

**Bindura University  
of Science Education**



**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**FACULTY OF SCIENCE AND ENGINEERING**

**DEPARTMENT OF SPORTS SCIENCE**

**Using Supply Chain Management (Scm) Principles To Optimize Operations At Pitbulls Rugby  
Football Club In Harare, Zimbabwe**

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
OF MASTER OF SCIENCE DEGREE IN SPORT MANAGEMENT**

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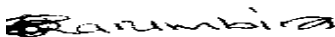
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## **DEDICATION**

This work is dedicated to my children ..... and .....

## **ABSTRACT**

This study investigated the use of Supply Chain Management (SCM) principles to optimize operations at Pitbulls Rugby Football Club (Pitbulls RFC) in Harare, Zimbabwe. The purpose of the study was to enhance efficiency in managing the flow of goods and services, streamlining the movement of products, reducing costs and improving customer satisfaction. The study sought to assess the current supply chain management practices at Pitbull Rugby Football Club, identify areas of improvement within the club's supply chain management principles and the impact of SCM implementation on cost reduction, customer satisfaction, and overall performance at Pitbull Rugby Football Club. This study was driven by seeming evidence and research work on the operational challenges and impacts of traditional supply chain management principles being practiced by many start-up sports clubs in Zimbabwe. The study was informed by the pragmatic philosophy and adopted the qualitative methods approach. In the context of the positivist approach, the focus is adopting an objective scientific approach that would be on testing hypotheses and using empirical data to support findings. In the context of Interpretivism, the focus would shift to exploring social phenomena; the subjective experiences and perspectives of individuals within the Pitbull Rugby Football Club supply chain. The study utilized the case study research design and also employed both probability and non-probability sampling to select the participants in the research. Data collection was done through focus group discussions and interview sessions. The Nvivo tool was used in data analysis. The study made the observations that a shift from traditional supply chain management principles to scientific ones be adopted. The research forges the development of a scientific supply chain management principles framework. The study recommends the adoption of advanced methods of supply chain which cater for competitive edge amongst sports clubs

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

SCM	Supply Chain Management
Pitbulls RFC	Pitbulls Rugby Football Club
I T	Information Technology

## **CHAPTER 1**

### **1.1 INTRODUCTION TO THE STUDY**

A supply chain, which consists of all the transactions and communications involved in converting raw materials into a marketable product, guarantees a well-decorated network between the business and its clients or suppliers. The business network's functional groups include sales, procurement, sourcing, logistics, production, and customer service, while the network's components include actions, technology, people, resources, and information. Pitbulls Rugby Football Club (Pitbulls RFC) is a well-established sports organization with a strong presence in the local rugby community of Harare. However, the club encounters operational obstacles that impede its efficacy and efficiency. These difficulties include in effective inventory control and a lack of departmental collaboration, and optimal utilization of resources. To address these issues, the club can benefit from the application of supply chain management principles to streamline its operations and improve overall performance. This chapter presents the background to the Study, Statement of the Problem, Significance of the Study, Research Questions, Research Objectives, Delimitations of the Study, and study outline.

### **1.2 BACKGROUND TO THE STUDY**

Pitbull Rugby Football Club, located in Harare, Zimbabwe, is a prominent rugby club with a rich history and a strong fan base. It is an off-shoot trophy for two prominent High schools in Harare; Churchill Boys High and Lomagundi High. The problem at Pitbull Rugby Club lies in the lack of effective supply chain management principles. This results in inefficiencies in transport logistics, increased costs, and a suboptimal level of performance. The club's operations suffer from poor inventory management, delayed deliveries, and a lack of coordination between suppliers, players, coaches, and other stakeholders. These issues hinder the club's ability to achieve its objectives and remain competitive in the sports industry.

Supply chain management (SCM) is a critical aspect of any organization's success, as it involves the coordination and management of all activities involved in the production and delivery of goods and services. It encompasses the flow of materials, information, and finances from suppliers to manufacturers, distributors, retailers, and ultimately, the end consumer. The application of SCM

principles in the sports industry, particularly in rugby clubs, is an area that has received limited attention. By exploring the potential benefits of SCM in Pitbull Rugby Football Club, this study can contribute to the existing body of knowledge in sports management and provide valuable insights for other clubs facing similar operational challenges. Additionally, optimizing operations through SCM can lead to cost savings, improved performance, enhanced fan experience, and increased revenue generation for the club.

The field of sports management often lacks a comprehensive understanding of SCM principles and their potential application in optimizing operations. Many sports organizations, including rugby clubs, continue to face operational inefficiencies due to the absence of effective supply chain strategies.

While there is a significant body of literature on supply chain management in various industries, there is a lack of research specifically focused on its application in sports organizations. This study aims to bridge this gap by exploring the unique challenges faced by Pitbull Rugby Football Club and providing recommendations tailored to the sports industry. The findings of this study will shape the contribution of supply chain management (SCM) principles in sports organizations.

Supply chain management plays a crucial role in optimizing operations and ensuring the smooth flow of goods and services within an organization. There are several contributions made by other researchers on supply chain management principles and their relevance to the Pitbull Rugby Football Club in Harare. By examining various studies and scholarly articles, the researcher gained insights into how these principles can be applied to optimize the club's operations.

### **1.2.1 Global Context**

In a global context, the importance of SCM in sports organizations has been increasingly recognized. With the globalization of markets and the rise of competition, rugby clubs like Pitbulls Rugby Football Club in Harare are under pressure to streamline their operations and improve their competitiveness. By adopting SCM principles, these clubs can better manage their supply chains, reduce costs, and deliver high-quality services to their fans and sponsors. According to Christopher

et al. (2016), SCM can help sports organizations achieve a competitive advantage by optimizing their operations and enhancing their overall performance.

### **1.2.2 Regional Context**

In a regional context, the implementation of SCM principles can have a significant impact on the operations of rugby clubs in Africa. With the growing popularity of rugby in the region, clubs like Pitbulls Rugby Football Club are facing increasing competition and the need to improve their efficiency. By developing a framework for implementing SCM principles, these clubs can enhance their supply chain processes, reduce lead times, and improve their overall performance. As noted by Monczka et al. (2015), SCM can help organizations in Africa overcome logistical challenges and improve their competitiveness in the global market.

### **1.2.3 Local Context**

In a local context, the implementation of SCM principles at Pitbulls Rugby Football Club in Harare can lead to numerous benefits. By optimizing their supply chain processes, the club can reduce costs, improve inventory management, and enhance customer satisfaction. Additionally, SCM can help the club build stronger relationships with suppliers, sponsors, and fans, leading to increased revenue and long-term success. According to Chopra and Meindl (2016), SCM can help organizations achieve operational excellence and create a competitive advantage in their local markets.

Lastly, developing a framework for implementing SCM principles at Pitbull Rugby Football Club in Harare is essential for optimizing operations and enhancing performance. By considering the global, regional, and local contexts, the club can leverage SCM to improve efficiency, reduce costs, and deliver high-quality services to its stakeholders. Through the adoption of SCM principles, Pitbulls Rugby Football Club can achieve sustainable growth and success in the highly competitive sports industry.



The aforementioned authors have made significant contributions to the field of supply chain management principles. Their works provide a solid foundation for understanding the principles and practices that can be applied to optimize operations at the Pitbull Rugby Club. However, it is important to note that the application of these principles should be tailored to the specific context and requirements of the club. According to leading authorities in SCM, such as the Council of Supply Chain Management Professionals (CSCMP) and the Supply Chain Management Institute (SCMI), there are several key principles that organizations should follow to optimize their operations.

Firstly, effective supplier management is crucial. This involves selecting reliable suppliers, establishing strong relationships, and ensuring timely delivery of goods. Pitbull Rugby Club should evaluate its current suppliers and identify any bottlenecks or issues that may be causing delays in equipment procurement. By implementing supplier evaluation mechanisms and fostering collaborative relationships, the club can ensure a steady supply of high-quality rugby equipment.

Secondly, inventory management plays a vital role in SCM. Pitbull Rugby Club needs to assess its current inventory practices and identify areas for improvement. By implementing inventory control systems, such as just-in-time (JIT) or vendor-managed inventory (VMI), the club can reduce excess inventory, minimize stockouts, and improve overall efficiency. This will not only save costs but also ensure that the club has the necessary equipment readily available for its players.

Thirdly, effective coordination between all stakeholders in the supply chain is essential. Pitbull Rugby Club should establish clear communication channels with its suppliers, manufacturers, distributors, and players. By sharing information in real time, the club can respond quickly to changes in demand, address any issues promptly, and ensure a smooth flow of goods and services. This can be achieved through the implementation of technology solutions, such as enterprise resource planning (ERP) systems or cloud-based collaboration platforms.

Lastly, continuous improvement is a fundamental principle of SCM. Pitbull Rugby Club should regularly evaluate its operations, identify areas for enhancement, and implement necessary

changes. By conducting regular performance assessments, the club can measure its supply chain efficiency, identify any gaps, and implement corrective actions. This will enable the club to stay competitive and adapt to changing market dynamics

Addressing the operational challenges faced by Pitbulls RFC is crucial for its long-term sustainability and success. By implementing SCM principles, the club can improve its inventory management, reduce costs, enhance player performance, and provide a better experience for fans. Furthermore, the findings of this study can serve as a blueprint for other rugby clubs and sports organizations to optimize their operations and achieve sustainable success.

This study has the potential to address the operational challenges faced by Pitbulls RFC by applying SCM principles. By conducting a thorough analysis of the club's current operations, identifying areas for improvement, and proposing SCM-based solutions, this research can provide actionable recommendations to enhance the club's overall performance.

### **1.3 STATEMENT OF THE PROBLEM**

The Pitbulls RFC in Harare, Zimbabwe, faces several operational challenges which include inefficient inventory management, lack of coordination between suppliers and the club, and inadequate distribution processes. These challenges hinder the club's ability to meet the demands of its players, fans, sponsors and ultimately affecting its overall performance and reputation. This is evidenced in:

- ☐ Log standings of the team
- ☐ public outcry
- ☐ poor performance of the entity
- ☐ articles published by media tea
- ☐ annual reports of the entity

The existing gap in Pitbulls RFC operations can be observed through various practical examples. Firstly, the club often experiences delays in; transport logistics in ferrying athletes to and from competition venues, and receiving food and accessories from suppliers which leads to stockouts

and dissatisfied customers. Additionally, the lack of female athletes' inventory and its management practices results in overstocking or understocking, leading to increased costs. Furthermore, the absence of effective coordination among stakeholders and the volunteer reliance syndrome hampers the overall efficiency of the supply chain.

#### **1.4 SIGNIFICANCE OF THE STUDY**

Supply chain management is a critical aspect of operations in any organization, including sports clubs. Pitbulls RFC in Harare can significantly benefit from the application of SCM principles to optimize its operations. Firstly, the Pitbulls RFC can benefit from SCM principles by enhancing its efficiency in managing the flow of goods, services, and information throughout its supply chain. According to Chopra and Meindl (2007), SCM aims to streamline the movement of products from suppliers to customers, which can result in cost savings and improved service levels. By implementing SCM principles, the clubs improve their procurement processes for equipment, apparel, and other resources needed for training and competition. This results in better inventory management, reduced lead times, and lower costs associated with acquiring and storing necessary supplies.

Secondly, SCM principles help the club reduce costs by eliminating waste and optimizing resource allocation. Through effective inventory management, the club can avoid overstocking or understocking, thereby reducing storage costs and preventing stockouts during critical periods. Additionally, by establishing strategic partnerships with suppliers, the club can negotiate better pricing terms, leading to cost savings.

Furthermore, SCM principles can enhance communication and collaboration among stakeholders. By implementing advanced technology solutions, such as supply chain management software, the club can improve information sharing, real-time tracking, cloud storage systems, IOT, and forecasting. This will enable better decision-making, faster response times, and improved customer satisfaction, as fans can enjoy a seamless experience when purchasing merchandise or attending matches.

Secondly, SCM principles can help Pitbulls RFC in Harare to optimize its logistics and distribution processes. As noted by Jacobs, Chase, and Lummus (2011), effective SCM involves the coordination and integration of various activities such as transportation, warehousing, and order fulfillment. By leveraging SCM principles, Pitbulls RFC can enhance the management of its game schedules, travel arrangements, and venue logistics. This can contribute to improved team performance, reduced travel expenses, and better overall experiences for both players and fans. Furthermore, the application of SCM principles can enable Pitbull Rugby Club to build stronger relationships with its suppliers and other stakeholders.

According to Monczka, Handfield, Giunipero, and Patterson (2015), SCM emphasizes the importance of collaboration and communication within the supply chain network. By actively engaging with its suppliers, sponsors, and partners, Pitbulls RFC can gain access to better deals, sponsorships, and support for its operations. This can lead to improved financial performance and sustainability for the club in the long run.

In summary, the rationale for using SCM principles to optimize operations at Pitbulls RFC in Harare is clear. By focusing on streamlining its supply chain, improving logistics, and strengthening relationships with stakeholders, the club can achieve various benefits such as cost savings, performance improvements, and enhanced competitiveness. As emphasized by Chopra and Meindl (2007), Jacobs, Chase, and Lummus (2011), and Monczka, Handfield, Giunipero, and Patterson (2015), the application of SCM principles is crucial for organizations seeking to maximize their operational effectiveness and achieve sustainable success.

## **1.5 CONCEPTUAL FRAMEWORK**

The conceptual framework for this research proposal is based on the principles of supply chain management. It encompasses various elements such as supplier management, inventory management, and demand forecasting, logistics, and customer relationship management. By integrating these components, Pitbulls RFC can create a well-coordinated and efficient supply chain, leading to improved outcomes and operational effectiveness.

Firstly, an in-depth analysis of the club's current supply chain management practices will be conducted. This involved assessing inventory management, supplier relationships, and coordination processes. Based on the findings, the study will propose practical solutions to optimize operations. For instance, implementing a centralized inventory management system can enhance visibility and control over stock levels, enabling the club to make informed decisions regarding procurement and demand forecasting. Additionally, establishing long-term contracts with reliable suppliers can ensure consistent quality and timely deliveries. Furthermore, the club will adopt technology-driven solutions, such as automated inventory tracking systems and online ordering platforms. These advancements can streamline processes, reduce manual errors, and improve overall efficiency.

## **1.6: RESEARCH OBJECTIVES**

### **1.6.1: Primary Objective**

To develop a framework for implementing supply chain management principles to optimize operations at Pitbulls RFC in Harare.

### **1.6.2: Subsidiary Objectives**

- i. To assess the current supply chain management practices at Pitbulls RFC.
- ii. To identify areas of improvement within the club's supply chain management principles.
- iii. To evaluate the impact of SCM implementation on cost reduction, customer satisfaction, and overall performance at Pitbulls RFC.

## **1.7: RESEARCH QUESTION**

### **1.7.1: Primary Research Question**

How can supply chain management principles be used to improve the overall operations at Pitbull Rugby Club?

### **1.7.2: Subsidiary Research Question**

- a) What are the current challenges faced by the Pitbulls RFC supply chain management system?
- b) What strategies can be implemented to optimize the SCM operations at Pitbulls RFC?
- c) How can the club enhance the SCM principles to ensure the realization of its overall operations?

## **1.8: DELIMITATIONS OF THE STUDY**

This study is limited to the context of the Pitbulls RFC in Harare and may not be directly applicable to other sports organizations. Additionally, the research will focus on the application of SCM principles and their impact on operations and outcomes, rather than investigating other factors that may influence performance, such as coaching techniques or player talent. This study is subject to certain limitations as it will be conducted solely at Pitbulls RFC, limiting the generalizability of the findings. Also, the time and resource constraints may restrict the depth of data collection and analysis. Finally, the study may face limitations in terms of the availability and accuracy of historical data related to the club's operations.

## **1.9: DEFINITION OF KEY TERMS:**

1. Supply Chain Management (SCM): SCM refers to the coordination and integration of activities involved in the production, procurement, and distribution of goods and services. It involves managing the flow of materials, information, and finances across the entire supply chain, from suppliers to customers, (Christopher, 2016)

2. Optimization: Optimization involves maximizing efficiency and effectiveness within a system by identifying and implementing the best possible solutions. In the context of this research proposal, optimization refers to improving the club's operations and outcomes through the application of SCM principles, (Choi & Lee, 2018)

3. Principles can be defined as fundamental truths or guidelines that serve as the basis for reasoning and decision-making within a particular field. They are derived from empirical evidence, logical reasoning, and ethical considerations. Principles provide a framework for understanding and

interpreting phenomena, guiding individuals in their actions and judgments. According to Covey (1989), principles are universal and timeless, offering a moral compass for individuals and organizations.

4. Operations, on the other hand, refer to the practical activities or processes involved in achieving a specific goal or objective. Operations encompass the design, planning, execution, and control of various tasks within an organization or system. Slack, Chambers, and Johnston (2010) define operations as the transformation of inputs into outputs, involving the coordination of resources, people, and technology to deliver products or services efficiently and effectively.

5. According to Chopra and Meindl, (2007), a supply chain can be defined as a network of organizations involved in the procurement, production, and distribution of products to end customers. It encompasses all activities and processes that are necessary to deliver a product or service to a customer, from the sourcing of raw materials to the delivery of the final product.

## **1.10 ORGANISATION OF THE STUDY**

The study consists of six chapters, that is chapter one up to chapter six. The first chapter is the introductory chapter which serves to elaborate and outline the research problem, research objectives, and questions. Chapter one lays the foundation of the study as it gives the background of the research problem, gives a justification of why the cited problem is worth studying, and outlines the research aim and objectives which will guide the whole research and determine the contents of chapter two, three, four and five. The second chapter serves to give an in-depth review of relevant literature on developing a framework for implementing supply chain management principles to optimize operations at Pitbulls RFC. The literature review section will be based on the aim and objectives of the study and the key research questions outlined in chapter one will be answered by the literature review section. Another important aspect of the literature review section will be the conceptual and theoretical frameworks of the study which serves to expose the interrelationship between the main variables under study. The third chapter will provide an overall description of how the research will be conducted in detail. Chapter three presents the research methodology and design for the study. It covers issues on research paradigm and philosophy,

research approach and design, sampling design and the research methods, data analysis, and ethical issues. The fourth chapter deals with both qualitative and quantitative data presentation analyses. It presents the inter-relationships between the findings and the existing literature. The fifth chapter serves to present and interpret the results of the study in line with the research questions outlined in chapter one and the summary of findings, gaps in the literature as well as how the gaps can be resolved. Chapter six presents the new insights, conclusions, and recommendations from the study. The conclusions and recommendations will be drawn from the results of the study presented in chapter four. The chapter gives a general overview of the research results in light of the objectives and a way forward on what should be done to address the research problem as viewed by the researcher.

## **1.11 CHAPTER SUMMARY**

This chapter acquaints us with the background of the study, the statement of the study, the significance of the study, the conceptual framework, objectives, questions, and limitations of the research. The main elements that affect the Pitbulls RFC show that supply chain management principles are important for the success of a sports entity. The entire structure of the study is also stated. The next chapter discusses the relevant literature concerning supply chain management and the various operations.



## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 INTRODUCTION**

Effective supply chain management is vital for businesses to ensure the smooth coordination of all activities for the production and delivery of goods and services. This chapter on literature review is segmented under the following herding: conceptualization, theoretical framework, methodology review, thematic review, and chapter summary.

### **2.2 CONCEPTUALIZATION**

According to Kruger and Ramphal (2009), the supply chain process begins with the supplier and continues through manufacturing and distribution until the final product reaches the customer. Also Christopher, (2016) conceptualizes a supply chain is a network of organizations involved in activities that produce products and services for end consumers. In line with this study, the supply chain involves a series of processes and activities that move products, services, and information from suppliers to customers to satisfy both customer and entity vision.

Supply chain management (SCM), involves the cooperation and coordination of activities of all parties for the production and distribution of products to the final consumer with the mechanism in place to optimize inventories across the entire supply chain (Haan, et al., 2003; Viswanathan and Piplani, 2001). According to Kruger et al (2009), SCM entails planning, designing & controlling of information & material flows along the supply chain to ensure that customer needs and wants, in the present & future will be met in an effective & efficient manner. In line with the above views, SCM involves the movement of tangible and intangible products and services between and within entities, value creation, and support of enterprises in pursuance of a competitive advantage.

#### **2.2.1 Application of SCM Principles in Sports Clubs**

Sports clubs, including rugby clubs like Pitbull, can benefit from applying SCM principles to optimize their operations. For instance, effective inventory management can ensure that the club has the necessary equipment, jerseys, and other supplies readily available for training and matches. This can be achieved by implementing just-in-time (JIT) inventory systems, (Monczka et al. (2015). JIT can help reduce inventory holding costs while ensuring that the club has the right items at the right time.

### **2.2.2. Inventory Management:**

Effective inventory management is essential in the sports industry to ensure the availability of products and equipment. By utilizing SCM principles, organizations can optimize inventory levels, reduce stockouts, and minimize holding costs. For instance, a study by Wang and Li (2019) found that implementing SCM practices, such as demand forecasting and vendor-managed inventory, improved inventory turnover and reduced stockouts in sports retail companies.

### **2.2.3 Supplier Relationship Management**

Supplier relationship management (SRM) is another crucial aspect of SCM that can be applied at Pitbull Rugby Club. By developing strong relationships with suppliers, the club can ensure a steady supply of high-quality equipment and merchandise. Authors such as Ellram and Tate (2004) emphasize the importance of collaboration, trust, and mutual benefits in supplier relationships. Pitbull Rugby Club can negotiate favorable terms, such as discounts or exclusive deals, by maintaining strong relationships with suppliers. For example, a study by Lee and Kim (2017) highlighted how a sportswear manufacturer improved supplier relationships through the implementation of SCM practices, leading to enhanced product quality and reduced lead times.

### **2.2.4 Logistics and Transportation Management**

Efficient logistics and transportation management are essential for sports clubs to ensure timely delivery of equipment, jerseys, and other supplies. SCM principles can help Pitbull Rugby Club optimize its transportation routes, reduce delivery lead times, and minimize costs. The club can

adopt technologies such as GPS tracking systems to monitor shipments and ensure their safe and timely arrival. The work of Bowersox et al. (2013) provides valuable insights into logistics and transportation management in SCM. SCM principles enable organizations to streamline transportation, warehousing, and order fulfillment processes. A case study by Choi and Lee (2018) demonstrated how a professional sports team utilized SCM principles to enhance their logistics operations, resulting in reduced delivery lead times and improved customer satisfaction.

Effective SCM practices can optimize the procurement, maintenance, and distribution of rugby equipment, ensuring that players have access to high-quality gear when needed (Borland et al., 2018). Venue Management: Applying SCM principles to venue selection, maintenance, and scheduling can enhance operational efficiency, reduce costs, and improve the overall fan experience (Khan, 2019).

### **2.2.5 Information Technology and SCM**

Information technology (IT) plays a vital role in SCM, enabling effective communication, data analysis, and decision-making. Pitbull Rugby Club can leverage IT systems to streamline its operations, such as using inventory management software to track stock levels and automate reordering processes. The study by Simchi-Levi et al. (2014) highlights the importance of IT in SCM and guides its implementation. Leveraging technology can enhance supply chain visibility, efficiency, and collaboration. Entities can adopt digital tools and platforms to track and monitor the movement of goods, improve communication with stakeholders, and optimize inventory management. For example, a study by Li and Li (2021) examined the impact of technology integration on supply chain performance in sports retail. The authors found that technology adoption positively influenced supply chain agility and responsiveness.

### **2.2.6. Enhancing Efficiency and Cost Reduction:**

Implementing SCM principles allows sports entities to streamline their operations, resulting in improved efficiency and cost reduction. For instance, Nike, a leading sportswear manufacturer,

has successfully implemented SCM principles to optimize its supply chain. By collaborating with suppliers, implementing advanced technologies, and adopting lean manufacturing practices, Nike has reduced lead times, minimized inventory costs, and improved overall operational efficiency (Christopher, 2016).

### **2.2.7 Improving Customer Satisfaction:**

SCM principles enable sports entities to better understand customer demands and preferences, leading to improved customer satisfaction. Adidas, a renowned sportswear brand, has embraced SCM principles to enhance its responsiveness to customer needs. By implementing demand-driven supply chain strategies, Adidas has been able to deliver products faster, customize offerings, and provide personalized experiences to its customers (Fawcett et al., 2015).

### **2.2.8. Enhancing Collaboration and Innovation:**

Collaboration among supply chain partners is crucial for entities in the sports industry to stay competitive and foster innovation. The case of the International Olympic Committee (IOC) demonstrates the importance of collaboration in achieving sustainable success. The IOC collaborates with various stakeholders, including host cities, sponsors, and broadcasters, to ensure the successful organization of the Olympic Games. This collaboration enables the IOC to leverage the expertise and resources of its partners, resulting in continuous innovation and the ability to adapt to changing market dynamics (Chappelet & Kübler-Mabbott, 2017).

Developing strong collaborative relationships with stakeholders across the supply chain, including suppliers, manufacturers, distributors, and retailers, can help address global supply chain issues. Entities can engage in partnerships to share knowledge, pool resources, and develop innovative solutions. For example, a study by Gao et al. (2020) examined the supply chain management practices in the Chinese sports industry. The authors found that collaboration with suppliers and retailers positively influenced supply chain efficiency and customer satisfaction. Collaborating with sponsors and marketing partners can help rugby teams enhance their brand image, increase revenue streams, and attract a larger fan base. SCM principles can facilitate effective collaboration

and negotiation with sponsors (Borland et al., 2018). Ticketing and Merchandising: Integrating SCM principles into ticketing and merchandising operations can optimize inventory management, reduce costs, and improve customer satisfaction (Khan, 2019). While there is some empirical evidence supporting the use of supply chain management principles in the sports industry, it is crucial to acknowledge certain limitations and challenges: Lack of consensus: The literature presents a lack of consensus on the definition and scope of supply chain management in the sport industry. This lack of agreement hampers the development of uniform standards and best practices.

### **2.2.9 Sustainability and ethical sourcing:**

Addressing global supply chain issues involves considering sustainability and ethical practices. Entities should implement responsible sourcing strategies, such as considering environmental impact, fair labor practices, and ethical sourcing of raw materials. Empirical evidence: Kim and Na (2019) explored the effects of sustainable supply chain management practices on organizational performance in the sportswear industry. The study found that sustainable practices positively influenced financial and non-financial performance.

### **2.2.10 Enhancing Player Performance:**

Sourcing and Recruitment: Applying SCM principles to player recruitment can help identify and acquire talented individuals who align with the team's strategic objectives. This can be achieved through data-driven analysis, talent scouting, and effective negotiation strategies (Khan, 2019). Training and Development: Implementing SCM principles in training programs can improve player performance by ensuring the availability of appropriate resources, such as qualified coaches, state-of-the-art facilities, and personalized training plans (Borland et al., 2018).

Applying supply chain management principles can optimize operations at Pitbull Rugby Club in Harare. By implementing SCM practices such as effective inventory management, supplier relationship management, logistics, and transportation management, and leveraging information technology, the club can enhance its operational efficiency, reduce costs, and improve customer

satisfaction. By embracing SCM, Pitbull Rugby Club can gain a competitive advantage in the sports industry while delivering an exceptional experience to its players and fans.

Supply chain management has evolved significantly over the past five years, with scholars and practitioners continuously refining and expanding its principles. Initially, SCM focused primarily on the efficient movement of goods from suppliers to manufacturers and then to customers. However, it has now expanded to encompass a broader range of activities, including sourcing, procurement, production, distribution, and customer service, (Kilty, 2000). One of the key developments in SCM is the recognition of the importance of collaboration and integration among supply chain partners. Traditional supply chain models often operate in silos, with each function optimizing its performance without considering the impact on the overall supply chain. However, scholars such as Christopher (2016) argue that effective SCM requires close collaboration and coordination among all stakeholders, including suppliers, manufacturers, distributors, and customers. This collaborative approach enables organizations to achieve greater efficiency, reduce costs, and improve customer satisfaction.

While there is a consensus on the importance of collaboration in SCM, scholars have differing views on the extent to which organizations should integrate their supply chains. Some argue for a high level of integration, advocating for the creation of a single, unified supply chain network. Others argue for a more flexible approach, where organizations maintain multiple supply chain networks to cater to different customer segments or product lines. For instance, Lambert and Cooper (2014) propose the concept of a "virtual supply chain," where organizations collaborate with a network of suppliers and service providers to meet specific customer requirements. This approach allows organizations to leverage the expertise and capabilities of external partners while maintaining flexibility and agility in responding to changing market demands.

The current study aims to apply SCM principles to optimize operations at Pitbull Rugby Club in Harare. The study intends to adopt SCM principles, which can enhance its operational efficiency, reduce costs, and improve the overall fan experience. To achieve these objectives, the club needs to establish close collaboration and integration with its suppliers, including equipment manufacturers, apparel providers, and food and beverage vendors. By working closely with these

partners, the club can ensure the timely delivery of high-quality products and services, thereby enhancing the fan experience during matches and events.

Furthermore, Pitbull Rugby Club can leverage technology to streamline its supply chain operations. Implementing a robust supply chain management system can enable the club to track inventory levels, monitor supplier performance, and optimize logistics and distribution processes. This technology-driven approach can help the club reduce costs, minimize stockouts, and improve overall supply chain visibility. The following is an SCM channel that a club can employ to optimize its operations:

**i. Understanding Supply Chain Management:**

To begin, it is essential to establish a clear understanding of SCM principles. According to Chopra and Meindl (2007), SCM involves the coordination and integration of various activities within a supply chain to maximize customer value and achieve a competitive advantage. These activities include sourcing, procurement, production, distribution, and customer service. By implementing SCM principles, Pitbull Rugby Club can streamline its operations, reduce costs, and enhance overall performance.

**ii. Initial Stage: Assessing Current Operations:**

In the first year, Pitbull Rugby Club should conduct a comprehensive assessment of its current operations. This assessment should include an analysis of the club's supply chain, identifying areas of improvement and potential bottlenecks. Authors such as Monczka et al. (2015) emphasize the importance of understanding the current state of operations before implementing SCM principles.

**iii. Developing Supplier Relationships:**

In the second year, Pitbull Rugby Club should focus on developing strong relationships with its suppliers. This involves selecting reliable suppliers, negotiating favorable contracts, and establishing effective communication channels. Lambert et al. (1998) highlight the significance of supplier relationships in SCM, as they directly impact the quality and availability of resources.

**iv. Enhancing Inventory Management:**

During the third year, Pitbull Rugby Club should concentrate on optimizing its inventory management. This includes implementing inventory control systems, adopting just-in-time (JIT) principles, and utilizing technology to track and manage inventory levels. Mentzer et al. (2001) argue that effective inventory management is crucial for minimizing costs and ensuring timely availability of resources.

#### **v. Streamlining Distribution Channels:**

In the fourth year, Pitbull Rugby Club should focus on streamlining its distribution channels. This involves evaluating the efficiency of current distribution methods, exploring alternative options, and implementing strategies to reduce lead times and improve customer satisfaction. Bowersox et al. (2013) emphasize the importance of efficient distribution channels in SCM, as they directly impact the speed and reliability of product delivery.

#### **vi. Continuous Improvement and Evaluation:**

In the fifth year, Pitbull Rugby Club should prioritize continuous improvement and evaluation of its SCM practices. This involves regularly reviewing and updating SCM strategies, benchmarking against industry best practices, and seeking feedback from stakeholders. Christopher (2016) argues that continuous improvement is essential for maintaining a competitive advantage in an ever-evolving business environment.

## **2.3 THEORETICAL FRAMEWORK**

Supply chain management (SCM) has emerged as a critical discipline in today's globalized business environment. It encompasses the coordination and integration of various activities involved in the flow of goods, services, and information from suppliers to end customers, (Kruger et al (2009). To effectively manage supply chains, organizations rely on theoretical frameworks and models that provide a structured approach to understanding and optimizing their operations.

#### **a. The SCOR Model:**

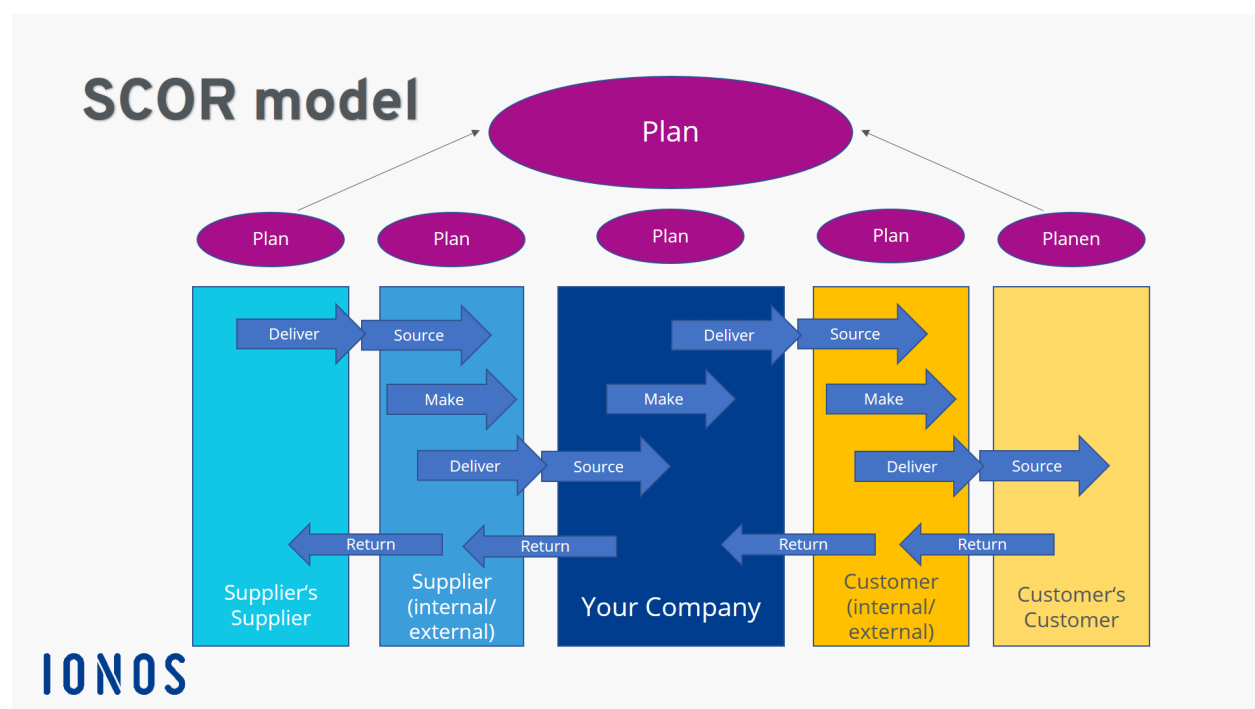
The Supply Chain Operations Reference (SCOR) model, developed by the Supply Chain Council, is a widely recognized framework for understanding and improving supply chain processes. It



provides a comprehensive structure that defines key performance indicators, process metrics, and best practices across various supply chain activities. The SCOR model consists of five core processes: Plan, Source, Make, Deliver, and Return. It enables organizations to identify areas of improvement, enhance collaboration, and achieve operational excellence.

Supply chain management (SCM) principles have become increasingly important in various industries, including sports organizations. By implementing effective SCM strategies, organizations can enhance their operational efficiency, reduce costs, and improve customer satisfaction. The SCOR model is a widely recognized framework that provides a comprehensive approach to managing and improving supply chain processes. The benefits of using SCOR model include process standardization, collaboration and integration, performance measurement and risk management (Gunasekaran et al., 2015). However, the model has its shortcomings which include implementation complexity, lack flexibility and data availability.

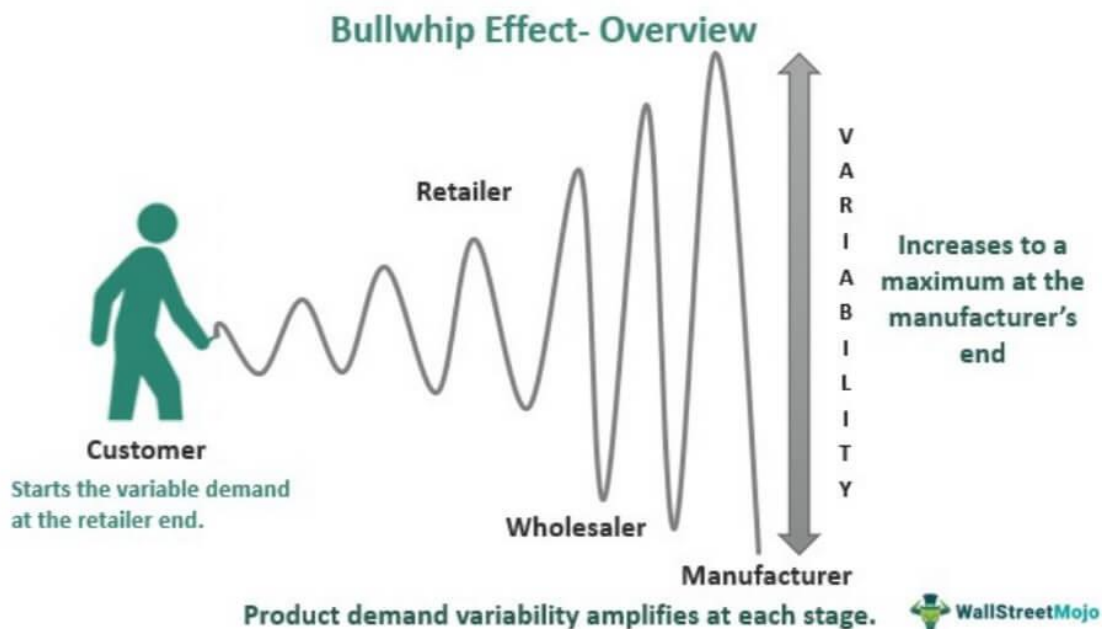
**Figure 2.1 The SCOR Model**



### b. The Bullwhip Effect:

The Bullwhip Effect theory, proposed by Lee et al. (1997), explains the amplification of demand fluctuations as they move upstream in a supply chain. This phenomenon occurs due to information delays, order batching, price fluctuations, and other factors. There are various benefits of adopting Bullwhip effect which are inventory optimization, enhanced collaboration and cost reduction, (Lee et al., 2015). The model has its short comings also which are increased inventory costs, inefficient production planning and customer dissatisfaction, (Chen et al., 2019).

**Figure 2.2 The Bullwhip Effect**

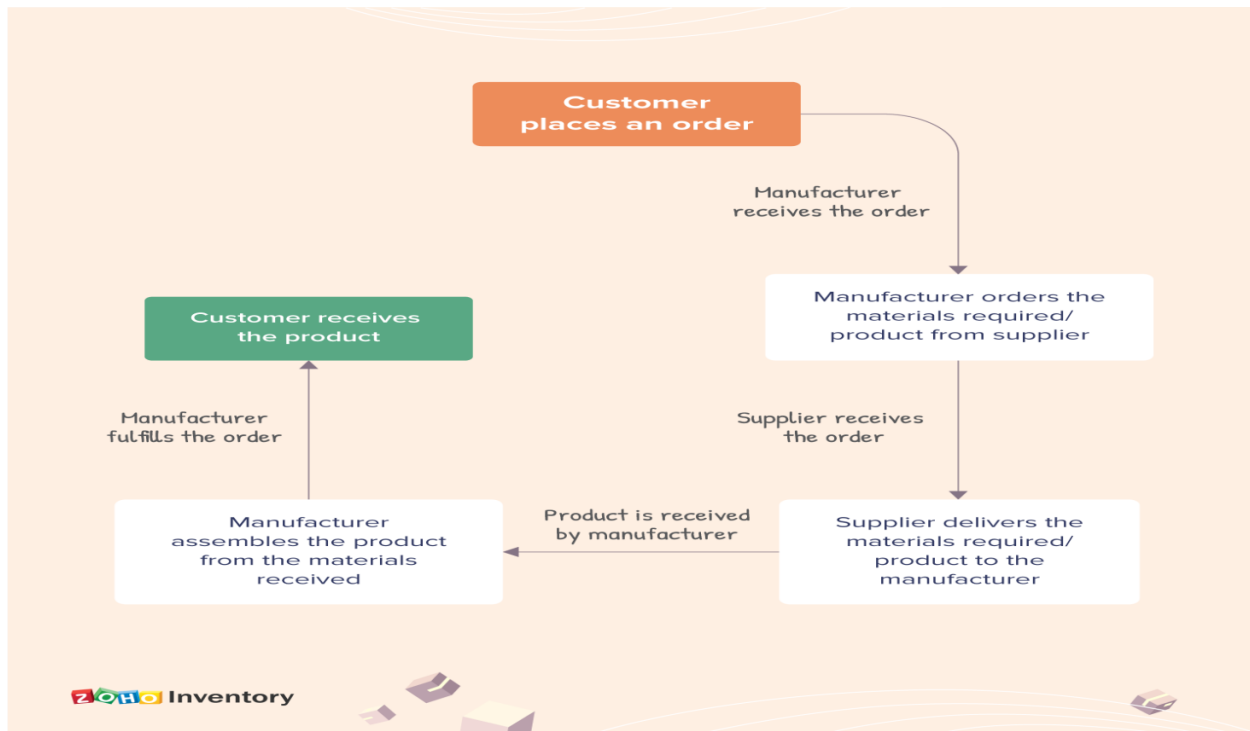


### c. Just-in-Time (JIT):

The Just-in-Time (JIT) philosophy, popularized by Toyota, emphasizes the elimination of waste and the continuous flow of materials through the supply chain. JIT aims to achieve high levels of efficiency by synchronizing production with customer demand. This approach minimizes inventory holding costs, reduces lead times, and enhances overall supply chain responsiveness.

JIT requires close collaboration with suppliers, reliable demand forecasting, and a robust production system capable of rapid changeovers. The benefits of adopting JIT are costs reduction, enhanced efficiency and flexibility responsiveness, (Monczka et al., 2015). However, the model has its short comings which are supply chain disruptions, increased reliance on supplier and Lack of buffer stock, (Mentzer et al., 2016).

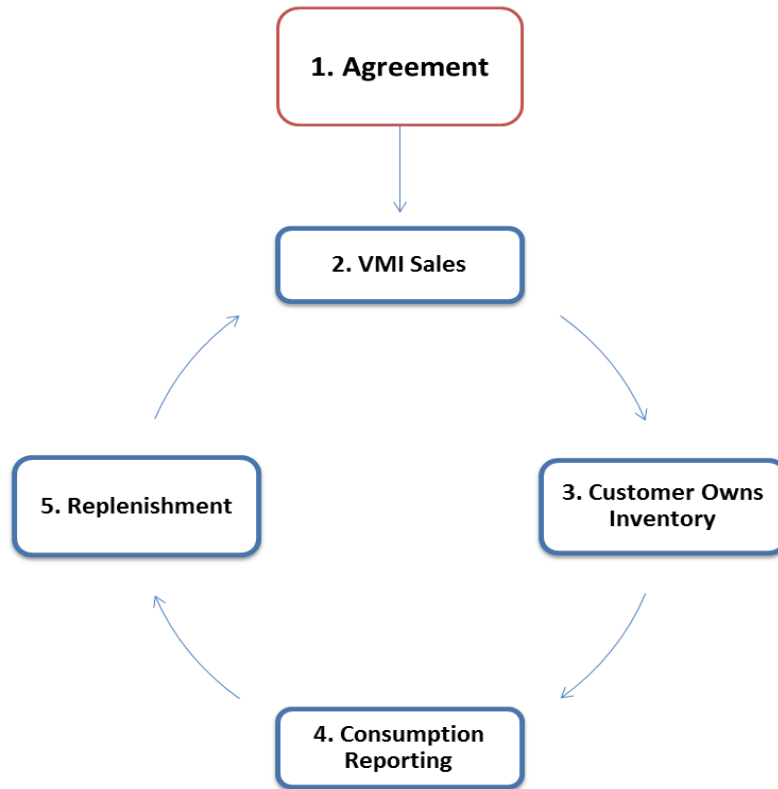
**Figure 2.3 Just in Time**



#### **d. Vendor-Managed Inventory (VMI):**

Vendor-Managed Inventory (VMI) is a collaborative supply chain model where suppliers take responsibility for managing inventory levels at customer locations. This approach gives suppliers real-time visibility into customer demand, enabling them to replenish stock proactively. There are varied benefits of using VMI which are reducing stockouts, improves order fulfillment rates, and enhances supply chain efficiency. However, the model has its shortcomings which are loss of control, dependence on supplier and communication challenges, (Chen et al., 2012)

**Figure 2. 4: Vendor Managed Inventory**



### **2.3.1 landmark contributions in Supply Chain Management Models**

#### **i. The Bullwhip Effect:**

One of the major themes addressed in SCM is the bullwhip effect, which refers to the amplification of demand fluctuations as they move upstream in the supply chain. Hau L. Lee, V. Padmanabhan, and Seungjin Whang made a landmark contribution in their article "Information Distortion in a Supply Chain: The Bullwhip Effect" (1997). They identified the causes of the bullwhip effect and proposed strategies to mitigate it, emphasizing the importance of information sharing and coordination among supply chain partners.

#### **ii. Just-in-Time (JIT) and Lean Principles:**

The concept of Just-in-Time (JIT) and lean principles revolutionized supply chain management by focusing on reducing waste and improving efficiency. Taiichi Ohno, the father of the Toyota

Production System, introduced these principles in the 1950s. His book, "Toyota Production System: Beyond Large-Scale Production" (1988), outlined the key principles of JIT, including continuous improvement, waste reduction, and pull-based production. Ohno's work has been instrumental in shaping modern SCM practices.

### **2.3.2 Similarities and differences in Models**

#### **Similarities**

Despite their unique characteristics, these supply chain models share some commonalities. Firstly, they all emphasize the importance of collaboration and information sharing among supply chain partners. Effective communication and coordination enable organizations to align their activities, reduce uncertainties, and improve overall supply chain performance. Secondly, these models recognize the significance of demand forecasting accuracy in achieving operational efficiency. Accurate demand forecasts enable organizations to optimize inventory levels, minimize stockouts, and enhance customer satisfaction.

#### **Differences:**

While these models share similarities, they also exhibit distinct characteristics. The SCOR model provides a comprehensive framework that covers all aspects of supply chain management, including planning, sourcing, manufacturing, delivery, and returns. In contrast, the Bullwhip Effect model focuses specifically on understanding and mitigating demand fluctuations. The JIT model emphasizes lean manufacturing principles and reducing waste, while the VMI model centers on supplier-managed inventory and collaboration.

Supply chain management (SCM) plays a crucial role in optimizing operations and enhancing overall performance in various industries, including sports clubs. Pitbull Rugby Club in Harare can greatly benefit from implementing effective SCM principles to streamline their operations. The study delved to analyze the strengths and weaknesses of four SCM models, namely the SCOR

model, the Bullwhip Effect model, the Just-in-Time (JIT) model, and Vendor Managed Inventory (VMI), in the context of optimizing operations at Pitbull Rugby Club.

In conclusion, while all four theories - the bullwhip effect, JIT, VMI, and the SCOR model - have their merits, the most suitable approach for Pitbulls RFC in Harare would be the implementation of the principles aligned to JIT theory. Given the club's relatively stable demand and the desire to optimize operation, however, it is essential to consider the specific context and gaps already in the JIT theory that can be faced by the club when implementing.

While the Just-in-Time theory provides valuable insights into optimizing operations, it is essential to address the gaps in its application to supply chain management. Pitbull RFC can enhance its supply chain practices by incorporating flexibility, establishing reliable supplier relationships, promoting information sharing, and implementing risk management strategies.

## **2.4 METHODOLOGICAL REVIEW**

Supply chain management (SCM) plays a crucial role in the success of organizations across various industries. As the field continues to evolve, it is essential to review the existing research methodologies, dominant methods, paradigm shifts, trends, and gaps in SCM. The research provided an analytical review of previous research on SCM, with a specific focus on data collection means at Pitbull Rugby Club in Harare.

In the realm of SCM research, several dominant research methods have been employed. One of the most prevalent methods is quantitative research, which involves the collection and analysis of numerical data. Authors such as Chopra and Meindl (2007) have extensively used quantitative methods to investigate various aspects of SCM, including inventory management, demand forecasting, and supplier selection. Quantitative research provides valuable insights into the relationships between variables and allows for statistical analysis, enabling researchers to draw objective conclusions.

Another dominant research method in SCM is qualitative research, which involves the collection and analysis of non-numerical data, such as interviews, observations, and case studies. Qualitative research allows for a deeper understanding of complex phenomena and provides rich, contextual insights. Authors like Christopher (2016) have utilized qualitative methods to explore supply chain risk management and the role of trust in SCM. By employing qualitative research, researchers can capture the nuances and complexities of real-world supply chain practices.

In recent years, there has been a paradigm shift in SCM research, moving towards a more holistic and interdisciplinary approach. Traditional SCM research focused primarily on the operational aspects of supply chains, such as inventory management and logistics. However, contemporary research has expanded to include strategic, environmental, and social dimensions of SCM. Seuring and Müller (2008) have emphasized the importance of sustainability and corporate social responsibility in supply chain practices. This paradigm shift reflects the growing recognition that SCM is not solely about efficiency and cost reduction but also about ethical and sustainable practices.

Furthermore, emerging trends in SCM research include the integration of technology, such as blockchain and artificial intelligence, to enhance supply chain visibility, traceability, and efficiency. Authors like Ivanov (2020) have explored the potential of blockchain technology in improving supply chain transparency and reducing fraud. These emerging trends highlight the need for Pitbull Rugby Club to consider incorporating technological advancements into their data collection means to stay competitive and efficient in their supply chain operations.

Despite the extensive research conducted in SCM, there are still notable gaps that need to be addressed. One significant gap is the limited research on supply chain management in the sports industry, particularly in rugby clubs. While SCM principles are applicable across industries, the unique characteristics of the sports industry, such as seasonality, player transfers, and fan engagement, require tailored research. Pitbull Rugby Club can benefit from filling this gap by conducting research specific to their industry, enabling them to optimize their supply chain operations and gain a competitive advantage.

Based on the review of previous research, Pitbull Rugby Club should consider employing a mixed-methods approach to data collection. This approach would involve combining quantitative methods, such as surveys and statistical analysis, with qualitative methods, such as interviews and observations. By utilizing both methods, the club can gather comprehensive and diverse data, enabling a deeper understanding of their supply chain dynamics. Additionally, Pitbull Rugby Club should explore the integration of technology into their data collection means. Implementing supply chain management software, such as enterprise resource planning (ERP) systems, can enhance data accuracy, real-time visibility, and decision-making capabilities. Furthermore, the club should consider leveraging emerging technologies like blockchain to improve supply chain transparency and traceability.

As businesses strive to optimize their operations, it is essential to understand the research methodologies employed in SCM studies. The research reviewed the literature on research methodologies used in SCM, citing authors, countries, focus, sample size and type, research approach, and methodology gaps.

Christopher (2005) explored the concept of supply chain integration in the United Kingdom. The study employed a qualitative research approach, focusing on interviews and case studies. However, a methodology gap exists as the research lacks quantitative analysis to support the findings. Future studies could benefit from incorporating quantitative methods to enhance the validity and generalizability of the results. Lee (1997) investigated the bullwhip effect in supply chains, a phenomenon characterized by demand amplification along the supply chain.

The study utilized a quantitative research approach, employing mathematical models and simulations. However, a methodology gap exists as the research has a limited focus on qualitative aspects. Future studies could consider incorporating qualitative methods, such as interviews or case studies, to gain a deeper understanding of the underlying causes and implications of the bullwhip effect.

Chopra and Meindl (2007) examined supply chain coordination strategies in the United States. The study employed a mixed methods research approach, combining qualitative and quantitative



methods. However, a methodology gap exists as the research has limited use of primary data collection methods. Future studies could benefit from incorporating primary data collection methods, such as surveys or interviews, to gather firsthand information from supply chain stakeholder

**Table 2.1** Methodological gaps, samples, and the geographical area.

<b>NO</b>	<b>AUTHORS</b>	<b>COUNTRY</b>	<b>FOCUS</b>	<b>RESEARCH APPROACH</b>	<b>METHODOLOGICAL GAP</b>
	Christopher	United Kingdom	Supply chain Integration	Qualitative	Lack of quantitative analysis to support findings
2	Lee, H.L.	United States	Bullwhip effect in supply chains	Quantitative	Limited focus on qualitativ aspects
3	Chopra, S. an Meindl, P	United States	Supply chain coordination	Mixed methods (Qualitative and Quantitative)	Limited use of primary dat collection methods
4	Mafini and Dlodlo	South Africa	Factors influencing supply chain	Surveys	Lack of quantitative analysis to support findings
5	Mhlanga	Zimbabwe	Supply chain challenges in agriculture	Interviews	Lack of quantitative analysis to support findings

6	Chikweche and Fletcher	Zimbabwe	Implementation of lean supply chain practices in the Zimbabwean automotive industry	Case study (interviews, observations, and document analysis)	Limited focus on qualitative aspects
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The studies reviewed the literature on research methodologies used in supply chain management studies. The authors' focus, countries, sample sizes and types, research approaches, and methodology gaps were discussed. Previous studies on supply chain management have employed a range of research instruments to gather data and analyze supply chain practices. These instruments include surveys, interviews, case studies, and simulations. Each instrument offers unique advantages and limitations, and their applicability to the Zimbabwean context will be explored.

Surveys have been widely used in supply chain research due to their ability to collect large amounts of data from a diverse range of respondents. For instance, in a study by Li et al. (2019), a survey was conducted to assess the impact of supply chain integration on firm performance in China. The survey instrument consisted of Likert-scale questions, allowing respondents to rate their agreement with various statements. Similarly, a survey-based study by Mafini and Dlodlo (2018) investigated the factors influencing supply chain performance in South Africa. The authors utilized a structured questionnaire to collect data from supply chain professionals. Surveys can be easily adapted to the Zimbabwean context, enabling researchers to gather valuable insights from supply chain practitioners in the country.

Interviews have also been employed in supply chain research to gain an in-depth understanding and explore complex issues. For example, in a study by Mhlanga et al. (2017), interviews were conducted with key stakeholders in the Zimbabwean agricultural supply chain to identify challenges and opportunities. The authors utilized semi-structured interviews to gather qualitative

data, allowing participants to provide detailed responses. Interviews can be a valuable research instrument in Zimbabwe, enabling researchers to explore the unique challenges faced by the country's supply chain and identify potential solutions.

Case studies have been widely used to investigate specific supply chain practices and their impact on performance. For instance, a case study by Chikweche and Fletcher (2012) examined the implementation of lean supply chain practices in the Zimbabwean automotive industry. The authors collected data through interviews, observations, and document analysis. Case studies provide a comprehensive understanding of real-world supply chain scenarios and can be adapted to the Zimbabwean context to explore specific industries or organizations.

Simulations have emerged as a powerful research instrument to model and analyze complex supply chain systems. These simulations allow researchers to test different scenarios and evaluate the impact of various factors on supply chain performance. For instance, a simulation-based study by Chikweche et al. (2014) investigated the impact of supply chain disruptions on the performance of the Zimbabwean textile industry. The authors developed a simulation model to assess the resilience of the supply chain under different disruption scenarios. Simulations can be utilized in Zimbabwe to assess the robustness of the supply chain and identify strategies to mitigate disruptions.

These instruments offer valuable insights into supply chain practices and performance. In the Zimbabwean context, these research instruments can be adapted to gain a comprehensive understanding of the challenges and opportunities faced by the country's supply chain. By utilizing appropriate research instruments, researchers can contribute to the improvement of supply chain management in Zimbabwe, ultimately enhancing the overall competitiveness of businesses in the country. Therefore, the study on Pitbull Rugby Club focuses on incorporating primary data collection methods, such as surveys, interviews, and the use of both qualitative and quantitative data to address these methodology gaps and enhance the validity and generalizability of findings.

## **2.5 THEMATIC REVIEW**

Supply chain management (SCM) plays a crucial role in enhancing operational efficiency and competitiveness in various industries, including sports clubs. The study aims to provide an analytical review of the existing literature on SCM principles and their application to optimize operations at Pitbull Rugby Club in Harare. By identifying repeated key themes, organizing them into subsections, and analyzing major scholars' views, this review will explore the similarities and differences in their perspectives. Furthermore, this essay will demonstrate how the literature provides answers to the study, citing relevant authors and references.

One key theme in the literature is the significance of supply chain integration. Scholars such as Chopra and Meindl (2007) argue that effective integration of supply chain activities leads to improved coordination, reduced costs, and enhanced customer satisfaction. This integration involves collaboration with suppliers, distributors, and other stakeholders to streamline processes and ensure timely delivery of goods and services.

Another crucial aspect of SCM is inventory management and demand forecasting. Authors like Simchi-Levi et al. (2008) emphasize the importance of accurate demand forecasting to optimize inventory levels, minimize stockouts, and reduce holding costs. By implementing advanced forecasting techniques and adopting just-in-time (JIT) inventory practices, Pitbull Rugby Club can ensure efficient resource allocation and minimize wastage.

The literature also highlights the significance of effective supplier relationship management (SRM). Scholars such as Monczka et al. (2015) argue that building strong relationships with suppliers can lead to improved quality, reduced lead times, and cost savings. By establishing long-term partnerships, Pitbull Rugby Club can benefit from a reliable and timely supply of equipment, merchandise, and other resources.

The use of technology and information sharing is another key theme in SCM literature. Authors like Christopher (2016) emphasize the role of technology in enhancing visibility, traceability, and communication across the supply chain. By implementing appropriate software systems, Pitbull Rugby Club can improve inventory tracking, order processing, and customer relationship management.

In recent years, sustainability and ethical practices have gained significant attention in SCM literature. Scholars such as Carter and Rogers (2008) argue that adopting sustainable practices, such as reducing carbon emissions and promoting fair labor practices, can enhance brand reputation and attract environmentally conscious customers. Pitbull Rugby Club can incorporate sustainable sourcing, packaging, and waste management practices to align with global sustainability goals.

This thematic literature review has explored key principles of supply chain management and their relevance to optimizing operations at Pitbull Rugby Club in Harare. The integration of supply chain activities, effective inventory management, supplier relationship management, technology adoption, and sustainability practices emerged as repeated themes in the literature. By implementing these principles, Pitbull Rugby Club can enhance operational efficiency, reduce costs, and improve customer satisfaction. The academic literature provides valuable insights and practical solutions to guide the club's SCM strategy, ensuring its long-term success in the competitive sports industry.

## **2.6 CONCLUSION**

The study conducted at Pitbull Rugby Club revealed several key findings that can significantly improve the club's operations. Firstly, it was observed that the club faced challenges in managing its inventory effectively. This led to issues such as stockouts, excess inventory, and increased costs. Secondly, the club lacked a streamlined procurement process, resulting in delays and inefficiencies. Lastly, the study identified a lack of coordination and communication among various stakeholders, including suppliers, players, coaches, and management.

The significance of this study lies in its potential to address the identified gaps and optimize operations at Pitbull Rugby Club. By implementing SCM principles, the club can enhance its overall performance, reduce costs, and improve customer satisfaction. Additionally, this research

can serve as a valuable reference for other sports organizations facing similar challenges, providing them with insights into effective SCM practices.

The existing literature on SCM in the sports industry is limited, with a particular dearth of studies focusing on rugby clubs in Zimbabwe. While some research has been conducted on SCM in other sports sectors, such as football and basketball, the unique characteristics and requirements of rugby clubs have not been adequately explored. This gap in the literature highlights the need for a study specifically targeting rugby clubs, such as Pitbull Rugby Club in Harare.

The study at Pitbull Rugby Club is justified by the need to fill the identified gap in the literature. By examining the application of SCM principles in a rugby club context, this research aims to contribute to the existing body of knowledge in the field of sports management. The findings of this study can provide valuable insights for rugby clubs in Zimbabwe and beyond, enabling them to optimize their operations and achieve sustainable success.

This study adds to the existing body of knowledge in the field of SCM by focusing on its application in the sports industry, specifically rugby clubs. By exploring the challenges faced by Pitbull Rugby Club and proposing effective SCM strategies, this research contributes to the understanding of how SCM principles can be tailored to suit the unique requirements of sports organizations. The findings of this study can serve as a foundation for future research in the field, encouraging further exploration of SCM practices in the sports industry.

## **2.7 CHAPTER SUMMARY**

This chapter serves as a foundation for the subsequent chapters, providing a clear understanding of the research topic and the approach taken to investigate it. It provides a comprehensive overview of the conceptualization, theoretical framework, methodological review, and thematic review. It ensures that the research is grounded in theory and conducted using appropriate methods. The next chapter will build upon this foundation by presenting the research methodology criteria in depth.

## **CHAPTER 3 METHODOLOGY**

### **3.1 INTRODUCTION**

This chapter presents a clear grasp of the study methodology, including the research design, participants, data-gathering procedures, and data analysis approaches. Additionally, the chapter presented how the validity and reliability of the study findings are reached.

### **3.2 RESEARCH PURPOSE**

The study explored the trends and patterns that could optimize sustainable innovations in supply chain management principles. This fits well with observations from Saunders et al. (2023), who claimed that exploratory studies are particularly useful when the topic is not well-known or has not been looked into extensively. In the context of using supply principles chain management to optimize operations at Pitbull RFC exploratory study design, involved gathering information and data through engaging in interviews and focus groups. Once the data has been collected, the researcher analyzed it to identify emerging patterns and trends. Using supply chain management principles tailored for the entity operations context made this research interventional (Saunders et al. 2023). Consequently, based on these drivers, this research ultimately developed a set of possible supply chain management principles tailored for the entity operations in the sports industry.

### **3.3 RESEARCH PARADIGM**

The research developed actionable recommendations that address the specific challenges and opportunities to achieve tangible improvements for the sports industry as far as supply chain management operations are concerned. As a result, the pragmatism paradigm works in line with the goals of this research. In support of this narrative, Doldor et al. (2017); Saunders et al. (2023); and Tobi and Kampen (2018) argue that pragmatism is the most appropriate since it offers the advantage of utilizing many techniques and paradigms while emphasizing common meanings and achieving coordinated action. In the context of Interpretivism, the focus would shift to exploring social phenomena; the subjective experiences and perspectives of individuals within the Pitbull Rugby Football Club supply chain. This approach involved collecting qualitative data through

interviews and focus groups, to gain a deeper understanding of the operational challenges being faced by Pitbull RFC. The goal was to develop a deeper understanding of the integration of supply chain, technology adoption, sustainability, and ethical consideration. Saunders et al. (2023) claimed that combining the insights gained from both paradigms is influenced by the need to compensate for the deficiencies caused by the subjective nature of interpretivism by providing the study with the scientific margin associated with the objective nature of positivist research. Therefore, the research developed a more comprehensive framework of supply chain management principles to be effective in optimizing operations at Pitbull Rugby Football Club in Harare, Zimbabwe.

### **3.4 APPROACHES TO THEORY DEVELOPMENT**

The abductive approach to theory development applied in this study was informed by Saunders et al. (2023) who highlighted that it is the reasoning that involves competing information in one context but far less in the context in which one is researching may lend itself to an abductive approach. The abductive approach combines deductive and inductive reasoning. In the context of this research deductive reasoning could involve using existing theories and principles of supply chain management to formulate an initial hypothesis in regards to the optimizing of operations at Pitbull Rugby Football Club. Inductive reasoning would then be used to draw conclusions and develop new insights based on the specific data evidence collected by Pitbull Rugby Football Club in Harare, Zimbabwe.

### **3.5 TIME HORIZONS**

The study adopted a cross-sectional design. This strategy is used to capture a snapshot of the current supply chain operational principles at Pitbull Rugby Club in Harare. Cross-sectional studies were chosen because they are appropriate for projects completed for academic courses with limited time and resources. The cross-sectional strategy is backed by Collis and Hussey (2014), who point out that it makes excellent use of a small sample and has the apparent appeal of allowing a result to be reached with a relatively modest expenditure of time, money, and other research resources. Participants in this study were recruited from a population with the capacity to provide



pertinent data to employ the cross-sectional methodology. After selecting the sample, the researcher collected the information and assess the connections between innovation and strategies. This cross-sectional research has also been preferred since it is used to collect preliminary data to plan an advanced investigation in the future. The study was conducted over a period of six months to ensure sufficient data collection, analysis, and implementation of SCM principles. This timeframe allows for a comprehensive understanding of the current operations at Pitbull Rugby Football Club and the subsequent evaluation of the impact of SCM principles on performance. The research was conducted in two phases: the first three months focused on data collection and analysis, while the remaining three months were dedicated to implementing and evaluating the SCM strategies.

### **3.6 PRIMARY RESEARCH STRATEGY**

The concurrent primary research methodology was used in this study. The study applied the qualitative technique strand throughout the research process, retaining the strands' independence during analysis and merging the results for overall interpretation (Plano Clark and Cresswell 2014; Cresswell, 2011). The researcher conducted interviews base on research questions with different stakeholders at Pitbull Rugby Football Club, including coaches, athletes, sports administrators, sports marketers, and sponsors. By asking open-ended and targeted questions, the researcher identified common themes and patterns related to supply chain management principles and operational challenges within the industry. These themes were used to validate data.

### **3.7 CHOOSING RESEARCH PARTICIPANTS**

#### **3.7.1. Population**

The population consisted of the officials from the Harare Rugby Board, Pitbull rugby management, the media, and sponsors in addition to athletes, fans, and officials at the club. In light of organizational complexities and research time constraints, it is not possible to conduct a census and establish the number of people. Nevertheless, a sample will be established in which the data

will be collected. To choose research participants from the qualitative and quantitative strands, the researcher will employ both purposive and stratified random selection techniques.

### **3.7.2 Sampling Procedure**

The stratified purposive sampling strategy was used in the first part to select study organization participants. The strata were the Harare Rugby Board, the media, sponsors, athletes, fans, and officials from the club. To select the participants, the researcher used theoretical sampling methods in the qualitative strand (REF). This technique involved the purposeful selection (REF) of participants based on their relevance to the research questions and the emergence of the key themes or patterns during data analysis. More importantly, this technique has an advantage in that it will target individuals who hold decision-making positions or have direct involvement in strategic planning for the Pitbull RFC. As the interview progressed, the researcher anticipated in continued theoretical sampling methods to identify new participants that provided new insights or challenge emerging theories. The process ended only when there are no new insights being introduced.

### **3.7.3 Sample Size Determinant**

The researcher used snowball sampling is a useful technique for studying hard-to-reach populations, such as stakeholders in a sports organization, (Babbie 2016), By using this method, the researcher managed to access individuals who may not be easily identified through traditional sampling methods. In addition to snowball sampling, another method that was used to select participants is random sampling. This involves selecting stakeholders at random from the population frame of 40 respondents. This method ensures that each stakeholder has an equal chance of being selected, which helps to reduce bias in the sample. According to Creswell (2014), random sampling is a reliable method for selecting participants in research studies. The researcher managed to ensure that the sample is representative of the population and that the results can be generalized to the larger group of stakeholders.

## **3.8 DATA COLLECTION PROCEDURES**

This research designed the research interview guide and survey guide which gathered relevant data related to supply chain management principles and supply chain operational changes at Pitbull RFC. The researcher conducted a pilot test with a small group of participants to ensure the clarity and comprehensibility of the questions. Accordingly, the pilot test helped in revising the guides. In the context of interview guides, they included a set of predefined open-ended questions related to study objectives. The guide served as a framework for the interview but allowed flexibility for follow-up questions based on the participant's responses. The researcher arranged face-to-face or virtual interviews with key informants. Beginning by establishing rapport, explaining the purpose of the study, and obtaining informed consent. The researcher ensured a comfortable and conducive environment for sharing insights and experiences. With the permission of the participants, the researcher transcribed the verbatim for later use.

Another data collection method that was used by the researcher was the focus group discussion. The researcher gathered two groups of participants, the first one consisting of athletes and coaches and the second one consisting of six members of the management team. Focus group discussions were important to this study because they helped validate the data from key informant interviews and gave detailed information about the ongoing contestations in a shift from traditional supply chain management to scientific supply chain management principles (Adam, 2014).

### **3.9 DATA ANALYSIS AND PRESENTATION PROCEDURES**

Once data is transcribed and recorded, the data was analyzed using Nvivo. In the qualitative strand, the researcher analyzed transcribed data by identifying themes, patterns, and trends. According to Dallas et al. (2017) NVivo version 24 is appropriate for analyzing qualitative data and the process will be as follows:

In the first stage, relevant qualitative data is imported into NVivo. The second stage involved coding and categorization, during which the researcher created codes that represent meaningful concepts or themes related to SCM principles, using NVivo. These codes can be derived from the research questions or identified during the data analysis process. In the third stage, nodes were

created in NVivo and organized the codes into categories or themes. Nodes allowed for grouping related codes under specific topics to aid in data analysis and exploration.

**Stage 4:** Data analyzed at this stage which also coincides with text search and retrieval. The researcher utilized NVivo's search function to locate specific information or patterns within the data. This helped to identify connections and relationships between different codes and nodes. Furthermore, the researcher generated coding queries in NVivo to explore relationships between codes and nodes. This allowed for a deeper analysis of the data and can reveal patterns or trends.

**Stage 5:** This stage involved visualization tools such as word clouds, charts, and diagrams that can help to visualize and summarize the data. These visuals aided in understanding and presenting both qualitative and quantitative data.

### **3.10 TRUSTWORTHINESS ISSUES**

A pilot test was conducted before the actual research study to evaluate and refined the research instruments and procedures. In this test, a small group of participants was selected to complete the study. The purpose was to identify any potential issues or problems with the research design or measurement tools, such as questionnaires or surveys. Feedback from the pilot test helped study make necessary improvements before proceeding with the actual study.

The test-retest reliability was used to measure the consistency of the interview guide. It involved administering the same test to the same group of participants on two separate occasions. The scores from both administrations were then compared to determine the reliability of the test. If the test produced consistent results over time, it is considered to have high test-retest reliability.

The Cronbach's alpha test, also known as internal consistency reliability, was a statistical measure that assesses the reliability of a questionnaire as well. It was calculated to evaluate how closely related a set of items or questions on a scale are to one another. The closer the items are related, the higher the internal consistency reliability. Cronbach's alpha values ranges from 0 to 1, with higher values indicating greater internal consistency.

### **3.11 ETHICAL CONSIDERATIONS**

When conducting this research several ethical considerations were taken into account. These considerations include:

**1. Consistency with Cultural Norms:** This involved respecting and adhering to the cultural norms, values, and sensitivities of the Zimbabwean context. In particular, the researcher sought a letter of research approval from the Bindura University of Science and a research ethics committee from the Ministry of Higher Education. The researcher communicated the purpose, methodology, and findings of the research to the participants, relevant stakeholders, and the wider public, when appropriate.

**2. Informed Consent:** this research ensured that participants were fully informed about the research objectives, procedures, and potential risks before participating. This meant the researcher obtained their voluntary and informed consent to participate in the study.

**3. Confidentiality:** This researcher protected the privacy of participants by ensuring that any personal or sensitive information collected during the research is kept confidential and used only for research purposes. This also includes safeguarding the data collected to prevent unauthorized access or disclosure.

**4. Privacy:** This research respected the privacy rights of individuals and organizations involved in the research. This also includes obtaining permission for any direct quotes, images, or personal details used in publications or presentations, while ensuring anonymity if required.

**5. Data Integrity:** The research maintained the integrity and accuracy of research data by collecting, recording, and analyzing it diligently and honestly. The research avoided any fabrication or manipulation of data to make it conform to desired outcomes.

**6. Minimize Harm:** This researcher considered minimizing any potential physical, psychological, or social harm to participants during the research process. The researcher ensured that the research design and procedures prioritize the safety and well-being of participants. More so, the research w shunned favoritism or discrimination based on gender, race, religion, or any other characteristic.

### **3.12 Chapter Summary**

The research chapter provided an overview of the research methodology used in the study. It includes a description of the research design, data collection methods, data analysis techniques,

and the sample population used in the study. The study discussed the advantages and limitations of the chosen methodology and the steps taken to ensure the validity and reliability of the results

**CHAPTER 4: DATA INTERPRETATION**

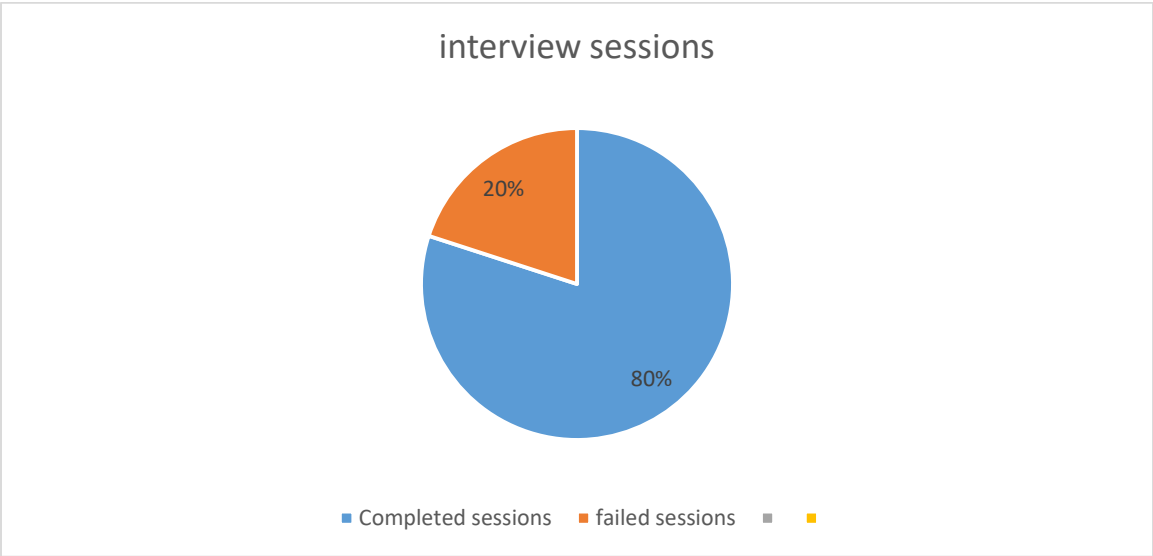
**4.1 INTRODUCTION**

In this chapter, the research presented and analyzed the data that have been collected through interviews and focus group discussions. The data presented aligns with the main objectives of this study, which were to assess the current supply chain management principles at Pitbull Rugby Football Club, identify areas of improvement within the club's supply chain management, and evaluate the impact of SCM principles implementation on cost reduction, customer satisfaction, and overall performance at Pitbull Rugby Football Club. The data was presented using headings and subheadings that were crafted based on the main thematic issues that arose during data collection. Tables, bar graphs, and pie charts were used in the presentation and analysis of data and in comparing the findings to the literature.

**4.2 RESPONSE RATE**

The Figure 4.1 illustrated the outcome on the interview sessions conducted, 80% respondents turned up for the sessions while 20% failed due to various commitments.

**Figure 4.1: Planned interview sessions**



**Table 4.1: Response Rate formula**

The table 4.1 illustrated how the response rate is calculated for instance the RR for the study becomes 100%.

number of usable interviews	X (100)
Total sample) – (uncontestable members)	

$$= \left( \frac{24}{30-6} \right) \times 100 = 100\%$$

### **4.3 DEMOGRAPHIC DATA**

The data sample presents a group of athletes who are attached to Churchill Boys High and Lomagundi High School. Two coaches are only attached to the club senior and assistant coach as volunteers. The club management comprised of four administrators, two media team members, two medics, two suppliers and more than four hundred and fifty-two fans that are based in Harare and outside the town.

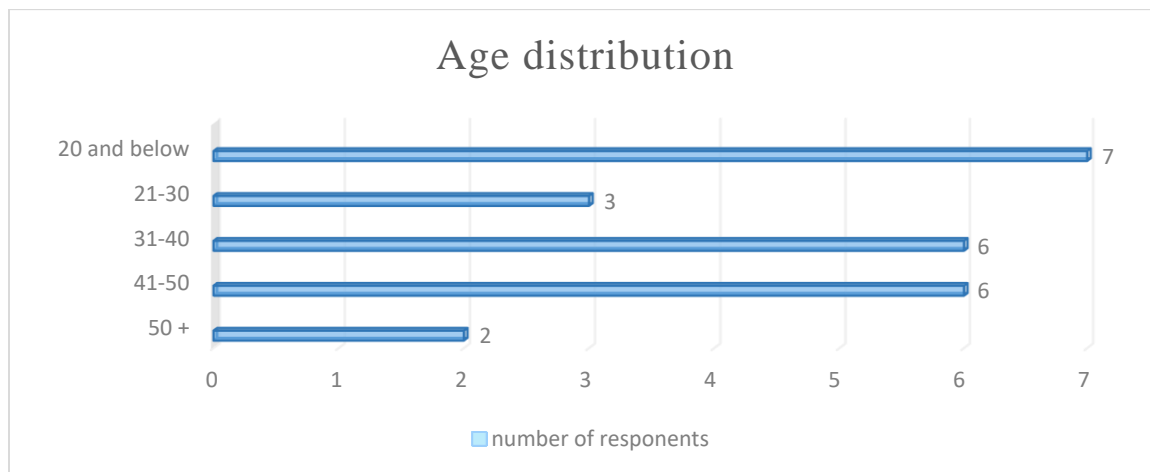
In terms of economic activities, most of the people who participated in this survey (10 out of 24 making it 41.6%) are athletes in High School. Very few people who reside and work with the club in the sampled area are business persons or civil servants. This scenario clearly explains the situation in the study area in which the majority of the people are volunteers for the club's operations and depend on their source of livelihood. In terms of gender distribution, this sample was dominated by male stakeholders. Sixty-two percent of the people who participated in this survey were males while females constituted thirty-eight percent.

The largest number of people who constituted the sample was mainly the athletes who were below the age of twenty in this sample. There were only three respondents of stakeholder with the age 21-30 years. The middle aged groups of 31-40 years were only six. The largest number of people who constituted the sample was mainly the athletes of nineteen years and below in this sample. There were only six



stakeholders between the ages of 41-50 in the sample. Lastly we have two other respondents who were in the category of over 50 years of age.

**Figure 4.2: Age distribution of the sample**



#### **4.4 PRESENTATION AND ANALYSIS OF DATA LINKED TO THE RESEARCH OBJECTIVES.**

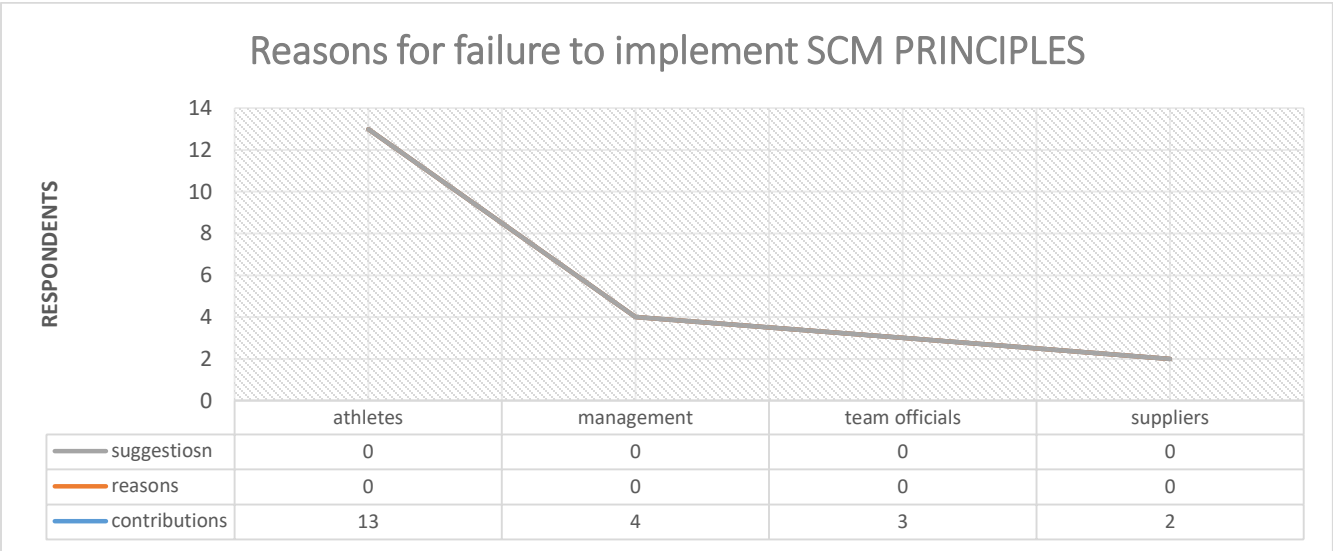
##### **4.4.1 The current supply chain management practices at Pitbull Rugby Football Club.**

One of the objectives of the study was to evaluate the current supply chain management practices at Pitbull Rugby Football Club. The data was gathered through interview sessions and focus group discussions. The researcher discovered that the Pitbull Rugby football Club mainly depend on traditional supply chain management principles as a startup club. Due, to its dependability on volunteerism, the club find it hard to climb up the ladder and adopt better scientific supply chain management principles. The club was founded by the former students at Churchill Boys High and it was attached to the institute where the former old boys (Pitbull Club) would provide training programs to the school rugby team, in exchange the school would provide the facilities and its management. As a result of the above factors the club is operating more informally than what is required to a promising club with such talented

athletes. This is evidenced by a number of specific challenges or obstacles encountered within the club’s operations as shared by respondents:

4.4.2: Reasons for failure to implement scientific supply chain management principles

Figure 4.3: Reasons for failure to implement SCM principles.



The Figure 4.3 cited why sport start up clubs often fail to implement scientific supply chain management methods as acknowledged by the informants. First, these clubs often have limited resources and may not have the expertise or knowledge necessary to implement these methods. Second, the club's leadership may not prioritize supply chain management or understand its importance. Third, the club may not have the infrastructure or systems in place to support the implementation of these methods. Finally, the club may not have the financial resources to invest in implementing these methods.

4.4.3 Specific challenges within the Pitbull RFC Supply chain practice

However, the informants guide on a number of suggestive ways to curb such challenges as indicated in Figure 4.4 which includes: to conduct a thorough assessment of the club's current supply chain

management practices and identify areas for improvement. The next step is to develop a plan for implementing the scientific supply chain management methods. This plan should include a timeline, budget, and resources needed to implement the methods. Once the plan is developed, the club should begin to implement the methods one step at a time. It's important to measure progress and make adjustments as needed. Finally, the club should regularly review and update the plan to ensure it remains effective.



**Figure 4.5: Stakeholder Perception on familiarization with the concept of SCM**

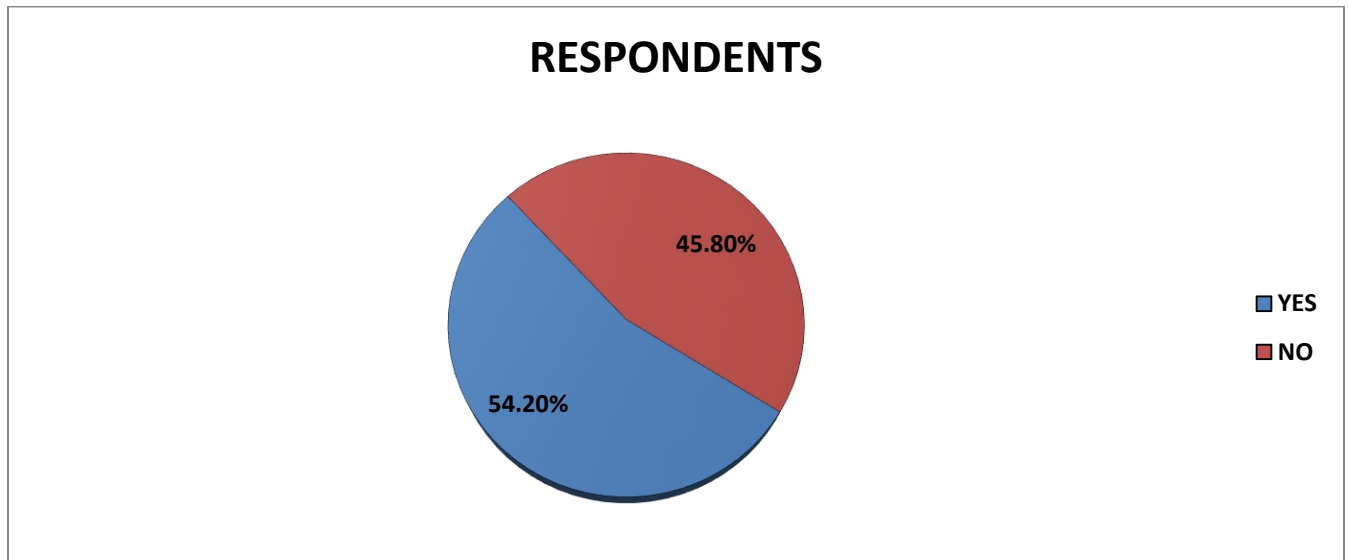
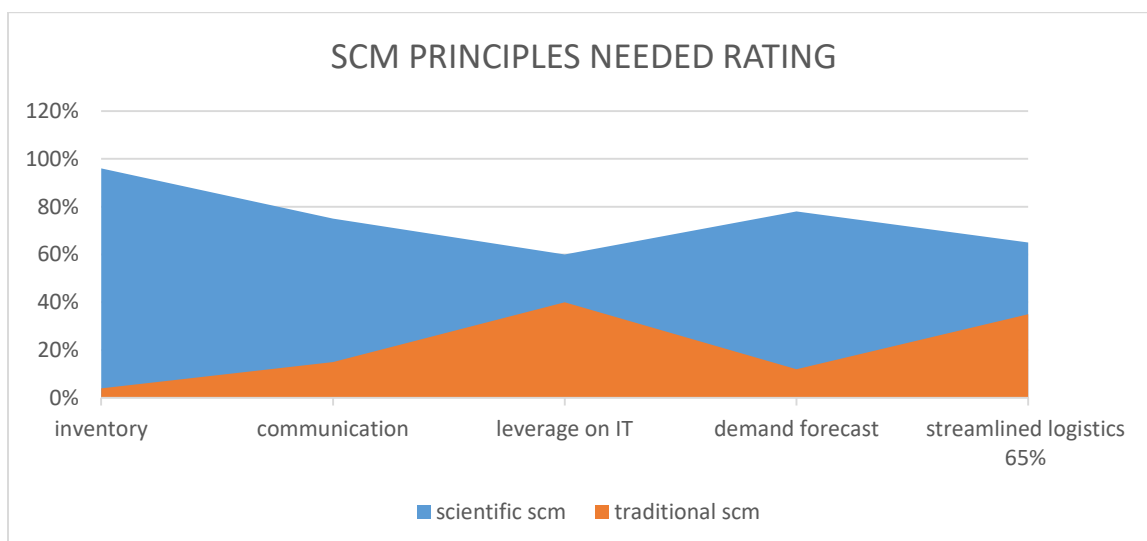


Figure 4.5, illustrate that in terms of the knowledge and familiarization with concept of SCM, 54.2% of the stakeholder have average knowledge of SCM principles while 45.8% find it hard to understand the concept. Their participation and engagement by Pitbull Rugby Football Club activities did not confirm aspect of SCM to them.

#### **4.4.5 Areas of improvement within the club's supply chain management principles.**

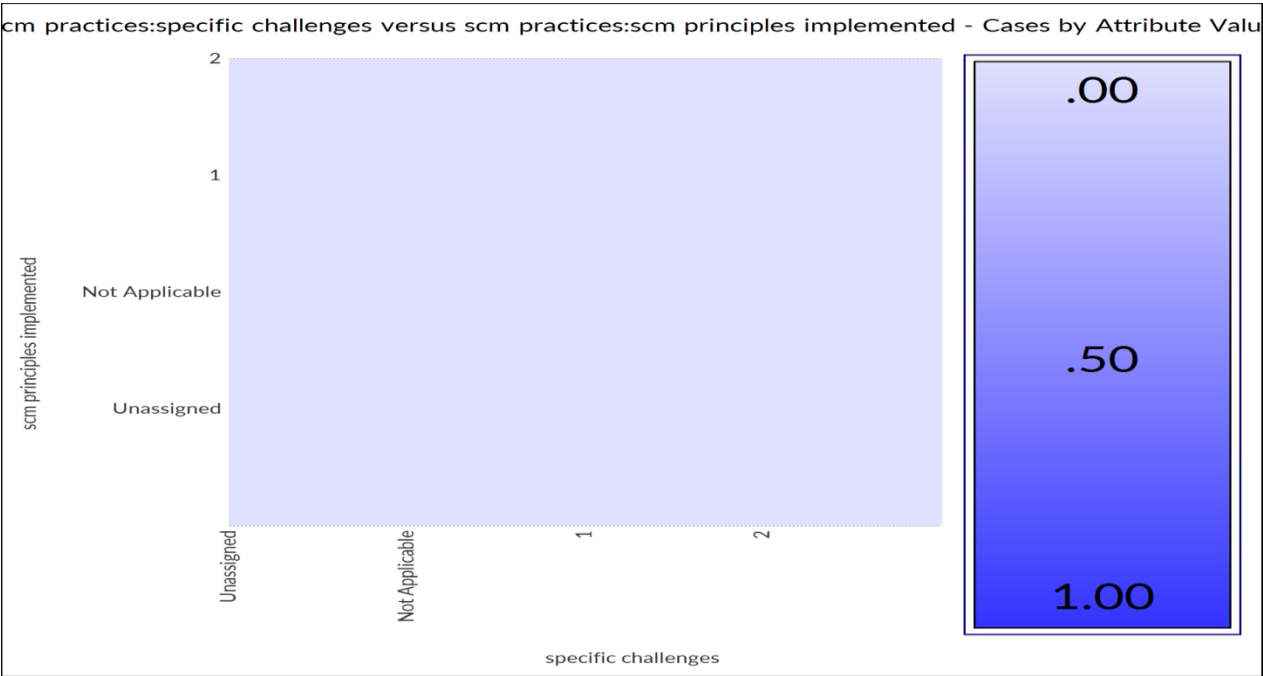
**Figure 4.6: Areas of improvement within the club's SCM principles**



One of the objectives of the study was to identify areas of improvement within the club's supply chain management principles. The data was gathered through key informant interviews and focus group discussions. The researcher discovered that the need to shift from traditional supply chain management principles to scientific ones is the way to go in this twentieth century, whereby 96% of the respondents were pointing that the club should adopt the scientific SCM principles such as; leveraging on technology tools such data analytics for training and performance trackers for training, streamlined logistics and transport, inventory management and demand forecasting as illustrated in Figure 4.6. The informants suggest that the club should have the SCM principles be enacted into club strategic plan and formalize the activities. Formal contracts with suppliers should be observed

#### 4.4.6 Specific challenges versus SCM practice at Pitbulls RFC

**Figure 4.7: Specific challenges versus SCM practice at Pitbulls RFC**



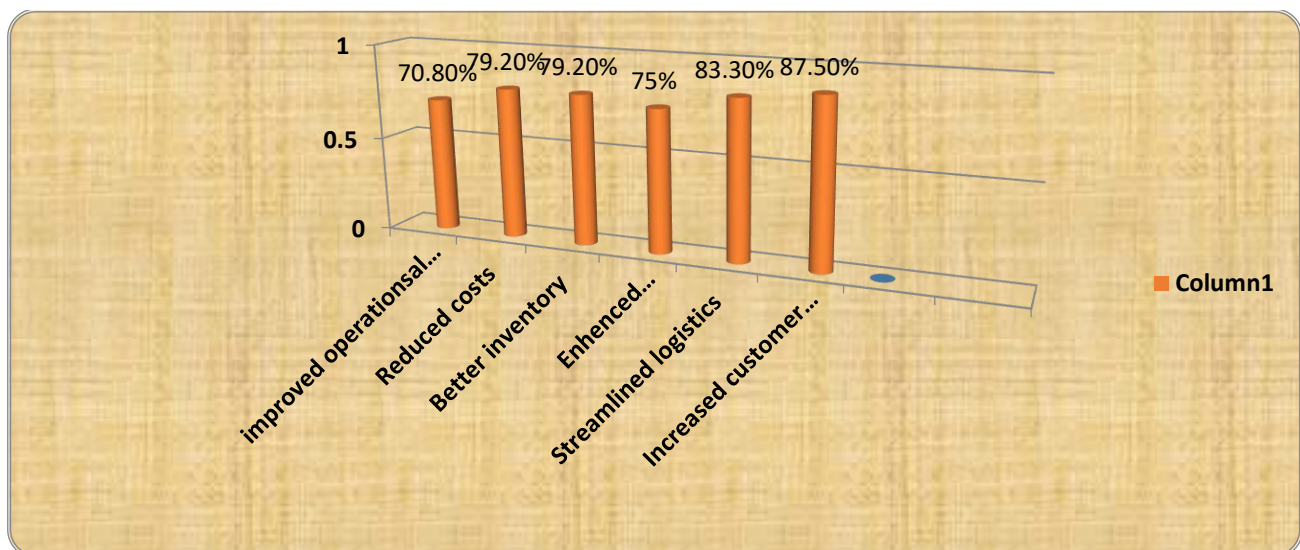
As indicated in Figure 4.7, on specific challenges against SCM principles implemented, it is evident that there was a significant lack of understanding and expertise in managing the flow of goods and services. The challenges faced as eluded by the respondents attributed to a lack of proper planning, coordination and communication within the team responsible for logistics.

In order to address these challenges respondents have recommended a supply chain mapping out from sourcing of the raw materials (athletes, kits and equipment) to delivering the final product which is the game/service to the customers. The informants suggest the idea to implement automated tools and technologies. This allows the entity to optimize supply chain processes such as inventory management systems, demand forecasting tools and supplier relations management platforms. Another aspect is to establish strong supplier relationship which will ensure reliable and high quality sources of materials and services. Informants suggest that supplier scorecards should be used to measure and drive continuous improvement. Respondents guide that the lean principles should be used to eliminate waste and to embrace data driven decision making. Also the club was guided to invest in employee training and development.

By adopting these principles and strategies informants suggest that, start-up clubs can enhance their supply chain operations, reduce costs, improve efficiency and ultimately achieve sustained success in their business endeavors.

#### 4.4.7 The impact of SCM Implementation on cost reduction, customer satisfaction, and overall performance at Pitbull Rugby Football Club.

**Figure 4.8: IMPACT OF SCM**



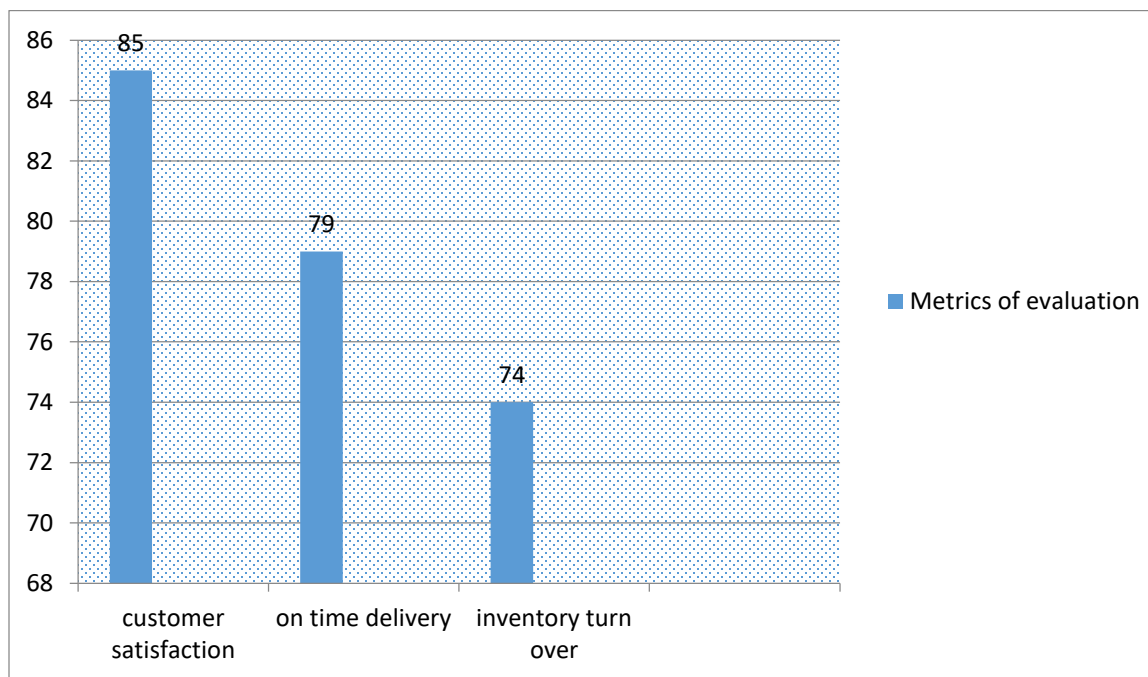
As illustrated from Figure 4.8, the implementation of SCM at the Pitbull Rugby Football Club has had a significant impact from various aspects on its operations. The most notable impact has been on costs reduction, with 79.2% decrease in overall costs. This reduction in costs according to informants can be

attributed to better inventory management, streamlined processes, and improved supplier relationships, all of which contribute to lower operating expenses for the club.

In addition to cost reduction, the implementation of SCM has also led to an increase in customer satisfaction, with a satisfaction rate of 87.5%. Thus according to respondents interviewed, the high level of customer satisfaction can be attributed to improved product availability, faster delivery times, and overall better service quality. Satisfied customers are more likely to return to the club for future purchases and recommend it to others, leading to increased revenue and growth.

#### 4.4.8 Use of tracking tools on management and evaluation

**Figure 4.9 Tracking tools on management and evaluation**

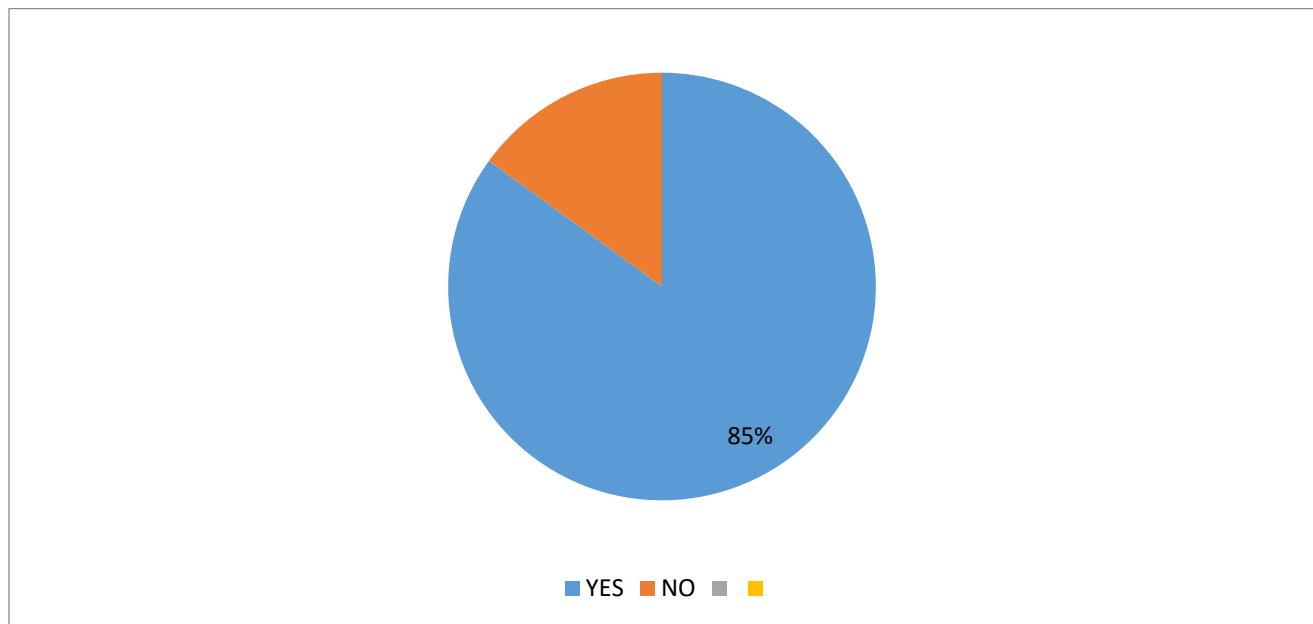


The data collected in Figure 4.9 reflects a set of suggestive metrics to track the impact of the changes in a rugby club. These metrics for evaluating supply chain management include on time delivery, inventory turnover and customer satisfaction. The informants ranked the metrics as: On-time delivery 79%, inventory turnover 74%, and customer satisfaction 85%. These are important metrics for measuring efficiency, while customer satisfaction is a key indicator of success.

Overall, the impact of SCM implementation on the club's performance has been overwhelmingly positive. The combination of cost reduction and increased customer satisfaction has resulted in improved operational efficiency, higher revenue, and ultimately, enhanced overall performance. The club is now better positioned to compete in the market, meet customer needs, and achieve long-term success.

#### **4.4.9 A framework for implementing scientific supply chain management principles at Pitbull Rugby Football Club**

Throughout the interview sessions conducted, stockholders acknowledged the gap and the need for change. The informants shared the notion as hinted in Figure 4.10



The data collected from the Pitbull Rugby Football Club through focus group discussions and interview sessions as illustrated in Figure 4.10 pointed that 90% of the stakeholders agreed to adopt while 10%vof the interviewed population disagreed. In this regard the club is set to adopt framework on scientific supply chain management principles needed to propel it to the next level.



## **4.5 CHAPTER SUMMARY**

This chapter has dealt with presentation and analysis of the results of the study. The chapter has outlined the demographic and economic characteristics as well as the settlement history of the survey respondents. It has come out from the study that the majority of the people who responded to the survey are males and mainly athletes who are twenty years and below. On the economic side, all stakeholders are not attached much to club but act mainly as volunteers. This first section has also presented the main current challenges faced by Pitbull Rugby Football Club and current supply chain practices being carried out. Another part explored in this section has to do with areas of improvement seen from the existing supply chain practices. The last part of this section touched on discussion of findings which is basically an interpretation of the results in relation to the research problem, research objectives and in relation to the literature on the study.

## **CHAPTER 5: DISCUSSION**

### **5.1 INTRODUCTION**

This chapter discusses findings and presents a summary of the research findings the new insights emerging from the study and the limitations of the study. It discusses the meanings and significance of the key themes. The research establishes the connections between the patterns that emerge from research data and research questions. It delves into the findings and provides answers to research questions. The study looks into the findings against existing theories and corroborates existing literature as well as bridging gaps in literature. Lastly, the chapter highlights the importance of the findings of the research in terms of bridging gaps in literature and practice of supply chain management principles to optimize operations at Pitbull Rugby Football Club.

### **5.2 DISCUSSIONS**

The problem stated that The Pitbull Rugby Football Club (PRF) in Harare, Zimbabwe, faces several operational challenges which include inefficient inventory management, lack of coordination between suppliers and the club, and inadequate distribution processes. This is against a backdrop of many sports clubs in Zimbabwe facing severe problems in adopting better scientific supply chain management principles to keep abreast with the demand to fulfill the clubs' objectives, vision, and competition from rivals in the sports industry. This is a global problem in most start-up sports clubs but is rare in African countries which find it difficult to formalize their operations. Pitbull Rugby Football Club was used as a case study.

The first objective of the study was to evaluate current supply chain management practices by the Pitbull Rugby Football Club (PRFC). The research has noted that the club is in the startup category where traditional supply chain management principles are more often used. In addition to this, the lack of effective communication and coordination in the planning and implementation of operations to run the club hurts the results. Equating to normal supply chain management principles, such clubs often show symptoms of having limited resources and do not have the expertise or knowledge necessary to implement these methods (Li and Li, 2021). Second, the club's

leadership does not prioritize supply chain management or understand its importance. Third, the club does not have the infrastructure or systems in place to support the implementation of these methods. Finally, the club does not have the financial resources to invest in implementing these methods.

The research noted another emanating theme from PRF club supply chain practice as pillars of its setbacks which are lack of intensive training on supply chain management, lack of girl athlete's inventory, and poor transport logistics. Many informants identified the lack of intensive training on supply chain management as a challenge for many organizations, especially start-ups. Without the proper training, it can be difficult to fully utilize the features and capabilities of the inventory management system, (Christopher, 2016).

The study saw the lack of girl athlete's inventory as a challenge to the Pitbulls RFC. This is a particularly relevant issue in the sports industry, as many female athletes have difficulty in finding the right gear and equipment. This can have a major impact on the performance of the athletes and the overall success of the team. The informants guided that when the clubs especially in rugby teams' clubs are associated with major Boys High Schools. The research noted that the PRF club should highlight the importance of working with female athletes to its stakeholders and create an inventory that meets their specific needs.

Another common challenge for organizations, especially those in the sports industry as hinted by the informants has to do with poor transport logistics. Poor transport logistics can lead to delays, increased costs, and unhappy customers, (Christopher,2016) The respondents have noted the following emanating challenges which are the transportation of athletes to the competition venue and training session, due to dependence on volunteer transporters

The second objective was to review areas of improvement within the club's Supply chain management principles. The informants suggested that the challenge with PRF has to do with formalizing and structuring the club's supply chain management practices so that it can be more efficient and effective. This will require developing new processes and procedures, as well as training staff on the new scientific principles. The research took note of the lack of resources which

makes it difficult to invest in professional transportation or other solutions that would improve the efficiency of the supply chain. However, the research noted some creative solutions that could be implemented without a major investment. For instance, a club can develop partnerships with local businesses or organizations that could provide transportation assistance, (Lee, 1997).

The research identified the top three goals for the supply chain management principle; demand forecasting, customer satisfaction, and inventory management as not visibly traceable in the PRF operations. These goals are important because they help clubs stay focused on efforts and prioritization their goals, (Monczka, Handfield, Giunipero, and Patterson, 2015). The informants noted that demand forecasting improves efficiency and reduces waste. Customer satisfaction is also critical for the long-term success of any organization.

Inventory management at Pitbulls can be improved by implementing scientific supply chain principles such as demand forecasting, just-in-time inventory, and ABC analysis. By using these techniques, Pitbulls can better predict consumer demand and adjust their inventory levels accordingly to avoid overstocking or stockouts. Additionally, implementing a robust inventory tracking system can help Pitbulls keep tabs on their stock levels and prevent losses due to theft or spoilage.

Improving customer satisfaction at Pitbulls can be achieved by implementing a customer-centric approach to their supply chain processes. This can involve providing customers with real-time visibility into their orders, offering flexible delivery options, and ensuring that products are delivered on time and in good condition. Using customer feedback to continuously improve their processes and product offerings is also essential for enhancing customer satisfaction.

Efficient transport and logistics are crucial for Pitbulls to ensure timely delivery of their products to customers. Implementing route optimization algorithms and using advanced tracking technologies can help Pitbulls streamline their transportation operations and reduce costs. Additionally, establishing partnerships with reliable logistics providers can help Pitbulls expand its reach and improve its service levels.

Some of the gaps that Pitbulls may face in their supply chain include lack of visibility, poor inventory management practices, and inefficient transport operations. These gaps can be bridged

by investing in advanced supply chain technologies, conducting regular performance evaluations, and continuous training and development of supply chain employees. Additionally, establishing strong partnerships with suppliers, distributors, and logistics providers can help Pitbulls close these gaps and improve their overall supply chain performance.

The findings from this study are important as they provide valuable insights into how Pitbulls can improve their inventory management, customer satisfaction, and transport and logistics operations. By implementing the proposed strategies and leveraging existing supply chain theories, Pitbulls can enhance their competitiveness, increase customer loyalty, and achieve sustainable growth in the market. Overall, the study highlights the crucial role of supply chain management in driving business success and the importance of continuous improvement in this area.

The third objective on the impact of supply management implementation over cost reduction, customer satisfaction against overall performance discovered that it is important to effectively manage the flow of goods and services to achieve strategic objectives. By implementing supply chain management principles, organizations can optimize their operations, streamline processes, and ultimately improve their bottom line.

One reference that can be cited about this theme is the article "The Impact of Supply Chain Management Practices on Competitive Advantage and Organizational Performance in Zimbabwe" by Tawanda Dzama and Davison Saruchera,(2009). In this study, the authors explore the link between supply chain management practices and organizational performance in the context of Zimbabwean organizations.

However, there may be gaps in existing theories on supply chain management that need to be addressed to fully understand the impact of its implementation. One potential gap is the lack of emphasis on the role of technology in supply chain management. As technology continues to evolve, organizations are increasingly leveraging tools such as automation, artificial intelligence, and blockchain to enhance their supply chain operations. Understanding how these technological advancements impact costs, customer satisfaction, and overall performance is crucial for bridging the gap in existing theories. In conclusion, the theme of the impact of supply chain management principles implementation on cost reduction, customer satisfaction, and overall performance at Pitbull Rugby Club in Harare underscores the importance of effectively managing the flow of

goods and services to achieve strategic objectives. By addressing gaps in existing theories and incorporating the latest technological advancements, organizations can optimize their supply chain operations and drive greater success.

The fourth objective of the study looked into developing a framework for implementing supply chain management principles to optimize operations at Pitbull Rugby Football Club in Harare. The informants suggest that supply chain management plays a crucial role in optimizing operations for sports clubs, including Pitbulls Rugby Club. By implementing effective principles and strategies, the club can enhance efficiency, reduce costs, and improve performance on and off the field. This framework aims to provide a comprehensive understanding of supply chain management principles and how they can be applied to Pitbulls Rugby Club.

One such principle is the importance of collaboration and communication within the supply chain. By fostering strong relationships with suppliers, sponsors, and other stakeholders, the club can ensure that goods and services are delivered efficiently and effectively. Additionally, implementing technology and automation can streamline processes and reduce errors, leading to greater operational success.

Based on these findings, a framework can be developed specifically for Pitbulls Rugby Football Club. This framework will include strategies for optimizing supply chain operations, such as:

1. Identifying key suppliers and partners
2. Implementing technology and automation
3. Monitoring performance and KPIs
4. Streamlining communication and collaboration

By following these principles, the club can improve its overall supply chain management and ultimately enhance its on-field performance.

The findings of this framework are crucial for Pitbulls Rugby Football Club as they can help the club maximize resources, reduce costs, and improve efficiency. By implementing supply chain management principles, the club can enhance its competitive advantage, attract top talent, and

build a strong reputation within the sports industry. Ultimately, the success of the club both on and off the field is dependent on effective supply chain management.

### **5.3 New Insights**

One key insight that emerged from the study is the importance of understanding the unique dynamics and challenges of a sports organization like Pitbulls Rugby Football Club when implementing supply chain management principles. Unlike traditional businesses, sports organizations have specific needs and requirements related to player management, equipment procurement, event planning, and fan engagement. Therefore, a generic approach to supply chain management may not be as effective in optimizing operations at a sports club.

Another insight that came to light is the significance of strong partnerships and collaborations with key stakeholders in the sports industry. By working closely with sponsors, suppliers, event organizers, and other relevant parties, Pitbulls Rugby Football Club can enhance its supply chain processes and improve overall performance. Building strong relationships with external partners can lead to better sourcing opportunities, cost savings, and increased operational efficiency.

#### **5.3.1 Novel Findings**

Additionally, the study highlighted the importance of leveraging technology and data analytics to drive decision-making and improve supply chain performance. By implementing advanced supply chain management systems, Pitbulls Rugby Football Club can better track and monitor inventory, streamline procurement processes, and optimize resource allocation. Using data-driven insights, the club can identify trends, forecast demand, and make strategic decisions to enhance operational effectiveness.

Overall, the study emphasized the need for a tailored and strategic approach to implementing supply chain management principles at Pitbulls Rugby Football Club. By recognizing the unique needs of a sports organization, fostering strong partnerships with key stakeholders, and leveraging technology and data analytics, the club can optimize its operations and achieve sustainable success in the competitive sports industry.

### **5.3.2 Conceptual Model**

The conceptual model for implementing supply chain management principles at Pitbulls Rugby Football Club consists of three main components: strategic planning, operational execution, and performance measurement.

#### **1. Strategic Planning:**

- Identify key stakeholders and their roles in the supply chain, including players, coaches, suppliers, sponsors, and fans.
- Develop a clear vision and mission for the club's supply chain management strategy, aligned with the overall goals of the organization.
- Establish performance metrics and key performance indicators (KPIs) to measure the success of supply chain operations.
- Conduct a SWOT analysis to identify strengths, weaknesses, opportunities, and threats in the supply chain

#### **2. Operational Execution:**

- Implement supply chain management best practices, such as demand forecasting, inventory management, procurement, and logistics.
- Collaborate with suppliers and partners to optimize the flow of goods and services throughout the supply chain.
- Utilize technology and digital tools, such as supply chain management software and analytics, to improve operational efficiency and decision-making.
- Continuously monitor and evaluate supply chain performance, identifying areas for improvement and implementing corrective actions as needed.

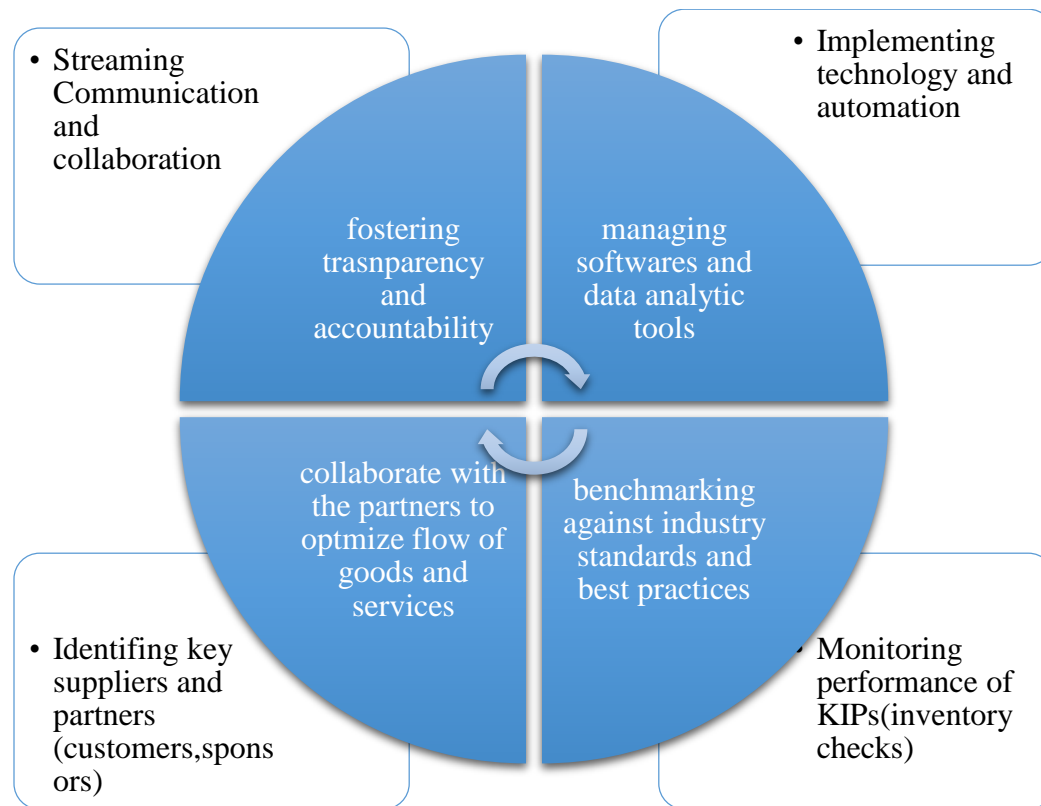
#### **3. Performance Measurement:**

- Regularly review and update performance metrics and KPIs to ensure alignment with the club's objectives.
- Conduct regular audits and assessments of supply chain processes to identify bottlenecks and inefficiencies.
- Benchmark supply chain performance against industry standards and best practices, seeking opportunities for continuous improvement.



- Communicate supply chain performance results to key stakeholders, fostering transparency and accountability within the organization.

**Figure 5.1 Scientific SCM principles framework for Pitbull RFC**



The framework was constructed from the findings of the current study. The Framework shows that the use of scientific supply chain management principles being adopted by Pitbulls RFC. It was proved by the research findings, which also corroborate the views of Christopher, (2016) who notes the integration and redesigning of the modern trends of SCM principles to optimize operations. The Framework also shows that Pitbulls RFC can shift from traditional means of doing business to scientific trends by implementing the modern principles to encounter their rivals. The conceptual framework contains some principles that the Pitbulls RFC must adhere religiously if they are to remain competitive. The study recognized the significance of applying scientific supply chain management principles to optimize operations.

### **Practical and Theoretical Implications:**

By implementing supply chain management principles, Pitbulls Rugby Football Club can improve the efficiency and effectiveness of its operations, leading to cost savings, increased competitiveness, and enhanced customer satisfaction. Theoretical frameworks, such as the SCOR model (Supply-Chain Operations Reference) and the value chain analysis can provide guidance on best practices for supply-chain optimization and performance measurement. Engaging stakeholders and building collaborative relationships with suppliers and partners can foster innovation and agility in the supply chain, enabling the club to respond quickly to changing market conditions and customer demands.

Implementation of supply chain management principles may require significant resources, time, and investment, which could be a challenge for a small or financially constrained organization like Pitbulls Rugby Football Club. Cultural and organizational barriers, such as resistance to change or siloed departments, may impede the successful adoption of supply chain management practices. External factors, such as global economic trends, geopolitical events, and regulatory changes, could impact the club's supply chain operations and create uncertainty in the supply chain.

Continuous monitoring and evaluation of supply chain performance are essential to identify and address emerging risks and opportunities, but this may require dedicated expertise and resources that may not be readily available within the organization. Overall, the implementation of supply chain management principles at Pitbulls Rugby Football Club can lead to improved operational efficiency, enhanced collaboration with stakeholders, and better performance measurement. By addressing practical and theoretical implications and overcoming potential limitations, the club can optimize its supply chain operations and achieve sustainable success in the competitive sports industry.

### **5.4 Limitations of the Study**

There are several limitations associated with developing a framework for implementing supply chain management principles to optimize operations at Pitbull Rugby Football Club:

1. Qualitative data collection limitations: The use of qualitative methods for data collection may present limitations in terms of the depth and breadth of the data collected. This can result in a lack of robustness and generalizability of the findings.
2. Grounding of the study: The study may be limited in its applicability to other contexts due to the specific grounding of the study at Pitbull Rugby Football Club. The findings may not be easily transferable to other organizations or industries.
3. Access to the population sampled: Challenges may arise in gaining access to the population sampled, such as key stakeholders within the organization or supply chain partners. Limited access may impact the quality and completeness of the data collected.
4. Minimizing the impact of limitations: Strategies should be implemented to minimize the impact of these limitations on the quality of the study. This may include triangulation of data sources, ensuring data credibility through member checking, and ensuring data saturation through thorough data collection methods.

Overall, while there are limitations associated with developing a framework for implementing supply chain management principles at Pitbull Rugby Football Club, strategic approaches can be taken to address these limitations and improve the quality and applicability of the study.

## **5.5 Chapter Summary**

The study focused on developing a framework based on supply chain management principles to optimize operations at Pitbulls Rugby Football Club. The discussion highlighted the current challenges faced by the club and the potential benefits of applying supply chain management principles to address these challenges. The objectives of the study were to identify key areas for improvement, develop a conceptual model for optimizing operations, and provide practical and theoretical implications for the club. The framework development involved a thorough analysis of the club's current operations, including inventory management, logistics, and procurement processes. The study aimed to provide new insights and novel findings by applying supply chain

management principles to non-traditional industry such as sports management. The importance of the findings lies in the potential to enhance the club's efficiency, reduce costs, and improve overall performance. The conceptual model developed in the study aimed to provide a roadmap for implementing supply chain management principles within the club, offering practical guidance for real-world application. The study also discussed the theoretical implications of applying supply chain management principles in a sports management context, contributing to the existing body of knowledge in this field. However, the study acknowledged certain limitations, such as the generalizability of the findings to other sports clubs and the potential challenges in implementing the framework. Chapter 6 will focus on drawing conclusions from the study and providing recommendations for Pitbulls Rugby Football Club based on the findings. It will offer actionable insights for the club to optimize its operations and improve its overall performance.

## **CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 INTRODUCTION**

This chapter focuses on the conclusions and recommendations. In this final chapter, the study concludes our study on the current supply chain management practices at Pitbull Rugby Football Club. The research also identified key areas for improvement within the club's supply chain and

evaluated the potential impact of implementing strategic supply chain management practices on cost reduction, customer satisfaction, and overall performance.

## **6.2 CONCLUSIONS**

Throughout this research, a comprehensive analysis was conducted of Pitbull Rugby Football Club's supply chain management practices. The researcher examined the club's procurement, inventory management, distribution, and logistics processes to identify strengths and weaknesses in its supply chain operations. Based on our findings, we have identified several areas for improvement within the club's supply chain, including optimizing inventory levels, streamlining procurement processes, enhancing supplier relationships, and improving transportation and distribution strategies. By addressing these areas of improvement, Pitbull Rugby Football Club can potentially reduce costs, enhance customer satisfaction, and improve overall performance.

Furthermore, we also evaluated the potential impact of implementing strategic supply chain management practices on the club's operations. By adopting advanced supply chain technologies, improving collaboration with suppliers and partners, and implementing efficient inventory management systems, Pitbull Rugby Football Club has the opportunity to gain a competitive advantage, reduce costs, increase efficiency, and enhance customer satisfaction.

In conclusion, this study has provided valuable insights into Pitbull Rugby Football Club's supply chain management practices and highlighted areas for improvement. By implementing the recommended strategies and best practices outlined in this research, the club has the potential to achieve significant improvements in cost reduction, customer satisfaction, and overall performance. We recommend that Pitbull Rugby Football Club take proactive steps to enhance its supply chain operations and leverage the benefits of strategic supply chain management to drive success in the future.

In the context of developing a framework for implementing supply chain management principles to optimize operations at Pitbulls Rugby Football Club, the chapter on conclusions and recommendations would likely involve summarizing the key findings and insights from the study.

This would include a review of how supply chain management principles can be applied to the specific context of a sports organization like the Pitbulls Rugby Football Club.

The conclusions drawn from the study may highlight the potential benefits of integrating supply chain management principles into the operations of the club. This could include improved inventory management for sports equipment and merchandise, streamlined procurement processes for team supplies, and enhanced logistics for travel and event management.

The practice recommendations would likely focus on practical steps that the Pitbulls Rugby Football Club could take to implement supply chain management principles. This might involve suggestions for restructuring internal processes, adopting new technologies for inventory tracking and procurement, or establishing partnerships with suppliers and logistics providers to optimize operations.

In terms of implementation in theory and practice, the chapter may discuss how the conclusions and recommendations align with existing supply chain management theories and frameworks. This could involve drawing on established principles from the field of supply chain management and demonstrating how they can be adapted to the unique needs of a sports organization.

Furthermore, the chapter may explore the practical implications of implementing supply chain management principles at the Pitbulls Rugby Football Club. This could involve discussing potential cost savings, efficiency gains, and improvements in overall operational performance that could result from the adoption of these principles.

Regarding further studies, the chapter may outline specific areas for future research related to supply chain management in the context of sports organizations. This could include exploring the impact of supply chain optimization on the overall performance of sports clubs, conducting comparative studies with other similar organizations, or investigating the role of technology in enhancing supply chain operations in the sports industry.

Overall, the chapter on conclusions and recommendations would serve to provide a comprehensive overview of the study's findings and offer actionable insights for the Pitbulls Rugby Football Club to optimize its operations through the implementation of supply chain management principles.

## **6.3 IMPLICATIONS/RECOMMENDATIONS**

### **6.3.1 Implications for Practice**

The Pitbulls RFC is recommended to conduct a thorough assessment of the club's current supply chain management practices and identify areas for improvement. The next step is to develop a plan for implementing the scientific supply chain management methods. This plan should include a timeline, budget, and resources needed to implement the methods. Once the plan is developed, the club should begin to implement the methods one step at a time. It's important to measure progress and make adjustments as needed. Finally, the club should regularly review and update its plan to ensure it remains effective.

To implement scientific supply chain management principles, the PRF should set clear goals and objectives for the supply chain. This will help to ensure that everyone is working towards the same goals. Secondly, the PRF club should create a system for tracking and measuring performance. This will help to identify areas where the supply chain can be improved. Third, the club should create a process for communicating with suppliers and customers. This will help to ensure that everyone is on the same page.

In addition, it can be difficult to identify and resolve issues without the right training, interview sessions are a great way to start communicating the benefits of the new principles and become the backbone of the strategy. In addition, the research saw it important to consider using other communication channels, such as written materials, presentations, or even a dedicated website or social media page for the initiative. The more you can spread the word about the benefits, the more likely people will be to embrace the change.

Reliance on volunteer transporters can cause a lot of uncertainty and make it difficult to ensure that athletes can get to where they need to be on time, (Lambert and Cooper, 2014). This can have a major impact on the overall success of the team. The contestations saw it important to work with a professional transportation company or using public transportation.

The field results noted that it is important to have evaluations of these tools. Demand forecasting can be measured by the accuracy of demand forecasts and inventory turnover rate. Customer satisfaction can be determined by customer retention rate, customer feedback, and net promoter score, (Christopher 2016). And for communication and collaboration, can be measured by response time, communication effectiveness, and level of trust. Accuracy of demand forecasts can be obtained by comparing the actual demand to the forecasted demand. This can be done using a metric called Mean Absolute Percentage Error (MAPE). The inventory turnover rate is the number of times the inventory is sold and replaced in a given period. Both of these metrics do help you to assess the effectiveness of the demand forecasting process, (Chopra and Meindl, 2007).

Customer retention rate is the percentage of customers who continue to do business with the club over some time. For example, if you had 100 customers at the beginning of the year and 80 of those customers were still doing business with the club at the end of the year, your customer retention rate would be 80%. Customer feedback is another important metric that can be measured through surveys, focus groups, or other methods. The net promoter score is a metric that measures the loyalty of a club's customers and their willingness to recommend the club to others. This is calculated by subtracting the percentage of detractors from the percentage of promoters, Chopra and Meindl, 2007).

### **6.3.2 Implications for Theory**

Implementing supply chain management principles at Pitbulls Rugby Football Club could have several implications in theory and practice. Firstly, from a theoretical perspective, it would contribute to the body of knowledge in sports management by demonstrating the applicability of supply chain management principles in a non-traditional industry. This could lead to a better



understanding of how these principles can be adapted and implemented in diverse settings, expanding the scope of supply chain management research.

Additionally, the findings could provide insights into the potential benefits of optimizing operations through supply chain management in the sports industry. This could lead to the development of new theoretical frameworks for understanding the impact of efficient supply chain management on the overall performance and competitiveness of sports organizations.

Furthermore, the implementation of supply chain management principles at Pitbulls Rugby Football Club could also lead to practical implications. It could potentially improve the club's operational efficiency, reduce costs, and enhance the overall fan experience. These practical implications could serve as a case study for other sports organizations looking to optimize their operations through supply chain management principles.

There are a few key suggestions that could help the Pitbull Rugby Football Club to outsmart its rivals. First, focus on the core areas of operations that drive value for the club, such as player recruitment, game day operations, and fan engagement. Second, use data analytics to make informed decisions and identify areas of improvement. Third, invest in technology to automate and streamline operations. And fourth, prioritize relationships with key stakeholders, such as sponsors, players, and fans. Furthermore, the study implored the idea to have a clear vision and strategy for the club and, build a strong culture of teamwork and collaboration. And lastly, developing a comprehensive risk management plan to identify and mitigate risks.

The contestants guide that a comprehensive risk management plan for a rugby club should start with identifying the key risks the club faces. These can include financial risks, operational risks, legal risks, and strategic risks. Next, assess the likelihood and impact of each risk. Then, prioritize the risks based on their likelihood and impact. Finally, develop a plan to mitigate each risk. This plan should include specific actions to be taken, responsible parties, and timelines for completion.

The research noted that a club is attached to a school where it trains the athletes for the school in exchange for sporting facilities and equipment and has a challenge of losing athletes who would

get a sponsorship to go and study abroad but fail to project anything to the club. This is a great example of a risk that a rugby club could face. In this case, the club should consider implementing a player development program that provides incentives for players who stay with the club after graduation. This could include scholarships, job placement assistance, or other benefits. Additionally, the club could focus on developing strong relationships with players and their families to create a sense of loyalty and commitment.

Another option could be to create a "pathway to success" program for the players. This program could include a tiered system where players are rewarded for their commitment and achievements. For example, players could start at the "development" level, where they receive access to the club's facilities and resources. As they progress, they could move up to the "elite" level, where they receive additional benefits such as scholarships or job placement assistance.

In addition to the player development program, I would recommend creating a strong marketing and communications strategy to promote the program and the benefits of staying with the club. This could include social media campaigns, events, and other outreach efforts. You could also consider developing a mentorship program that pairs players with alumni who can offer guidance and support.

Lastly, one of the best ways to mitigate risks is to create a contingency plan. This means having a backup plan in place in case the primary plan doesn't work out. For example, if the player development program doesn't bring in the results being hoped for, a plan B should be ready to go. For instance, the club could create a partnership with a local university or other organization to offer scholarships or job placement assistance. This could be done in addition to the player development program, or it could be used as an alternative if the primary plan doesn't work out. One more thing to consider is the cost of implementing these recommendations. It's important to balance the cost of the program with the potential benefits. For example, if the player development program is very expensive, it may not be worth the investment if it doesn't result in a significant increase in player retention.

The player development program is an example of a process improvement strategy, which is one of the key principles of supply chain management. By improving the process of player

development, the club can improve its overall performance and efficiency. This is similar to how companies in other industries use process improvement strategies to optimize their supply chains. In the case of the rugby club, improved player retention can lead to increased ticket sales and merchandise sales. This directly relates to the supply chain management principle of cost reduction.

The study delves into the idea of cost reduction in supply chain management. In addition to reducing the cost of the player development program, the club could also look for ways to reduce costs in other areas, such as player travel, equipment, and facilities. By finding ways to reduce costs without sacrificing quality, the club can increase its overall profitability. There are a few other cost-reduction strategies that the club could consider. One example is to negotiate better prices with suppliers. By working with suppliers to get the best possible prices on things like equipment and uniforms, the club can save money without compromising on quality. Another example is to review contracts and identify opportunities to reduce costs.

When reviewing contracts, there are a few key things to look for. First, it's important to make sure the contract is clear and concise. All the terms and conditions should be easy to understand and free of ambiguous language. Second, the contract should clearly outline the roles and responsibilities of both parties. This can help to prevent misunderstandings and disputes down the road. Third, the contract should include a termination clause that outlines the process for ending the contract if necessary.

In summary, the findings from implementing supply chain management principles at Pitbulls Rugby Football Club could contribute to the body of knowledge by expanding the theoretical understanding of supply chain management in non-traditional industries and providing practical insights for sports organizations looking to improve their operations.

### **6.3.3 Implications for Further Studies**

Firstly, from a theoretical perspective, future researchers should use mixed methods and a larger sample size.

This same study can be repeated with a different sports discipline such as soccer for generalization across the whole sports industry in the country.

To carry the same study for the remaining key aspects of the supply chain which are Product development, commercialization, and Returns management.

Additionally, the findings could provide insights into the potential benefits of optimizing operations through supply chain management in the sports industry. This could lead to the development of new theoretical frameworks for understanding the impact of efficient supply chain management on the overall performance and competitiveness of sports organizations.

Furthermore, the implementation of supply chain management principles at Pitbulls Rugby Football Club could also lead to practical implications. It could potentially improve the club's operational efficiency, reduce costs, and enhance the overall fan experience. These practical implications could serve as a case study for other sports organizations looking to optimize their operations through supply chain management principles.

In summary, the findings from implementing supply chain management principles at Pitbulls Rugby Football Club could contribute to the body of knowledge by expanding the theoretical understanding of supply chain management in non-traditional industries and providing practical insights for sports organizations looking to improve their operations.

## **6.4 CHAPTER SUMMARY**

This chapter looked at conclusions made based on research questions in the chapter. The main conclusions made were that, while there are traditional supply chain management principles already in place to optimize the operations at Pitbulls RFC in Harare, Zimbabwe, there is a need not to rely on such principles due to dynamics, competition, and change in business rather an inclusion of scientific supply management principles to meet the demands and remain competitive among the business rivals. Recommendations for further studies were also highlighted to bridge gaps that exist in this study.

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## APPENDICES

## APPENDIX 1: INTERVIEW GUIDE FOR PITBULLS RFC STAKEHOLDERS.

AN INTERVIEW GUIDE FOR PITBULLS RUGBY FOOTBALL CLUB IN HARARE AND ITS STAKEHOLDERS: (CLUB MANAGEMENT, COACHES, ATHLETES, SPONSORS, SUPPLIERS, SRC, GOVERNING BOAD AND MEDIA). I am ,,a Bindura University of Science Education student pursuing a Master’s Science Degree in Sport Management. I’m working on a study titled: “**Using Supply Chain Management (SCM) principles to optimize the operations at Pitbulls Rugby Football Club in Harare, Zimbabwe.**’ You are cordially invited to this interview questions items listed below. Your contributions will be used exclusively for scholarly reasons and kept entirely anonymous.

## 1. Section 1: Respondent Information

## 1. Gender

Mark only one oval

**O**Male

☐ Female

## 2.Age



Below 20

☐ 21-30

☐ 31-40

☐ 41-50

☐ Over 50

3. Stakeholder category in relation to Pitbull Rugby Football Club?

Mark only one oval

☐ Club management

☐ Coaches

☐ Sponsors

☐ Athletes

☐ Governing bodies

☐ Suppliers

☐ Media team

☐ Others

4. Please indicate your professional qualifications? Mark only one oval.

☐ Non formal education

☐ Primary

☐ Secondary

☐ Diploma

☐ Undergraduate

☐ Postgraduate

## Section 2: SCM Principles

5. Are you familiar with the concept of supply chain management (SCM)?

Mark only one oval

☐ Yes

☒ No

6. How would you rate the importance of implementing SCM principles in optimizing operations at Pitbulls Rugby Football Club? Mark the oval

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Section 3: Current Practices

7. Does your rugby club currently utilizing SCM principles in its operations?

Mark only one oval.

☒ Yes

☐ No

8. If yes, please briefly describe the SCM practice implemented at your Pitbulls Rugby Football Club (e.g., inventory management, vendor selection, logistics, etc )

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9. What specific challenges or obstacles have you encountered in implementing SCM principles within you clubs' operations? Please provide details.

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#### Section 4: Impact and Benefits

10. In your own experience or perspective, what are the potential benefits of implementing SCM principles in a rugby club's operations? Tick all that apply.

☐

Improved operational efficiency

☐

Reduced costs

☐

Better inventory

☐

Enhanced communication and inventory

☐

Streamlined logistics and transport

☐

Increased customer satisfactory

11. Has implementation of SCM principles positively affected your rugby club's operations?

Mark only one oval:

☐

Yes

☒

No

#### Section 5: Collaboration and integration

12. To what extent do different stakeholders in your rugby club( management coaches, sponsors, governing board, athletes and media) collaborate and integrate their efforts regarding SCM principles? Mark only one oval.

☐ Highly collaborative and integrated

☐ Moderately collaborative and integrated

### Section 6: Framework for implementation

13. How familiar are you with supply chain management principles? Mark only one oval.

☐ Highly ☐ Medium ☐ low

14. Do you believe that implementing SCM principles can enhance the overall operations of the rugby club? Mark only one oval.

☐ ☐

15. What specific SCM principles do you think are most relevant to the club's operations?

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16. Are there any challenges or barriers to implementing SCM principles at Pitbulls Rugby Football Club?

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17. What resources or support would be required to successfully implement SCM principles?

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**Section 7: Effectiveness Evaluation**

18. On a scale of 1 to 10, how would you rate the current effectiveness of SCM practices at the rugby club? Tick only one box.

1	2	3	4	5	6	7	8	9	10

19. What specific SCM practices have contributed to the club's success?

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20. Are there any additional insights, experiences or recommendations you would like to share regarding SCM principles in rugby football clubs?

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## **APPENDIX 2: INTERVIEW GUIDE FOR FOCUS GROUP DISCUSSIONS**

1. What are the current challenges faced by Pitbulls Rugby Football Club in managing its supply chain?
2. How do you think implementing supply chain management principles can benefit the club's operations?
3. What specific areas within the supply chain do you believe need improvement at the club?
4. How can technology be leveraged to streamline supply chain process at Pitbulls Rugby Football Club?
5. What roles do you think communication plays in optimizing supply chain operations at the club?
6. How do the club ensure effective collaboration among different stakeholders in supply chain?
7. What key performance indicators should be used to measure the success of supply chain management initiatives at the club?
8. How can the club ensure sustainability and resilience in its supply chain operations?
9. What are the potential risks and challenges associated with implementing supply chain management principles at Pitbulls RFC?
10. How can the club ensure continuous improvement and innovation in its supply chain management practices?

### **APPENDIX 3: CONSENT LETTER**

.....

Box 206

Guruve

19 September 2023

The Manager

.....

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Harare

Dear Sir

### **RE: REQUEST TO CARRY OUT A STUDY**

I am a postgraduate student in the Sports Science Department at Bindura University of Science Education. In partial fulfillment of my final thesis, I am currently undertaking research on “Using Supply Chain Management Principles to Optimize Operations in Managing Outcomes at Pitbull Rugby Sport Club in Harare

In this regard, I would like to request to collect data from your club management members, coaches and players and suppliers using questionnaires and interviews at your most convenient days and times.

It is my goal to come up with a comprehensive study that would provide guidelines on how to use supply chain management principles to optimize in managing the overall organization outcomes. Rest assured that the information obtained from your organization will be kept confidential and used solely for academic purposes.

A copy of my finished work will be provided to you at the soonest possible time it is available. The results of my study are expected to help you to transform the club through supply chain management principles.

Your approval of my request is highly anticipated. Should you need further clarification, please do not hesitate to call me at .....

Thank you very much.

Yours Sincerely,

.....

MScSM Stu



## APPENDIX 4: RESEARCH CONFIDENTIALITY AGREEMENT

This agreement is between:

**Individuals Receiving the Information:** .....

and

**Name of Individual Disclosing the Information:** .....

for

**A Research Project Entitled:** Using Supply Chain Management Principles to Optimize Operations in Managing Outcomes at Pitbull Rugby Sport Club in Harare

### AGREEMENT

1. For purposes of this Agreement, the term "**Confidential Information**" means any of the following:

- nonpublic information relating to the Parties' technical or non-technical data, know-how, algorithms, formulas, patterns, compilations, programs, devices, methods, research and development data, computer source and object code, trade secrets, recipes, techniques, drawings, processes, products, services, or lists of actual or potential customers or suppliers, technology, business plans and methods, promotional and marketing activities, finances and other business affairs;
- Third-party information that the Parties are obligated to keep confidential; and (Personal information under the custody or control of the Parties.

2. The Discloser intends to disclose confidential information to the Recipient for the purpose of the study.

3. The Recipient undertakes not to use the confidential information for any purpose except the purpose of the study, without first obtaining the written agreement of the Discloser.

4. Strong password-protected computers will be used to store identifiable information.

5. Only two members of the research team who are signatories to this agreement shall have access to the two computers.

6. Identifiable information will also be used in a manner that would not be linked to the providers.

7. Confidential Information shall be returned to the Disclosing Party at the request of the Disclosing Party or shall be destroyed within thirty days after the completion of the study.

8. In cases of breach of this agreement by the Receiving Parties, the Disclosing Party shall be entitled as a matter of right, to injunctive relief, including specific performance.

**SIGNED:**

**a. Individuals Receiving the Information:**

1.Name.....	Signature .....	Date.....
2.Name.....	Signature .....	Date.....
3.Name.....	Signature .....	Date.....
4.Name.....	Signature .....	Date.....

**b. Individuals Disclosing the Information:**

1. Name.....Signature .....Date.....

## **APPENDIX 5: TIMEFRAME SCHEDULE**

### **Research Timeframe Schedule:**

To conduct a comprehensive analysis of the current operations at Pitbull Rugby Club and propose SCM strategies, the following research timeframe schedule is suggested:

1. Week 1: Familiarization with Pitbull rugby club's operations, including its organizational structure, processes, and challenges.
2. Week 2: Conducting a thorough literature review on SCM principles and their application in the sports industry.
3. Week 3: Gathering primary data through interviews with key stakeholders, including club management, players, coaches, and suppliers.
4. Week 4: Analyzing the collected data and identifying areas for improvement within the club's supply chain.
5. Week 5: Developing a comprehensive SCM strategy tailored to Pitbull Rugby Club's specific needs and challenges.
6. Week 6: Presenting the proposed SCM strategy to club management and seeking their feedback and approval.
7. Week 7: Implementing the approved SCM strategy and monitoring its effectiveness.
8. Week 8: Evaluating the outcomes of the implemented SCM strategy and making necessary adjustments for continuous improvement.

## **APPENDIX 6: BUDGET**

The budget for this research includes expenses related to data collection, analysis, and dissemination. These expenses may include travel costs for interviews and observations, survey administration, data analysis software, and publication fees. The budget is justified by the potential benefits of optimizing operations at Pitbull Rugby Sport Club Harare, leading to improved performance and financial sustainability. The total budget for this research project is \$800. Budget

## **APPENDIX 7**

