
Examining the Effectiveness of Green Supply Chain in the Retail Sector of Zimbabwe

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ABSTRACT

The study examined the effectiveness of green supply chain in the retail sector of Zimbabwe. The following objectives guided the study, to determine the importance of green supply chain, to assess factors that contribute to a successful green supply chain and to ascertain the challenges that lead to poor implementation of the green supply chain. Literature review in this study covered green supply chain issues as it filled the literatures gaps with regards to previous researches as well as empirical evidence. The exploratory research design was deemed effective for this study as it helped in examining the in-depth and experiences pertaining to the green supply chain. The target population comprised of 20 management and 80 employees that were drawn from selected retail organizations in Zimbabwe. The selected target population was deemed a true representation of the entire population. A total of 80 questionnaires were distributed while only 50 were returned, 20 interviews in the form of face to face were conducted with the 20 management. The findings that were generated from this study proved that the green supply chain has been adopted by many organizations for purposes of environmental conversation. Recommendations were made that all retail organizations have to comply with the regulations of environmental management agent (EMA).

Keywords: Green supply chain, Retail sector, Zimbabwe

BACKGROUND OF THE STUDY

Environmental issues have become a major concern for organizations operating in the retail sector from across the global perspective. In the past two decades, the environment has been affected by operations of the retail organization at a rate that has travelled faster than forest fire (Washington and Gordon, 2017). European retail outlets have adopted the concept of the green supply chain as a driver for preserving Mother Nature. With the growth in population that is expected to rise to approximately 9 billion by the year 2030, the natural resources are predicted to be in short scarcity hence making the adoption of

the green supply chain is a panacea for sustainability (Pillar, 2017). Global retail firms have noted that water pollution, as well as air pollution, has been affecting the flora and fauna, lead to an increased outbreak of diseases such as cholera and typhoid and green supply chain methods adopted by retail outlets from across the globe has been capable of preserving the environment (Keller, 2017).

In Africa, there is no doubt that the green supply chain has been effective for retail organizations in countries that include South Africa, Zambia, Mozambique, Ethiopia, and Kenya. Green supply chain has been implemented by making use of renewable material on the supply chain management, use of logistics transport that does not emit pollution to the ozone and promoting the use of product that do not cause harm to the environment (Toke et al, 2015), This has seen the retail outlets being involved in green supply chain conservative activities that involved engagement in corporate social responsibility and preservative awareness campaigns (Troppe and Hillary, 2017). Green supply chain adoption by the African retail sector has brought positive results that include a reduction in air pollution by more than 34% and improved disposable of paper and plastic material.

Studies on the green supply chain are not new as they have been done in another sector for instance in manufacturing, fast food restaurant, tourism and hospitality (Grill, 2014, Freidman, 2015 and Washington et al, 2018). This leaves a knowledge gap that needs to be exhausted in the retail sector with regard to the context of Zimbabwe. Therefore the current study will examine the effectiveness of green supply chain in the retail sector of Zimbabwe.

The retail sector of Zimbabwe has many players that are contributing to economic development and growth of GDP. Among the common players include Pick n Pay (TM), OK, Choppies and Spar. These organization has since adopted the green supply chain as a strategy of preserving the environment and to meet with the control regulation set by environmental management agent (EMA).

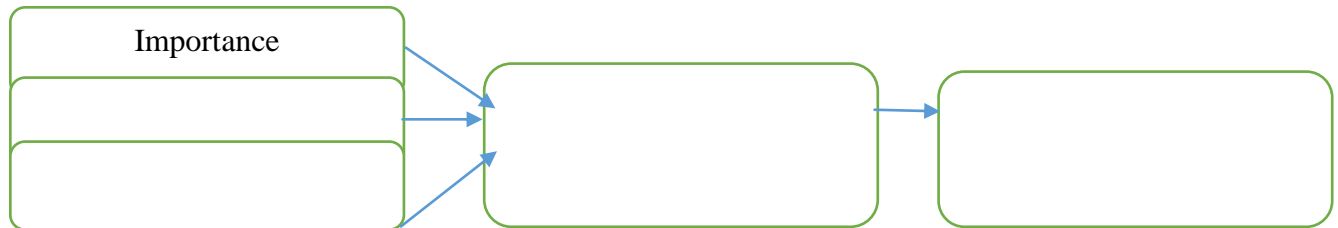
Despite the green supply chain is effective and yielding positive results in the retail organization from across the globe, in Zimbabwe it is a different issue. This has seen the retail outlets failing to manage the environment as evidenced by land pollution through failure to put in place proper disposable methods, offering products that pollute the environment and failure to comply with the government environmental management set standards. This has seen customer complaints increasing by 56%, increased rate of waterborne diseases and loss of lives. Additionally, this has seen many retail outlets losing their operating license from the Standard Association of Zimbabwe.

STATEMENT OF THE PROBLEM

The green supply chain is known for its potential influence of promoting environmental management despite most organizations failing to make it remedial. Despite the green supply chain is effective and yielding positive results in the retail organization from across

the globe, in Zimbabwe it is a different issue. This has seen the retail outlets failing to manage the environment as evidenced by land pollution through failure to put in place proper disposable methods, offering products that pollute the environment and failure to comply with the government environmental management set standards. This has seen customer complaints increasing by 56%, increased rate of waterborne diseases and loss of lives.

CONCEPTUAL FRAMEWORK



Source: Author

The conceptual framework shows the link between green supply chain and sustainable environmental management. The framework also shows the factors that have an influence on the green supply chain such as its importance, success factors and the challenges faced in the successful implementation of the green supply chain.

RESEARCH OBJECTIVES

- To determine the importance of a green supply chain
- To assess factors that contribute to successful green supply chain
- To ascertain the challenges that lead to poor implementation of green supply chain

RESEARCH QUESTIONS

- What is the importance of the green supply chain?
- What are the factors that contribute to the successful green supply chain?
- What are the challenges that lead to poor implementation of the green supply chain?

SIGNIFICANCE TO THE STUDY

The study is significant to retail organizations of Zimbabwe as it will help them in coming up with green supply chain strategies that can be adopted in preserving the environment. The environment of Zimbabwe has been affected by pollution and poor disposable methods as these have been contributed by retail organizations hence this research will help them in coming up with strategic ways of managing the natural resources on the environment.

LITERATURE REVIEW

Green supply chain

GSCM has been taken by a number of authors as a process that integrates environment-directed thinking into the supply chain (Mumtaz et al., 2018). Some features of green practices can be found by reviewing the definitions quoted by the researchers. The definitions cited by Zhu and Sarkis (2004), for example, show that GSCM is a concept that makes allowance for SCM innovation in the milieu of the environment as well as a set of processes directed to reuse and recycling of materials, and practice of environmental performance of the supply chain. (Fiksel, 2016). defined supply chain as the integration of environmental issues into the supply chain that echoed in product design, material purchasing, product manufacturing, product delivery to customers and management of products end of life.

The importance of green supply chain

The emergence of the green supply chain has become popular due to the changes in the business environment. The government is changing environmental policies as a way to preserve resources for the next generation. Green supply chain management has brought many benefits to the business environment. These benefits are discussed below:

Environmental and economic gains

Zhu and Sarkis(2014) green supply chain have brought many benefits to both environmental and economic. Environmental and economic gains are improved by producing products that are ecofriendly. Many countries around the world, for example, China has benefited much through green supply chain practices. Research is done by Bruce (2014)in Chinese manufacturing found that there is a positive relationship between green supply chain and environmental and economic performance. Therefore his study concluded that there are win-win opportunities for every organization involved in production and manufacturing. In addition, a study done by Elmore (2014) found out that considering green supply chain management helps to improve the integrated supply chain which eventually leads to greater competitiveness and economic performance. In addition, research was done by Kagali (2014) in Kenya pointed out that green supply chain practices improve both environmental and economic which in turn improves profitability.

Enhances technological innovation

Green supply chain management practices help to improve technological innovation. The business environment is dynamic hence there is a need for organizations in the logistics to embrace change in the supply chain. Rothenberg (2014)alluded that partnerships and collaborations with suppliers help to improve products and services that are user-friendly. The study done by Heavy on US automobile assembly plants found that building strong collaborations with suppliers, aided by suitable incentive systems resulted in the successful execution of innovative environmental technologies. Furthermore, research done by Aliatey (2014) hypothesized that green supply chain management practices lead to

positive environmental impact without compromising high production costs, profitability and positively influences the performance of green supply chains.

Factors that contribute to a successful green supply chain

According to Belton (2014) there a number of factors that lead to a successful implementation of green supply chain practices. These factors are categorized into two dimensions two major sets that are internal factors and external factors (Iraldo, 2010). Internal factors are regarded as organization-founded practices in the perspective of realizing both long term and short term environmental objectives, whereas external factors are regarded as collaboration-based efforts with the organization's stakeholders that are directed to enhance the environmental performance (Zhang et al., 2018).

Mumtaz et al. (2018) did research in Pakistan and found out the organizational policies act as a major factor that drives the green supply chain. Collaborating both organizational and government laws and policies contributes to organizations in the supply chain to consider the green supply chain as a way to strike the balance between the organizational and the external environment. Agyemang et al. (2018) carried out a study in West Africa and highlighted that the following are critical factors that lead to green supply chain management, lack management competence, integrated management information as well as traceability systems. On the basis of a sample encompassed subjects from Chinese companies, Zhu and Sarkis (2004) alluded that to improve the total quality of products organizations in the supply chain must consider factors that help enhances their competitiveness and performance. In addition, Hu and Hsu (2010) identified product recycling, organizational involvement and life cycle management as the major factors that need to be considered in order to implement a green supply chain.

Mouton (2014) studied the factors of the sustainable supply chain in China, Wu et al. (2018) specified the factors such as, customer pressure, competition, management awareness, and government participation as the major factors that help shape the successful implementation of green supply chain management. According to Pourjavad and Shahin (2018), green design and green manufacturing are the most important factors that have significant effects on company performance. Petljak et al. (2018) conceptualized green supply chain management in terms of three dimensions: green purchasing, green logistics, and cooperation with suppliers.

Challenges that lead to poor implementation of green supply chain

Green supply chain management faces many challenges. There are a number of barriers that face organizations in the adoption of green supply chain management practices.

Costly

Implementing green supply management means that there are perceived costs associated with a successful implementation. Research done by Hilmore (2014) hypothesized that adopting green supply chain management practices requires organizations to incur high

initial costs for implementation. Investing in technological infrastructure is appropriate for environmental management, associated information enablement and hiring employees who are capable of working with such systems have high investment costs associated. These high starting investments could prove to be a major barrier

Lack of support from the top management

The lackadaisical approach by the top management does not give the required impetus to implementing green supply chain management practices. Management determination and support towards the formulation and implementation of green supply chain practices is a major challenge that many organizations in the manufacturing firms face (Klassen and McLaughlin, 2016). Support and commitment from the top management can help take green supply chain management initiatives a long way within the organization. In addition lack of confidence and understanding of green supply chain management practices and high initial costs, top management end up being apprehensive about these practices thereby creating a major challenge in the supply chain

Mis-alignment of green supply chain and organizational corporate strategy

Traditionally supply chain management has been given lesser importance as compared to other functions of management such as administration and human resources. The traditionally narrow perspective towards supply chain management has become a barrier in opening up the gates for the adoption of green supply chain management practices (Green et al, 2017). Adding more weight to the manager's personal responsibility for ensuring greener supply chains can be a possible solution. By transferring part responsibility of implementing green supply chain management practices to managers and by actively involving supply chain managers and green supply chain initiatives while drafting overall corporate strategy can to an extent help in greater

METHODOLOGY

Exploratory research design has been adopted in this research due to its potential benefit of examining an in-depth analysis as well as the experiences pertaining green supply chain. This research design helped in this study on identifying the challenges that have led to environmental mismanagement as a result of poor green supply chain methods being implemented by retail outlets of Zimbabwe (Saunders, 2014).

TARGET POPULATION

The targeted population of the study was the participants that had an influence on this study and these comprised 20 management and 80 employees that were selected from the retail organization of Zimbabwe namely Pick n Pay, OK, Choppies and Spar.

SAMPLE SIZE

The target population of the study was reduced to a manageable sample size by the use of Krejcie and Morgan model. The model implies that when the target population is 100, a

sample size of 88 should be used. Therefore the sample size of the study comprised of 12 management and 66 employees

RESEARCH INSTRUMENT

The study adopted closed-ended questionnaires in data collection. The questionnaires were in the form of semi-structured with two sections that included Section A demographic profile while Section B was the research objectives

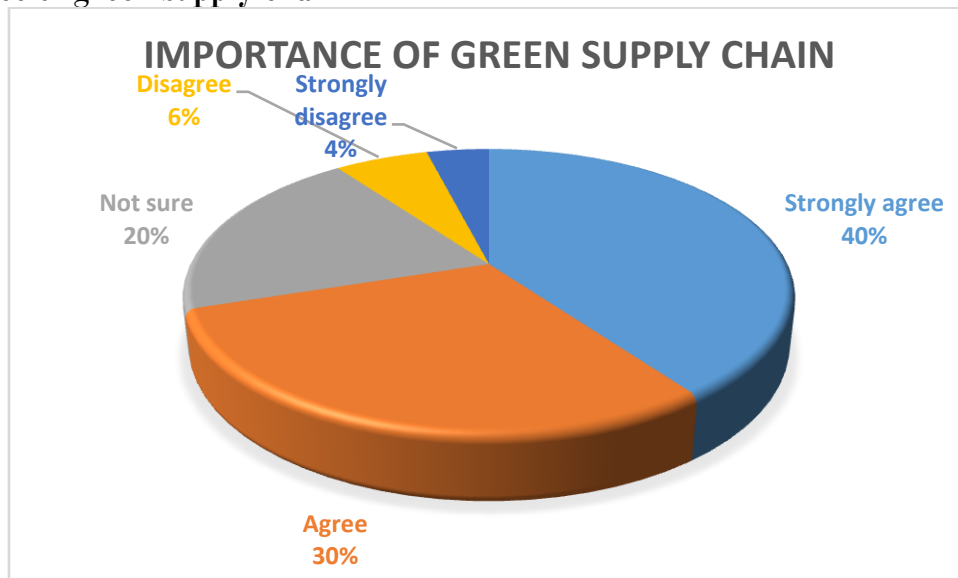
VALIDITY AND RELIABILITY

Validity and reliability are the issues in research in reducing the common biases and errors in research. The researcher achieved reliability through pretesting the research instrument to selected 5 friends and validity was achieved by triangulation of the instrument. The instrument was corrected by other lecturers (Creswell, 2014).

FINDINGS AND DISCUSSION

Out of the 66 questionnaires that were administered to the employees on 50 were successfully completed to achieve a 75% overall response rate and of the 12 interviews that were planned with the management all of them were successful to achieve a 100% response rate.

Importance of green supply chain



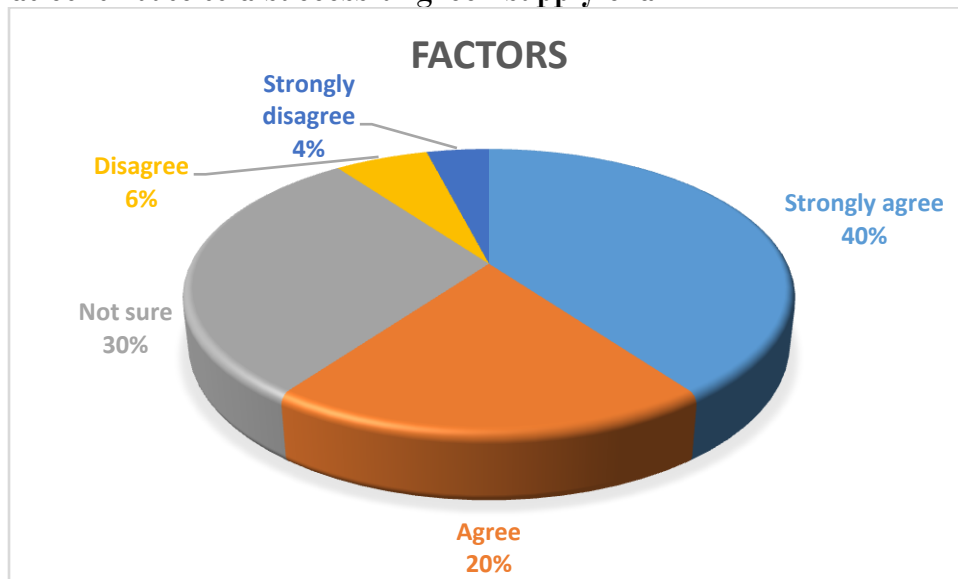
Source: Survey data 2019

Participants view the importance of the green supply chain. 20 out of 50 being the highest response, proved that 40% were in support that the green supply chain is important to retail organizations of Zimbabwe in minimizing the potential risk of pollution and increased outbreak of diseases. The findings are supported by Jones and Vance (2016) who posited that the green supply chain has been important to organizations of today that

aim at preserving the environment and wildlife considering the scarcity of natural resources at the expense of the rapid growth in population.

“We are aware of the importance of green supply chain despite the fact that our customers are still learning about the concept as we have awareness campaigns in place to ensure customers learn about it”.

Factors that contribute to a successful green supply chain

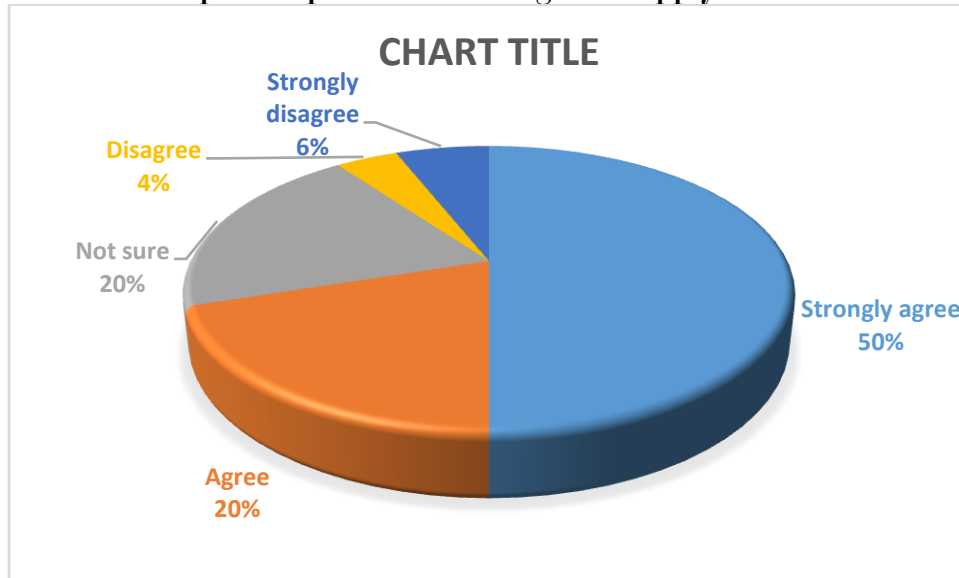


Source: Survey data 2019

Participants view factors that contribute to the successful green supply chain. 20 out of 50 being the highest response, proved that 40% were in support that green supply chain success factors to retail organizations of Zimbabwe in minimizing the potential risk of pollution and increased outbreak of diseases. 2 out of 50 was the least response yielding 4%. There are factors that lead to the improved or successful implementation of the green supply chain that includes complying with environmental regulation and eco-labeling (Reign, 2018).

“We are aware of the factors that lead to successful factors for green supply chain although the organization is still financial constraints on mitigating the concept and some of the customers are ignorant”.

Challenges that lead to poor implementation of green supply chain



Source: Survey data 2019

Participants view the challenges that lead to poor implementation of the green supply chain. 50% of the respondents were in agreement that they are many challenges that affect the implementation of the green supply chain while the least 4% noted that not all the challenges have the same influence. The findings are supported by literature which states that the challenges that lead to failure of implementing a green supply chain include limited resources, lack of awareness campaigns and prioritizing profits at the expense of the environment (Wellington et al, 2018).

RECOMMENDATION

Recommendations were made that green supply chain should be the main agenda of all retail organizations in Zimbabwe as a way of managing the environment. The government of Zimbabwe should put in place mitigating measures so as to ensure that the environment is preserved at all times.

AREA OF FURTHER RESEARCH

Next author should now dwell on the effect of sustainable supply chain management as a driver for corporate growth. This has been the recommended area based on the assumption that the literature gaps in the green supply chain seem to have failed to exhaust this research area.

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