCM mediating the relationship between the two. This approach provides useful recommendations that businesses can implement.

The impact of efficient supplier management on the overall performance of Kenyan manufacturing enterprises is examined by Kepher et al. (2015). East African Breweries Ltd. (EAB) was the case

study company, and the research centred on workers from different departments within the company. The research design was descriptive, which was suitable because the main goal was to gather data so that relevant questions about the researched subjects' current states could be answered. The population that was intended to be addressed included 450 employees from various departments who were directly responsible for managing the company's production process. A positive association between the predictor variables and supplier complaint management was found in the study. When looking at the factors that affected a company's success, the results showed that lead time management was the most important, followed by organisational policy and information and communication technology integration.

The potential impact of supply chain management on a company's performance in Kenya is investigated by Geoffrey and colleagues (2019). Their study question was, How much do independent variables impact firm performance in Kenyan state corporations? and they sought to answer it using a descriptive survey approach. The research made use of both qualitative and quantitative methods. The study's sample size was 80 individuals. The data was examined using SPSS version 23 and Excel 2016 to get quantitative metrics related to the study. Supplier appraisal, collaborative trust, supplier development, and the amount of handling supplier complaints were found to be positively associated with Kenyan state firms, according to the research. In order to ensure that suppliers fulfil their contractual obligations, the study recommends implementing tougher procedures.

## **2.8 Research gap**

Klevensparr (2016) investigated public procurement in Sweden from the standpoint of performance management. The study by Klevensparr (2016) set out to examine the different kinds of performance indicators that can be used for public procurement within the framework of institutions in the public sector, and how those indicators might be grouped together. It was originally planned that 117 performance indicators would be uncovered by comparing the results of the research literature review with those of the empirical investigation. As a result of their research and analysis, Klevensparr (2016) identified eight factors. Time, money, quality, adaptability, sustainability, innovation, risk, and conformity are all part of these factors. There is a connection between public procurement and each of these eight dimensions. Seven distinct yet

related components were uncovered by the empirical research. Management of operations, supply chains, categories, customers, suppliers, and procurement are all part of these components, along with company strategy and development, supplier management, customer management, and supplier management.

Africa was the site of a study on supply chain management and supplier complaint handling by Ateker (2015) at Uganda's national agricultural research organisation. Examining the relationship between supply chain management and the success rate of procurement in Uganda's public sector was the goal of Ateker's (2015) research. The impact of strategic alliances, communication, and supplier performance management on the management of supplier complaints in Ugandan public institutions was examined in a study by Ateker (2015). This study intends to fill a vacuum in the literature by investigating the impact of supply chain performance monitoring, contract negotiation, and supplier complaint management on the aforementioned topics.

## **2.9 Chapter summary**

This study relates to development of a supply chain management model for managing supplier complaints in mining organizations in Zimbabwe: a case of Murowa Diamonds. This chapter outlined literature review of the study guided by objectives of the study such as to determine factors motivating supplier complaints in mining organizations, to establish the effect of collaborative relationship on managing supplier complaints in mining organizations, to examine the effect of contract negotiation on managing supplier complaints in mining organizations and to evaluate the effect of monitoring supply chain on managing supplier complaints in mining organizations. In this chapter theoretical review and empirical review were provided. Other aspects such as conceptual framework were outlined. The next chapter shall outline research methodology of the study.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### **3.1 Introduction**

The previous chapter presented literature review of this study. Research methodology pertains to the specific approach and techniques employed in the planning and gathering of data (Sekeram and Bougie, 2019). The document encompasses topics such as the design of the research, the methods employed for conducting the research, the procedures utilized for selecting samples, the methods and techniques for collecting data, and the process of synthesizing, analysing, and interpreting the findings. This chapter also offers comprehensive rationale for the different methodologies employed in this study.

#### **3.1 Research philosophy**

Creswell (2022) posits that research can be broadly categorized into two basic paradigms: positivism, which focuses on quantitative research endeavours, and interpretivism, which is closely associated with qualitative research methodologies and pragmatism which work hand in hand with mixed research methods. This study focused on merging two approaches to address the shortcomings identified in each other, with the aim of ensuring a comprehensive and unbiased research study. The research philosophy employed for this study was pragmatism. Cohen (2022) defines a research philosophy as a set of beliefs about how information about a phenomenon should be collected, evaluated, and used in a research project. This notion focuses on the utilization of data in the study. Within the context of research philosophy, one often encounters terms such as epistemology and doxology. Epistemology refers to the understanding of what can be known to be true, while doxology pertains to what can only be believed to be true.

#### **3.2 Research strategy**

Within the context of the study, philosophical assumptions cover not only value-based assumptions but also assumptions about the nature of reality and assumptions about the nature of knowledge. This research is based on the ontological assumption that objectivity exists, implying that there is

a single truth that is factually accurate on how supply chain management can effectively handle supplier complaints, enhance performance, and improve customer satisfaction. This research posits that there is a singular truth that can be objectively right regarding how supply chain management may effectively handle supplier complaints. The underlying epistemological premise of this research is that maintaining a level of detachment is feasible by employing structured questionnaires. The primary importance of this research is in preserving the anonymity of the participants. This aligns with the fundamental values that support the study and form its basis.

### **3.3 Research design**

Campbell (2021) defines a research design as a structured framework comprising various research approaches and techniques that a researcher choose for their topic. This definition is derived from the researcher's original work. As per Campbell (2021) research design refers to the comprehensive approach selected to effectively combine the many elements of a study in a cohesive and rational manner. This guarantees that the research adequately addresses the research question. According to Campbell, research design refers to the comprehensive approach selected to incorporate the different elements of the study. Research design, in essence, pertains to the methodology employed to ensure that the research adequately addresses the research question. Through the utilization of an explanatory research design, the researcher acquired comprehension regarding the impact of collaborative relationships, contract negotiations, and commitment on the management of supplier complaints.

In addition, the researcher successfully evaluated the impact of supplier reliability on the management of supplier complaints, as well as assessed the effects of monitoring supply chains on the management of supplier complaints. The affordability and efficiency of questionnaires were key considerations in choosing a cross-sectional survey technique, which was combined with an explanatory research design. Questionnaires may be conducted within an acceptable timeframe, which influenced the decision to choose this option. These studies are referred to as cross-sectional research, which sets them apart from other types of research due to their observational nature and classification as descriptive research. The results of this research can be employed to identify characteristics that exist within a community; however, they cannot be utilized to distinguish the cause and effect linkages that exist among the many components involved.

### **3.4 Targeted population**

As defined by Creswell (2022) target population encompasses the entire population or group that a researcher aims to study and analyze. Creswell (2022) provides a definition of the phrase target population. The target audience of this study consists of all the Murowa Diamonds located in Harare. The researcher selected this specific target demographic because it holds the necessary characteristics for the research issue. A sample of 1000 responders was selected from the Murowa Diamonds mine in Harare. The researcher utilized the databases of these organizations to compile a grand total of one thousand respondents.

### **3.5 Sample size**

A sample, as defined by Creswell and Black (2022) represents the individuals selected from the total study population to participate in a research project. The term sample refers to the size of the participant group in a research study. The researcher's inability to determine the overall population of the study due to the operational methods being used and the presence of unregistered participants prevents them from drawing any conclusions about the study's findings. During the study, the researcher will focus exclusively on registered organizations as their main objective. In his work, Campbell (2021) presents an alternative interpretation of the sample size, defining it as the quantification of the total number of individual samples employed in an experiment or study. This definition of the sample size is analogous to the initial one. In this study, the researcher utilized the Taro Yamane method for determining the sample size, as depicted below.

The value of  $n$  can be calculated using the formula  $n = N/(1+N(e)^2)$ .

The components in this equation are:

$n$  represents the size of the sample.

$N$  represents the whole population that is being studied.

$e$  represents the margin of error in the calculation.

The sample size is calculated using the formula  $1000 / (1 + 1000(0.05)^2)$ .

Sample size =  $1000/3.5$

The sample size is 285.

### **3.6 Sampling methods**

Saunders (2020) categorizes sampling procedures into two distinct groups: probability sampling techniques and non-probability sampling approaches. Both of these groups are further broken into subcategories. Campbell (2021) defines the term sampling method as the process of selecting individuals from a population to participate as participants in a research study. The word sampling method refers to the procedure of selecting individuals from a community. Examples of various sampling procedures include a simple random sample, a systematic sample, a stratified sample, a clustered sample, a convenience sample, a quota sample, and a snowball sample. The study employed a sampling approach called judgmental sampling to identify management for the study. This decision was made because there was an insufficient quantity of proficient managers available in the field of digital marketing. These steps were essential to ensure the reliability of the study's findings. This procedure is necessary to assure the reliability of the findings. This step is mandatory.

After devoting significant time and careful thought to each of the components, the researcher successfully assembled a satisfactory sample by selecting specific instances of each component. Consequently, the researcher successfully achieved their goal of producing an adequate sample. This required the exercise of sound discretion and the implementation of a strategy that was appropriate for the problem at hand. The researcher meticulously chose each respondent who willingly participated in the interview. They based their judgments on the individuals they believed would offer the most relevant information in response to the questions posed. The study concluded that the managers' control over their divisions was the basis for the findings. The researcher concluded that the supply chain managers made the most significant contributions to this specific study endeavour, as opposed to the Human Resources Managers and the Procurement Managers.

In this specific study, the quantitative portion employed procedures that did not involve the use of random sampling. This was done in order to enhance the precision of the results. To efficiently get essential data and patterns for the study, convenience sampling was employed to gather data from a selection of completed questionnaires. This facilitated the swift gathering of crucial information and trends. This was done to facilitate the researcher's acquisition of these vital data and patterns promptly. Convenience sampling is a type of non-probability sampling where participants are

chosen from a smaller pool of prospective responders compared to probability sampling. When it comes to carrying out pilot testing, this is the option that should be given the most serious consideration. Researchers, teachers, or participants may use terms such as grab sample, inadvertent sample, or opportunity sample to refer to it (Lee, 2018).

The objective of this strategy is to gather responses from those who can be easily contacted or reached with minimal effort, in order to optimize efficiency. As per Cresswell (2018) the sole prerequisites for this type of sampling are the willingness of participants to participate in the activity and their availability to do so. There are no other prerequisites that need to be fulfilled. There is no requirement for a random sample to be conducted, as the only criteria is that individuals must be willing to participate in the study. There is no mandatory stipulation for conducting a random sample. The decision was made to use convenience sampling as it allows for the collection of targeted input from individual perspectives, which was a crucial factor in choosing this method. The researcher engaged in dialogues with the study participants in order to gather data for the study.

The researcher determined that the most optimal approach for the qualitative portion of the study would be to employ judgmental sampling. According to Saunders et al (2014) judgmental sampling is the most suitable strategy to apply when certain individuals in a community are considered to have higher levels of knowledge and motivation to participate in the study compared to others. Put simply, this strategy is best suited for instances when certain individuals in the community are considered to be superior to others in terms of their motivation to participate in the research. Put simply, when there is a perception of superiority among certain individuals in a population, the most suitable approach to apply is judgmental sampling. The reason for this is that judgmental sampling considers the comparative advantages of each individual within the population. In this specific situation, the implementation of judgmental sampling is the most effective course of action. Based on the findings of this analysis, the researcher determined that the sample procedure should be carried out using this specific approach. In this specific circumstance, the researcher had a preconceived belief that some managers possessed a higher level of awareness compared to other managers regarding the opportunities presented by digital

marketing and the on-going activities within the mining organizations in Harare. The researcher held the belief that specific managers had participated in the creation of digital marketing.

This line of thinking received validation due to the study's findings, which were quite positive. The most formidable challenge that had to be overcome was when the researcher uncovered that the managers, who were expected to provide the most insightful responses, lacked the requisite technical expertise in the issues under study. This was the most challenging obstacle that needed to be overcome. This was the most formidable obstacle that had to be overcome in order to achieve success.

This problem arose when the researcher discovered that the managers, who were expected to provide the most responses, lacked the necessary technical understanding. Overcoming this difficulty was crucial, as it was the most formidable among all the challenges. We could only proceed at that point. The researcher had to invest a substantial amount of time in explaining the meaning of some questions to the respondents, ensuring that they could provide accurate information. The purpose of this was to enable the respondents to supply precise information. Subsequently, the respondents were finally able to provide authentic and precise information. The researcher failed to consider the supplementary duration needed to do the work, leading to an unexpected situation. The researcher opted to gather data on the workforce's demographics through random employee selection due to its minimal effort need, making it the most attractive choice.

The sample was chosen via a continuous process until the required number of participants was found. In essence, the researcher employed individuals who were eager to participate in the study, easily accessible, located in close proximity, and met the criteria of convenience in terms of location and proximity. Convenience sampling was chosen due to its ease of implementation and the limited constraints on how the sample should be collected. Convenience sampling was chosen for this purpose as well. One of the main factors that influenced the decision to proceed with convenience sampling was this particular aspect. The choice to employ convenience sampling was based on multiple factors, including one specific rationale and another contributing factor. Compared to other sampling methods, such probability sampling, using a convenience sample requires significantly less money and time resources for the researcher. This is because the

convenience sample consists of persons who are readily available. Consequently, the researcher was able to obtain the necessary sample size efficiently and within her economic limitations.

### **3.7 Research Instruments**

#### **3.7.1 Questionnaires**

The participants in the study were requested to complete standardized questionnaires to furnish the necessary information for the study. A structured questionnaire is a written instrument that has a set of standardized questions and a present framework that specifies the precise arrangement and order of the questions. Its purpose is to gather data from individuals who are being surveyed. Structured questionnaires often deliver the questions in a consistent way each time they are asked. This document can be utilized to gather information pertaining to a specific subject or area of interest. While it is not always certain, readers should be vigilant for the inclusion of a well-organized questionnaire inside the pages of a newspaper. This type of questionnaire normally consists of a set of standardized questions together with a pre-established structure. The survey was constructed using interval Likert scales, and it required respondents to express their level of agreement or disagreement with a proposal using a standardized response format.

The respondents were asked the following questions to gather views and suggestions: How does the collaborative collaboration impact the success of the procurement process? How does the process of writing contracts impact the handling of complaints regarding supplier management? What impact does devotion have on the efficiency of the procurement process? What is the impact of supplier reliability on the management of supplier complaints? What impact does supply chain monitoring have on the management of supplier complaints? The researcher employed a structured questionnaire to conduct this study. The researcher employed research questionnaires that were administered using the Likert Scale to gain insight into the level of agreement or disagreement among respondents about the various questions derived from the research objectives. Put simply, the researcher aimed to assess the level of agreement or disagreement among the respondents on the many questions derived from the research objectives. Manion (2020) states that the Likert Scale assigns the highest level of agreement to the narratives as Strongly Agreed, while the highest level of disagreement is represented by Strongly Disagree. These narratives pertain to statements regarding the impact of supply relationships on managing supplier complaints in the mining

industry. Both levels of agreement and disagreement pertain to the assertions regarding the impact of supply relationships on managing supplier complaints in the mining industry.

### **3.8 Data collection methods**

The data was collected using the case study approach, with a specific focus on the Murowa Diamonds mine in Harare. The researcher employed many methods, including observations, interviews, questionnaires, and focus group discussions, to ensure the reliability and impartiality of the research findings. This was done to ensure that the research study's findings were acquired. The researcher scheduled appointments and was allocated specific days to participate in the interviews and focus group discussions, which were performed electronically. Meanwhile, a limited number of questionnaires were distributed to respondents involved in operations to gather further insights into measurable data. Furthermore, the researcher ensured a substantial response rate by personally distributing the instruments to the individuals who were the intended subjects of the study.

### **3.9 Data presentation and analysis**

Tables were selected as the preferred method for gathering quantitative data due to its simplicity in both construction and comprehension. This was a significant determinant in the decision. Furthermore, SPSS was employed to document and evaluate the results of the analyses conducted on the data obtained from the questionnaires. The aforementioned results were derived from the discoveries made by Kothari & Garg (2014) Kothari (2004) and Saunders et al. (2016). The act of employing rational reasoning to comprehend the received information is commonly known as data analysis. This form of reasoning is referred to as deductive reasoning. Once the data had been gathered, they underwent various procedures, including editing, coding, and processing, among others. We utilized the quantitative data provided by the respondents in their responses.

Subsequently, the material underwent a statistical analysis technique utilizing the Statistical Package for the Social Sciences (SPSS) software. Descriptive analyses were conducted as a component of the completed task. Descriptive statistics provide measurements of central tendency. Examples of these metrics are means, medians, and standard deviations (Salkind, 2012). These words are just a small sample of the many terms you may encounter. The researcher conducted a linear regression analysis to determine the presence of a statistically significant relationship between behavioral intention and actual product consumption. In order to assess the statistical

significance of the study's findings, it was determined that the p-value should be less than 0.05. A multiple regression analysis was conducted by Cilliers, Chinyamurindi, and Viljeon (2017) to validate the hypothesized associations and gain understanding of their probable direction. This was done to substantiate the postulated connections.

### **3.10 Validity and Reliability**

#### **3.10.1 Validity**

According to Patton (2021) validity can be conceptualized as the condition of being legitimate, real, or genuine. It is crucial to emphasize that the research was qualitative in nature yet had a heterogeneous makeup. Although Creswell and Miller (2020) argue that validity is not applicable to qualitative research, they have concluded that it is crucial for any qualifying checks or measurements associated with the research. The researchers emphasized the need of selecting individuals who are commonly acknowledged as deserving of contract negotiation and possess the capacity to voice concerns. This is crucial to ensure the accuracy of the gathered data. Validity, as defined by Creswell 2020, is the extent to which a method accurately assesses its intended target. After finishing the process, the researcher used several analytical tools, such as theme analysis, which involved the use of graphs and tables, to reduce the likelihood of producing inaccurate data representations. Prior to commencing the study, the researcher presented a formal request to the participants, soliciting their input on potential enhancements to the study tools while maintaining their dependability. Put simply, the researcher aimed to investigate the participants' perspectives on enhancing the trustworthiness of the research tools. Ultimately, the researcher employed words with a more straightforward connotation in the data collection tools during the interviews. This was done to ensure that the participants comprehended the instruments in a more accessible manner.

#### **3.10.2 Reliability**

Reliability, as described by Creswell (2020) refers to the ability to consistently perform well and be considered worthy of inclusion in contract negotiations or job. Dependability, as explained by Dipboye, Macan, and Shahani-Denning (2021) refers to the assessment or examination of the reliability, validity, and excellence of the research results. This poses a challenge ascertaining the reliability of the findings. To ensure data consistency, it is necessary to examine several elements

such as raw data, data reduction products, and process notes during the study's verification procedure (Campbell, 2021). Consequently, the data can be utilized in future research.

The researcher employed effective data collection strategies to address any potential gaps that may have arisen during the research process. The assessment focused on two crucial criteria of reliability: the consistency of the collected data and the suitability of the instruments utilized, particularly in relation to contract negotiation. Furthermore, the suitability of the instruments for utilization in contract negotiations was also under evaluation. The reliability of the acquired data was enhanced by employing various methodologies for data collection, such as interviews, discussions in focus groups, and open-ended questionnaires. This measure ensured the utmost accuracy of the data. The researcher interviewed influential and autonomous informants who were also part of the operations department at different organizations to enhance the credibility of the statement. These individuals actively participate in the daily operations of the different enterprises they are associated with.

### **3.11 Ethical considerations**

Creswell (2020) defines an ethical concern as a set of norms and values that individuals must follow when participating in activities that involve human beings. These ideas and ideals should serve as a compass for an individual's conduct in all circumstances involving interpersonal interactions. Ethical concerns ensure that individuals refrain from engaging in actions that could cause harm to society or individuals (Campbell, 2021). Preserving the participants' identities and ensuring the confidentiality of the study was paramount, as the research necessitated direct interaction with the individuals. Consequently, the participants' rights to privacy and confidentiality were maintained throughout the entire procedure. The researcher ensured that all participants were adequately informed about the schedule and locations of the interviews and focus group sessions. Therefore, it was imperative for the participants to possess complete knowledge regarding the activity and its intended objectives. Both genders were equally considered for participation in the selection process to ensure adequate representation of all demographic categories throughout the entire procedure.

Prior to commencing any data collection, it was imperative to gain the respondent's informed consent, while ensuring that their rights to privacy and anonymity were upheld in all cases. At every stage of the research project, it was clearly communicated to the participants that their involvement in the study was completely voluntary. The individuals who volunteered for the research were explicitly informed that they would not receive any form of compensation or recognition for their participation in the study. Furthermore, the participants were informed that they had the autonomy to discontinue their involvement in the study at any point during the process, without facing any negative consequences. Throughout the research study, each participant was given an equitable and unbiased opportunity to share any information they were comfortable discussing. During the study, the researcher diligently considered all relevant organizational, religious, and cultural practices.

### **3.12 Chapter summary**

This chapter provided an overview of the research methods employed in this study. This chapter addressed topics like research design, research methodology, sample methods employed, data collection methods and procedures, and the process of synthesizing, analyzing, and interpreting the data. This chapter provided a comprehensive rationale for the many strategies used in this study. The following section will provide an overview of the data presentation and analysis conducted in the study.

## CHAPTER 4

### RESULTS AND DISCUSSION

#### 4.0 Introduction

This study relates to development of a supply chain management model for managing supplier complains in mining organizations in Zimbabwe. A case of Murowa diamonds. Data is presented, evaluated, and analyzed in this chapter. In this chapter results, interpretations and discussions are directed by research objectives, research questions and hypotheses of the study. Tables are charts will be adopted. The outcomes of the data analysis and subsequent discussion are presented in this chapter.

#### 4.1 Response rate analysis

In this research the researcher distributed 285 questionnaires to non-managerial employees of Murowa diamonds. From the 285 distributed questionnaires 240 questionnaires were successfully completed. This gave a response rate of 84%. The researcher also scheduled 5 interviews with the management of Murowa diamonds. All five interviews were conducted successfully and this gave a response rate of 100%. According to Kent et al. (2020) a response rate of 50% is adequate for any research, a response rate of 70% is good and a response rate of 80% and above is excellent for any study. In this study a response rate of 84% which was obtained was excellent. Table 4.1 below presents the response rate of this study

**Table 4.1: Response rate analysis**

	Distributed/ Scheduled	Returned/ Conducted	Response rate
Questionnaires	285	240	84%
Interviews	5	5	100%
Total questionnaires	285	240	84%

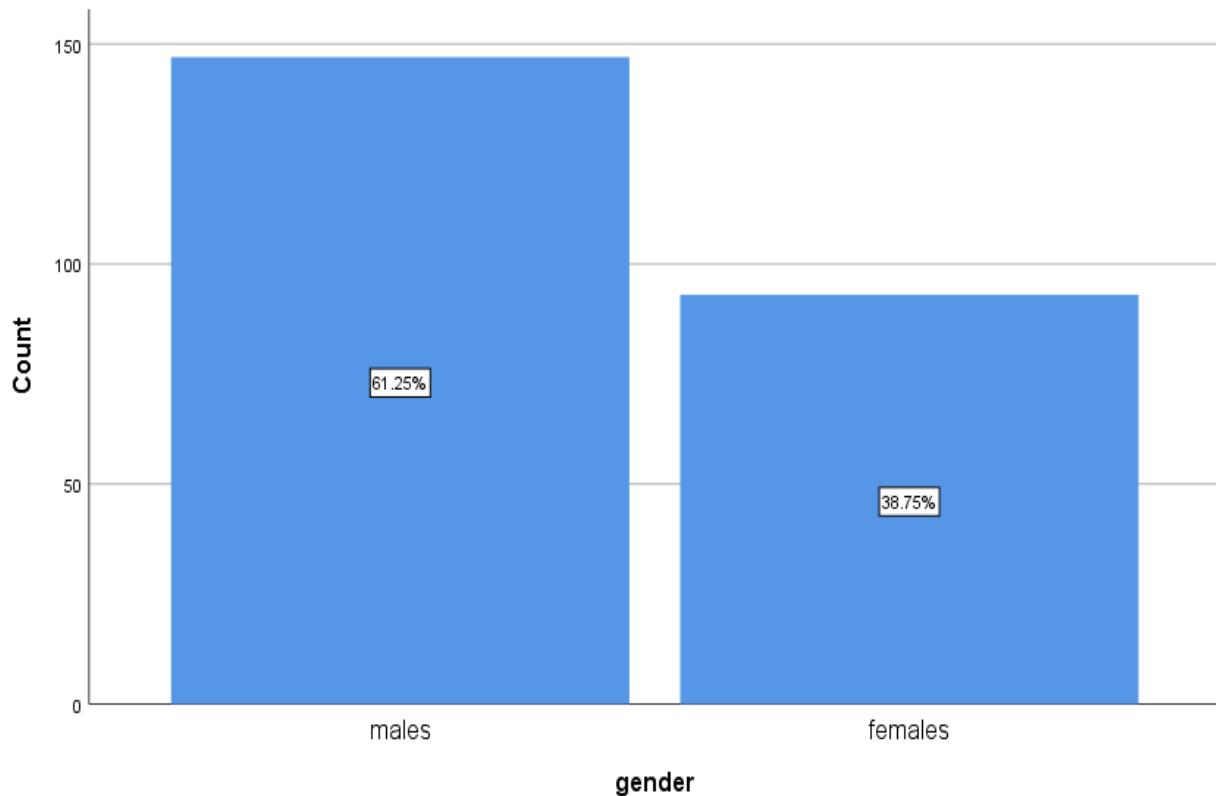
Source: Survey

## 4.2 Demographic data analysis

Demographic data in this research relates to information concerning respondents organized in specific characteristics, such as gender, age, position, level of education and working experience.

### 4.2.1 Gender

In this study on development of a supply chain management model for managing supplier complains in mining organizations in Zimbabwe. A case of Murowa diamonds respondents were asked to outline their gender as shown in the figure 4.1 below.



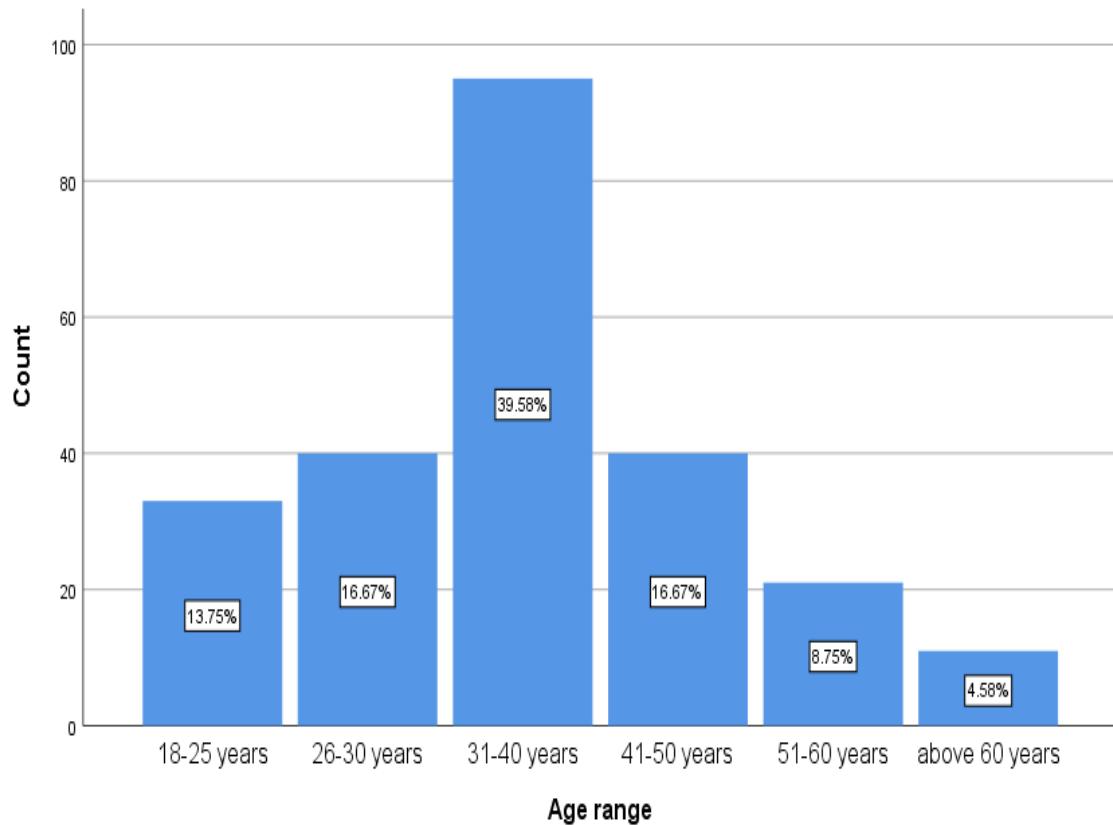
**Figure 2: Gender**

**Source:** Survey

Figure 4.1 above shows that the majority of respondents were males. This is because of the working environment and nature of duties offered by Murowa diamonds which require male labor and expertise. According to Fernandes et al. (2019) most mining organizations are male dominated hence the findings attained in this study were expected.

#### 4.2.2 Age

Respondents who took time to complete the questionnaire of the study were asked to indicate their age range and their responses are shown in figure 4.2 below



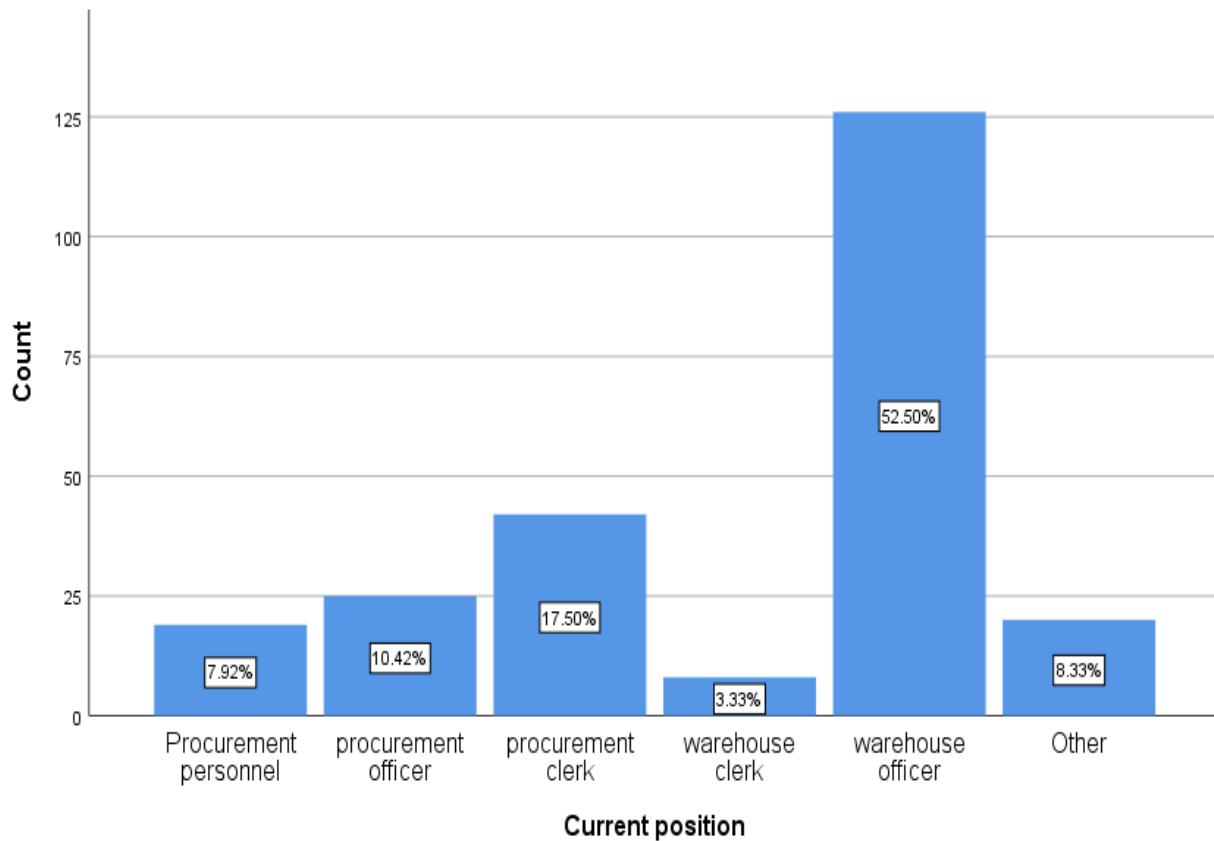
**Figure 3: Age range**

**Source:** Survey

From the figure 4.2 above it can be seen that the majority 39.58% were in the age range of between 31-40 years. This age group was mature enough to provide honest and reliable answers on establishing an association between collaborative relationship and managing supplier complains in mining organizations, assessing the effect of contract negotiation on managing supplier complains in mining organizations and determining the effect of monitoring supply chain on managing supplier complains in mining organizations.

#### 4.2.3 Position

In this study on development of a supply chain management model for managing supplier complains in mining organizations in Zimbabwe. A case of Murowa diamonds respondents were also asked to outline their position. Their responses are shown in the figure 4.3 below



**Figure 4: Position**

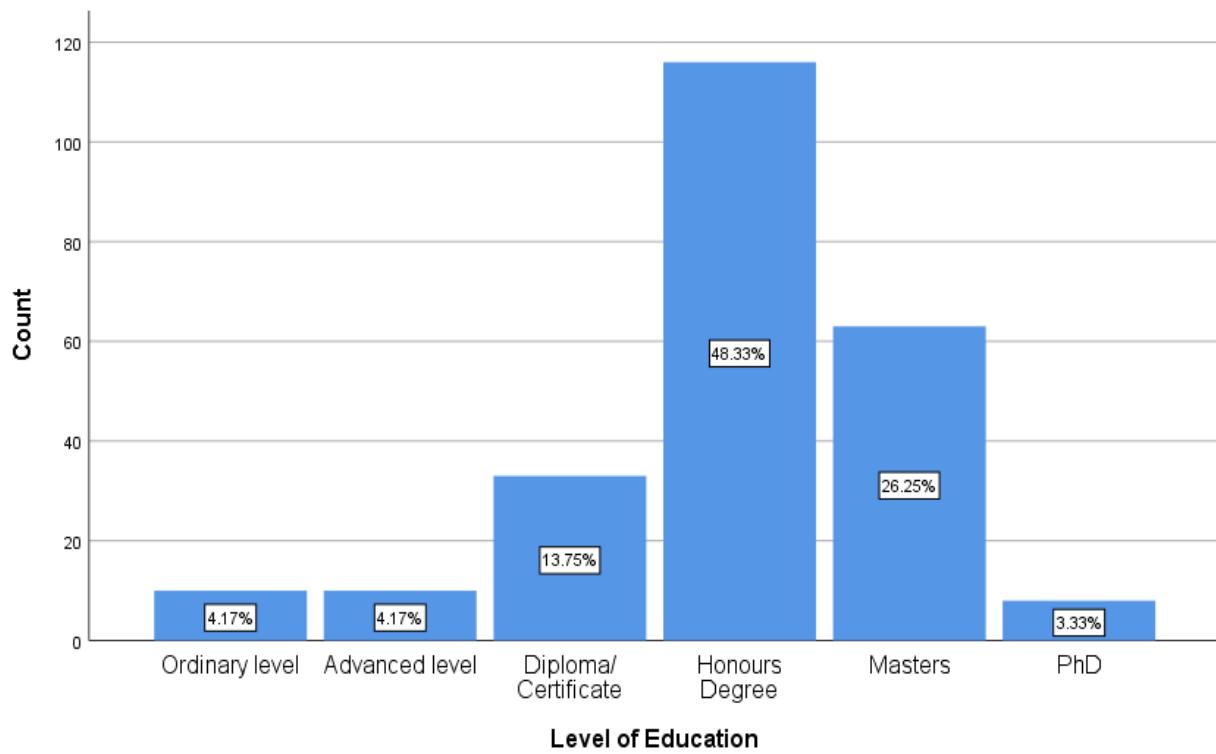
**Source:** Survey

From the figure 4.3 above it can be seen that the majority of respondents 52.5% were warehouse officers. These respondents ensures that inventories are accurate and maintains control over inventory levels by ensuring that regular physical counts are carried out and reconciled with the system balance, as well as by ensuring that physical counts are undertaken (Jajja et al., 2019). These officers prepare, coordinate, and keep an eye on the shipment of goods, as well as their reception and storage. They ensure that all documentation relating to goods received and commodities dispatched, including the labelling of all stock items, is accurate and relevant, and do so as thoroughly as possible (Wang et al., 2021). Evaluate the efficiency of the warehousing

activities as well as the performance of the staff, and submit your findings. They assist the organization in maintaining order in the storage area as well as the inventory, ensuring the accuracy of all transactions involving shipments and inventory, interact with clients to provide answers to their questions and help them solve their difficulties (Zhang et al., 2021).

#### 4.2.4 Level of education

In this study on development of a supply chain management model for managing supplier complains in mining organizations in Zimbabwe. A case of Murowa diamonds respondents were also asked to indicate their level of education. Their responses are shown in the figure 4.4 below



**Figure 5: Level of education**

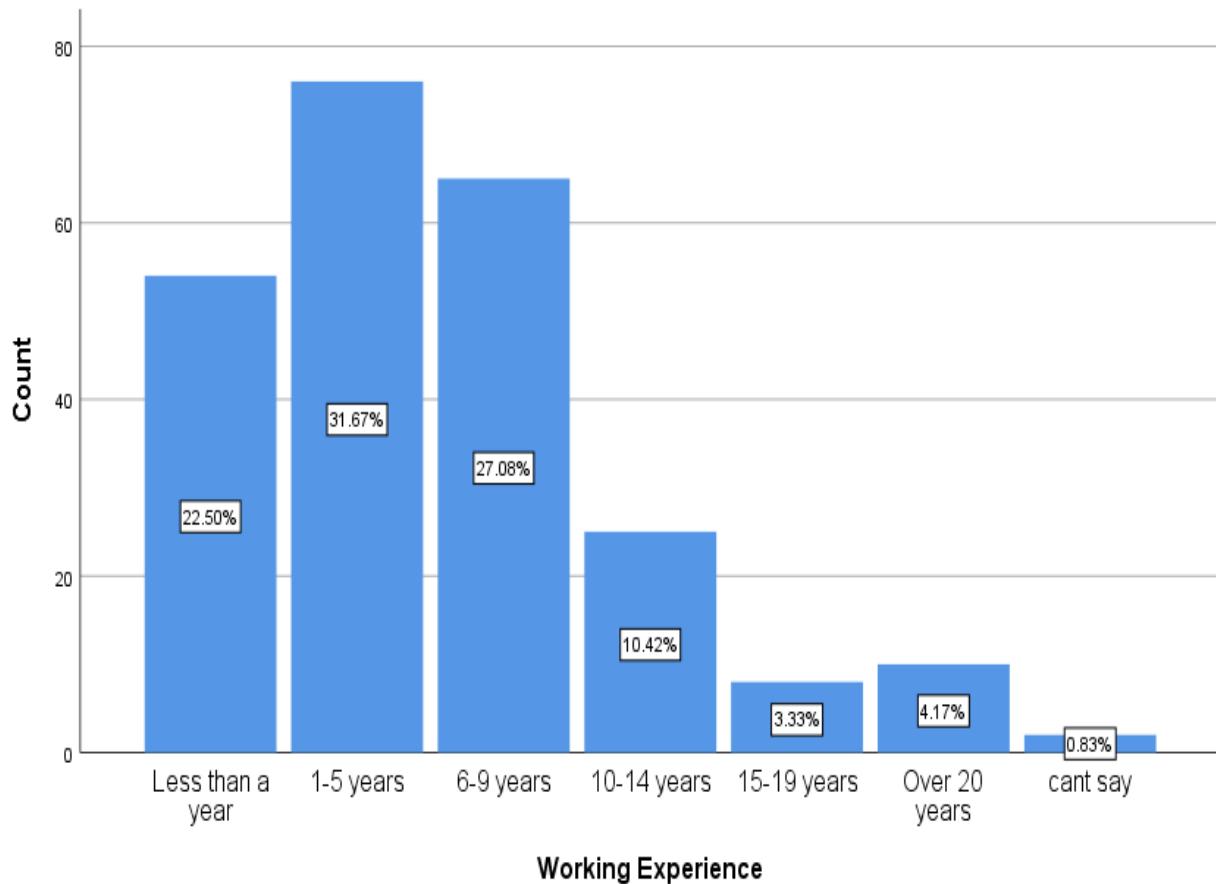
**Source:** Survey

From the figure 4.4 above it can be seen that the majority of respondents 48.3% had an honors degree. These respondents could understand all study aspects or contracts and interpret all aspects to do with factors motivating supplier complains at Murowa diamonds, the effect of collaborative relationship on managing supplier complains in mining organizations, the effect of contract negotiation on managing supplier complains in mining organizations and the effect of monitoring

supply chain on managing supplier complains in mining organizations as they were educated. According to Tanikawa & Jung (2018) having educated employees increases engagement and helps to fortify the culture of an organization. Also educated employees strengthens the resilience of organizations (Birasnav et al., 2015).

#### 4.2.5 Working experience

In this study respondents were also asked to indicate their working experience. Their responses are shown in the figure 4.5 below



**Figure 6: Working experience**

**Source:** Survey

The majority of respondents 31.67% had been attached to the organization for a period of between 1 to 5 years. Work experience relates to a temporary position held by an employee for the purpose of gaining knowledge about a particular occupation, business, or sector of the economy (Burke, 2019). Employers stand to gain as well, given that the organization will be able to contribute value

to their operations. Being attached to the organization for a period of between 1 and 9 years, the majority of respondents could easily relate incidents when their suppliers could complain and how it was handled.

### 4.3 Reliability analysis

In this study analysis of reliability provided the researcher with the opportunity to research the qualities of measuring scales as well as the components that make up the scales. The composite reliability (CR) coefficient was utilised in order to evaluate the latent variables' level of reliability. All of the CR coefficients of the latent variables were found to be more than 0.6, which is the minimal value required for Nunnally and Bernstein (2016) to deem a variable to be legitimate. In order to assure a high level of reliability, as well as discriminant and convergent validity, multiple questions have been identified for each component. According to Nunnally (1978), reliability is defined as the capacity of the scales to reliably produce the same answer over and over again. The question that needs to be answered is Are we getting consistent results over from our measures? Equivalence and stability over time are the two categories that fall under the umbrella term consistency. For the Cronbach's alpha statistic, a value more than 0.70 is often accepted for use with pre-existing scales, although values greater than 0.60 are generally thought to be enough for use with freshly generated scales. The findings of the evaluation of the scales using Cronbach's alpha are provided in Tables 4.2 below. These results reveal that all of the scales had a Cronbach's alpha value that was higher than that which was defined by Nunnally (1978). Table 4.2 below presents reliability analysis of the study.

**Table 4.2 Reliability analysis of the study**

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
collaborative relationships	19.32	7.867	.239	.467	.619
contract negotiation	19.69	7.043	.326	.441	.693 <sup>a</sup>
supply chain monitoring	19.56	9.218	.088	.034	.669
monitoring and managing risks	19.66	10.258	-.078	.042	.617
supply chain selection	19.30	9.409	.162	.059	.620
making payments	19.59	11.624	-.184	.066	.656

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions.  
You may want to check item codings.

#### 4.4 Descriptive statistics

This section gives the findings on descriptive statistics (mean and standard deviation) of the constructs that were investigated in this study. On each of the five constructs namely supply chain management, the effect of collaborative relationships on reducing supplier complains in mining organizations, the effect of contract negotiation on reducing supplier complains and the effect of monitoring supply chain on managing supplier complains a Likert scale with five points was utilized. The following scale was utilized 1= strongly disagree, 2 = Disagree, 3=Neutral, 4= Agree, 5 = Strongly Agree.

##### 4.4.1 Supply chain management

Table 4.3 below shows descriptive statistics for supply chain management

**Table 4.3: Mean and standard deviation for supply chain management**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The organization I work for does a supply chain selection process	240	1	5	3.92	1.247
The mine I work for monitor and evaluate the performance of their suppliers	240	1	5	3.70	1.446
My organization ensures that suppliers are paid on time for the goods and services they provide	240	1	5	3.61	1.232
The mine I work for gather documentation and information needed for the approval of the supply chain	240	1	5	3.32	1.432
Our organization negotiates contracts with their suppliers	240	1	5	4.00	1.203
Valid N (listwise)	240				

From the table 4.3 respondents agreed that the organization I work for does a supply chain selection process (Mean =3.92, SD= 1.247), the mine 1 work for monitor and evaluate the performance of their suppliers (Mean= 3.70, 1.446), my organization ensures that suppliers are paid on time for

the goods and services they provide (Mean= 3.61, SD= 1.232), the mine I work for gather documentation and information needed for the approval of the supply chain (Mean= 3.32, SD =1.432) and our organization negotiates contracts with their suppliers (Mean= 4.00, SD =1.203). From the findings it is important to note that the respondents strongly agreed that their organization negotiates contracts with suppliers with a highest mean rating of 4.00 and standard deviation of 1.203. Owusu Kwateng et al. (2022) conducted a study on the relationship between supply chain managed inventory and operational performance in Ghana and supported the findings of this study by saying that most organizations who are practicing supply chain management are negotiates contracts with suppliers.

#### **4.4.2 The effect of collaborative relationships on reducing supplier complains in mining organizations**

Table 4.4 presents descriptive statistics for effect of collaborative relationships on reducing supplier complains in mining organizations

**Table 4.4: Mean and Standard deviation for the of collaborative relationships on reducing supplier complains in mining organizations**

<b>Descriptive Statistics</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
The company I work for creates long term mutual beneficial relationships based on trust.	240	1	5	3.69	.997
Our company does information sharing with their supply chains	240	1	5	3.78	1.463
My company select partners based on capability and strategic alignment.	240	1	5	3.80	1.348
The organization I work for collaborate in areas where supply chains have solid footing.	240	1	5	4.05	1.218
Our company does joint decision making with their supply chains.	240	1	5	4.08	1.108
My company works closely with its suppliers.	240	1	5	3.90	1.272
Valid N (listwise)	240				

From the table 4.4 above it can be seen that respondents noted that the company I work for creates long term mutual beneficial relationships based on trust (Mean= 3.69, SD= 0.997), our company does information sharing with their supply chains (Mean= 3.78, SD= 1.463), my company select partners based on capability and strategic alignment (Mean= 3.80, SD= 1.348), the organization I work for collaborate in areas where supply chains have solid footing (Mean= 4.05, SD= 1.218), our company does joint decision making with their supply chains (Mean= 4.08, SD= 1.108) and my company works closely with its suppliers (Mean= 3.90, SD= 1.272). From these findings respondents strongly agreed that our company does joint decision making with their supply chains with a highest mean rating of 4.08 and standard deviation of 1.108. Nurhayati et al. (2023) conducted a study on joint B2B supply chain decision-making: drivers, facilitators and barriers. Nurhayati et al. (2023) noted that within a supply chain, one of the coordination mechanisms that can be utilised to solve the inherent complexity of business-to-business (B2B) procedures is the act of making joint decision making with supply chains. By coming to choices together as a group, the parties involved may stand to gain directly from the potential and synergies offered by a partnership.

#### **4.4.3 The effect of contract negotiation on reducing supplier complains**

Table 4.5 below shows descriptive statistics for the effect of contract negotiation on reducing supplier complains.

**Table 4.5: Descriptive statistics for the effect of contract negotiation on reducing supplier complains**

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Contract negotiation is being used by my organization to come to an agreement on a set of legally binding terms with its suppliers.	237	1	5	3.73	1.451
Our company receives goods at a the lowest price possible due to agreeable terms for a contract	240	1	5	3.87	1.204
The organization I work for has good quality goods from suppliers due to standards which should be abided to.	240	1	5	3.80	1.301

Our company does better service delivery to clients due to goods delivered on time by supply chains as they adhere to standards on the contract.	240	1	5	3.65	1.432
Valid N (listwise)	240				

From the table 4.5 above it can be noted that respondents noted that contract negotiation is being used by my organization to come to an agreement on a set of legally binding terms with its suppliers (Mean= 3.73, SD= 1.451), our company receives goods at a the lowest price possible due to agreeable terms for a contract (Mean= 3.87, SD= 1.204), the organization I work for has good quality goods from suppliers due to standards which should be abided to (Mean= 3.80, SD= 1.301) and our company does better service delivery to clients due to goods delivered on time by supply chains as they adhere to standards on the contract (Mean= 3.65, SD= 1.432). From these findings it can be noted that respondents strongly agreed that our company receives goods at a the lowest price possible due to agreeable terms for a contract with a highest mean rating of 3.87 and standard deviation of 1.204. This is supported by Das et al. (2020) who posits that nowadays organizations receives goods at a lowest price possible due to agreeable terms for a contract,

#### 4.4.4 The effect of monitoring supply chain on managing supplier complains

Table 4.6 below shows descriptive statistics for effect of monitoring supply chain on managing supplier complains.

**Table 4.6: The effect of monitoring supply chain on managing supplier complains**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
My company classify its suppliers when managing their performance.	240	1	5	3.50	1.552
The organization I work for monitors their suppliers when managing their performance.	240	1	5	4.24	.904
Our company manages their supply chain performance through price	240	1	5	3.82	1.343
The organization I work for manages their supply chain performance every quarter of the year.	240	1	5	3.96	1.181

Our company does surprise supplier visits to manage their performance	240	1	5	3.85	1.099
Valid N (listwise)	240				

From the table 4.6 above it can be seen that respondents noted that my company classify its suppliers when managing their performance (Mean= 3.50, SD= 1.552), the organization I work for monitors their suppliers when managing their performance (Mean= 4.24, SD= 0.904), Our company manages their supply chain performance through price (Mean= 3.82, SD= 1.343), the organization I work for manages their supply chain performance every quarter of the year (Mean= 3.96, SD= 1.181) and our company does surprise supplier visits to manage their performance (Mean= 30.85, SD= 1.099). From the findings attained in this study it can be noted that respondents strongly agreed that the organization I work for monitors their suppliers when managing their performance with a highest mean rating of 4.24 and standard deviation of 0.904. This is supported by Wang et al. (2021) who noted that most organizations monitors their suppliers in a bid to improve organizational performance.

## 4.5 Testing hypothesis

**H1:** There is an association between collaborative relationship and managing supplier complains in mining organizations

**H<sub>2</sub>:** Contract negotiation have a positive effect on managing supplier complains in mining organizations

**H3:** Monitoring supply chain have a positive effect on managing supplier complains in mining organizations.

Multiple-regression analysis was used to test the hypotheses and results are illustrated in Table 4.7, Table 4.8 and Table 4.9 below.

**Table 4.7: Model Summary**

1	.338 <sup>a</sup>	.114	.103	1.285	.114	10.147	3	236	.000
a. Predictors: (Constant), supply chain monitoring, collaborative relationships, contract negotiation									

Results in Table 4.7 below show that the four constructs explain about 11% of changes in supplier complains. This is shown by the R square value of 0.114. This implies that there are other factors that influence supplier complains in mining organizations.

Table 4.8 below shows the ANOVA test results.

**Table 4.8: ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.267	3	16.756	10.147	.003 <sup>b</sup>
	Residual	389.716	236	1.651		
	Total	439.983	239			

a. Dependent Variable: managing supplier complains

b. Predictors: (Constant), supply chain monitoring, collaborative relationships, contract negotiation

Results in Table 4.8 above show that the model is statistically significant ( $F= 10.147$ ;  $p= 0.003$ ). This implies that the regression model is relied upon. Table 4.9 below presents coefficients results for factors which causes supplier complains.

**Table 4.9: Coefficients**

Coefficients <sup>a</sup>							
Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B
		B	Std. Error				Lower Bound
1	(Constant)	3.984	.367		10.871	.000	3.262
	collaborative relationships	.394	.083	.390	1.780	.052	-.557
	contract negotiation	.286	.079	.297	3.637	.300	.131
	supply chain monitoring	.170	.066	.157	2.562	.011	.039

a. Dependent Variable: managing supplier complains

Results in Table 4.9 above show that collaborative relationships has a partial effect on supplier complains (Beta= 0.390, t= 1.780, p= 0.052). However, since the p-value of 0.052 is above the expected p-value of 0.050, H1 is not supported. This implies that collaborative relationships does not influence supplier complains at Murowa Diamond Mine. These results contradict Chen et al. (2019) who found a significant relationship between collaborative relationships and supplier complains.

Results in Table 4.9 above show that contract negotiation has an insignificant effect on supplier complains (Beta= 0.297, t= 3.637, p= 0.300). Therefore, H2 is not supported. This implies that contract negotiation does not influence supplier complains. This contradicts Jajja et al. (2017) who claims that contract negotiation influence supplier complaints.

Results in Table 4.9 above indicate that supply chain monitoring has an insignificant effect on supplier complains (Beta= 0.157, t= 2.562, p= 0.11). Therefore, H3 is not supported. This implies that supply chain management does not influence supplier complains. This finding differs from that of Tukimin et al. (2019) who claim that supply chain management influence supplier complains.

## 4.6 Qualitative data

### 4.6.1 What factors are motivating supplier complains at Murowa diamonds?

Respondent ABB mentioned that... *You are aware, as a manager of food and beverage operations, of the significance of fostering positive relationships with the supply chains who supply your business. They supply you with the high-quality components, tools, and services that are essential to the operation of your business successfully. Nevertheless, there may be instances when disagreements or complaints surface because of problems with delivery, changes in pricing, product flaws, or other factors. How can you manage these situations in a way that is both successful and professional, without putting a strain on your long-term partnership? The constructive resolution of any disagreements or complaints regarding suppliers can be achieved with the help of the following suggestions*

Respondent ABD noted that... *Negotiating with your supplier in a manner that is both fair and flexible is the second stage in managing any problem or complaint that may arise. Make an effort*

*to comprehend their stance and areas of interest, and look for areas of agreement and areas of focus that you both share. Be open to making compromises and offering concessions, but do not back down from advocating for your rights and requirements. Stay away from making demands or issuing ultimatums, and instead offer options and several courses of action. For the purpose of providing support for your arguments and claims, you should make use of objective criteria and benchmarks, such as industry standards, contracts, or invoices. Maintain a reasonable and realistic outlook, and steer clear of requests and expectations that are out of line with reality*

#### **4.7 Chapter summary**

This study relates to development of a supply chain management model for managing supplier complaints in mining organizations in Zimbabwe. A case of Murowa diamonds. In this chapter data was presented, evaluated, and analyzed. Results, interpretations and discussions were directed by research objectives, research questions and hypotheses of the study. The next chapter shall outline summary of findings, conclusions and recommendations of the study.

## CHAPTER 5

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 INTRODUCTION

This chapter presents a comprehensive summary of the research findings ,analysis and conclusions drawn from the data collected through questionnaires .Additionally it discusses the limitations encountered during the study ,offers recommendations and suggest avenues for future research.

#### 5.1 SUMMARY

The research analysed the supply chain management model to reduce supplier constraints at Murowa Diamonds. Through a detailed examination of the current supply chain operations, stakeholder interviews, surveys and performance data, key issues such as communication breakdowns, contractual disputes, payment delays and logistical inefficiencies were identified as primary sources of supplier dissatisfaction. However to address these issues the study proposed a refined supply chain management model emphasizing enhanced communication strategies ,improved payment process and effective logistical coordination.

#### 5.2 CONCLUSION

In conclusion , this study demonstrates the need for effective supply chain management in the mining industry in Zimbabwe .The study highlights the importance of supplier complaints and the need for a formal complaint management process .The study also demonstrates the importance of technology in improving supply chain management efficiency and effectiveness .In this study it was also identified areas that need improvement to enhance as well as reduce supplier complaints if addressed well .That is

1. Enhanced communication
2. Contract clarity
3. Timely payments
4. Logistical efficiency

These improvements are expected to reduce supplier complaints thus enhancing supplier relationships and lead to more and more efficient supply chain operations and ultimately benefiting the overall performance of mining organisations

### **5.3 RECOMMENDATIONS**

Based on findings and conclusions, Murowa Diamonds should adopt the following recommendations as proposed for mining organisations like Murowa Diamonds to reduce supplier complaints and optimize their supply chain

1. Implement a centralised supplier portal
2. Standardise and clarify contract terms
3. Automate payment processes
4. Integrate logistics management
5. Continuous improvement and feedback mechanisms

By adopting these recommendations mining organisations can build a more resilient, efficient and supplier friendly supply chain.

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