GREEN SUPPLY CHAIN MANAGEMENT AND PERFORMANCE OF CLEANING COMPANIES IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

The general objective of the study was to explore on green supply chain management and performance of cleaning companies in Nairobi City County, Kenya. The specific objectives were: green purchasing and green marketing on performance of cleaning companies in Nairobi City County, Kenya. The following theories are anchored to this study: Theory of Planned Behaviour and Sustainable Consumption Theory. This study used a descriptive research design. The target population was 630 respondents. The sample size was 239 chosen from the population and stratified random sampling technique was used. The researcher used both open and closed ended questionnaire. The research conducted pilot test of 10% (24) of the respondents to check validity and the reliability instruments. The study used both descriptive and inferential statistics for data analysis with the aid of Statistical Package for Social Sciences version 28. The result is resented in tables and graphs. From the pilot test results, all the variables were found to have Cronbach alpha value greater than 0.7. Content validity test of 0.50. This suggest that all the variables were reliable and hence minor changes is required before proceeding to final data collection. In summary the study concludes that there was a strong relationship between the independent variables and dependent variable. Also the study concludes and recommends that the finding of this research to be implemented.

Key Words: Green Supply Chain Management, Performance of Cleaning Companies, Green Purchasing, Green Marketing

Background of the Study

Supply Chain Management (SCM) is the science that discusses suppliers and customers from upstream to downstream to get lower costs and superior value for customers (Boateng, 2019). As defined by the supply chain council, supply chain is a network of organizations that work together, and are connected to control, manage, and improve the flow of materials, and information from suppliers to end customers. Supply Chain Management can also be defined as the strategic and systematic coordination of traditional business functions which facilitate the distribution network between customers, and the company's internal activities (Barraza et al, 2016). Changes in the distribution of supply chains are very dynamic, the things that affect it include direct customers and also announcements of new regulations (Bastas and Liyanage, 2018). From the statements that have been mentioned, the changes in the supply chain distribution are very dynamic, making the SCM topic will continue to evolve and continue to adapt as needed in an effort to provide better alternative solutions. For this reason, it is obligatory to know any new concepts in the discussion of SCM scientific concepts.

Supply chain practices greatly influence company or organizational performance. Competitive advantage shows that the supply chain is correct, because it includes supplier management, customer management, inventory management, distribution, development, and design of new products (Truong et al, 2016). SCM in manufacturing occupies a position that is widely studied by researchers compared to SCM in other fields. Of the 100 articles reviewed, 39% study SCM in manufacturing. However, it should also be noted that the facts show that in theory, SCM lags behind in developing its scientific base compared to other scientific disciplines (Durach et al, 2017). So that, a systematic review is needed to add theoretical shared insights in the field and sub- field of SCM science (Panigrahi & Bahinipati, 2019).

The supply chain network must be seen as a whole, which considers purchasing, production, inventory, distribution, logistics areas together, and is easy to reach. Where with the supply chain management can carry out all the tasks and planning involved in the purchasing and logistics process of the company. Supply chain networks can also facilitate coordination and relationships with partners both suppliers and customers (Grant, 2017). Locations that can influence customer orders such as marketing, new product development, and accounting are included in the supply

chain network. Parties involved in this process include suppliers, manufacturers, retailers, customers, warehouses, operators, and others. Data connectivity and integration of companies or organizations arise from technology, making the construction of supply chain networks consistent for companies (Radzhabova et al, 2019). The use of tools such as ERP (Enterprise Resoursce Planning) and optimization software is a solution in facilitating the ease of effective and efficient decision making in supply chain networks. This is because technology can store large amounts of company data. Use of this optimization software as a necessity for the development and innovation of a structured supply chain network. In the current 2020 era, it is certainly already being felt by some people especially young people who can buy products online through online shopping software applications and online transportation service applications (Panigrahi & Bahinipati, 2019).

The application has brought distribution chains from upstream to downstream. Producers who create a product can directly offer their products to end consumers or end users, so that transportation of products is not so much thought of by producers, because purchasing or ordering online involves shipping services that focus on moving in the shipping field. From all parties, both the producers, the shipping service, and the consumer all benefit from this system (Siomos, 2018). SCM has the aim to produce a service, a better product, and a minimum cost that cannot be separated from the discussion of distribution from upstream to downstream. All parties must feel disadvantaged, both producers, shipping services, and end consumers. The

development concepts of SCM, there are the terms Lean Supply Chain (LSC), Supply Chain Quality Management (SCQM), and Supply Chain Network Design. LSC serves to minimize costs and increase competitiveness. Its application includes addressing waste in the distribution chain, maximizing production and others. SCQM in its application there is the term internal dimension, namely quality management and external dimensions, namely the context of supply chain management. SSCM has a perspective in the form of environmental, social, economic, governance, and performance measurements. Then for supply chain network design is a technology that can support the development of SCM to realize connectivity and integration of distribution data (Panigrahi & Bahinipati, 2019).

Statement of the Problem

Green Supply Chain Management concept has been on increase all over the world due to consciousness and active role of the environmentalist from the 1980s and has gained momentum in the 1990s. The 1992 Earth Summit in Rio for instance, recorded governments and international organizations commitment to protect environment as part of long term economic development (Mehmet, 2012). Qinghua, et al., (2008) observed increasing globalization and shifting focus to competition promote acquisition of GSCM practices. The governments, organizations and more people are aware of the world"s environmental problems such as global warming, toxic substance usage, and decrease in non-renewable resources. GSCM entails involvement in activities that include reduction, recycling, reuse and the substitution of materials and management of solid waste. According to Eshikumo and Odock (2020), performance of cleaning companies in Kenya, particularly in Nairobi City County, has experienced a notable decline in performance in recent years. Also, according to Ahi and Searcy (2023), the market for cleaning services in Kenya has faced swelling competition, leading to downward pressure on prices and profit margins due to green supply chain management. In Nairobi, being the capital of Kenya, the demand for cleaning services is high due to the concentration of businesses, institutions, and residential areas, the decline in performance is more evident due to green supply chain management. Panigrahi and Bahinipati (2019), According to Kenya National Media Report, the performance of cleaning services has been deteriorating from 62% to 20% for the last 3-5 years ago. It is reported that improperly treated sewage and uncollected garbage have fueled a vicious cycle of water pollution, air pollution and environmental destruction. In Nairobi informal settlements, residents endure problems such as floods, and foul smell from garbage sites. Cleaning companies that fail to meet customer expectations struggle with retaining contracts, and this results in a further contraction of their market share (Ahi, & Searcy, 2023).

The cleaning services companies have lately expressed interest in the concept of Green Supply Chain Management (GSCM), joining the ranks of several other Kenyan industries. According to Ngigi and Busolo (2019), asserts that if a cleaning company fails to meet performance standards or breaches its contract, clients can seek various remedies, including verbal or written complaints, partial or full refunds, contract termination, and potentially legal action if damages are incurred. Also, Ongeri and Osoro (2021), they observed that unsatisfactory cleaning services can lead to client dissatisfaction, resulting in verbal or written complaints to the company. Poor performance can damage the cleaning company's reputation, leading to a loss of future business and difficulty in attracting new clients (Ambrose, 2021). Therefore, this study was done in the Kenyan context to bridge the research between green supply chain management and performance of cleaning companies in Kenya.

Objectives of the study

General Objective

The general objective was to establish the relationship between green supply chain management and performance of cleaning companies in Nairobi City County, Kenya.

Specific Objectives

i. To assess the effect of green purchasing on performance of cleaning companies in Nairobi City County, Kenya.

ii. To determine the effect of green marketing on performance of cleaning companies in Nairobi City County, Kenya.

LITERATURE REVIEW

Theoretical Review

Theory of Planned Behavior (TPB)

Theory of planned behavior was thought to be relevant in this study in order to understand the effect of green purchasing on performance of cleaning companies in Nairobi City county, Kenya, hence it gives a theoretical background of this study. The Theory of Planned Behavior (TPB) is a psychological framework that aims to explain how individuals make decisions and engage in specific behaviors. Developed by Ajzen, (1991), TPB expands upon the earlier Theory of Reasoned Action by incorporating the concept of perceived behavioral control. This addition recognizes that not all behaviors are under volitional control, allowing for a more comprehensive understanding of how intentions lead to actions (Munezero & Ndolo, 2022). At the core of TPB are three key components: attitude, subjective norm, and perceived behavioral control. Attitude refers to the individual's positive or negative evaluation of performing a particular behavior. This evaluation is shaped by beliefs about the outcomes of the behavior and the value placed on those outcomes. For example, if someone believes that exercising will improve their health and values good health, their attitude toward exercising will likely be positive (Anane, 2020).

Subjective norm involves the perceived social pressure to engage or not engage in a behavior. This component considers how individuals feel others view the behavior and how much they care about others' opinions (Njoroge, Mburu & Getuno, 2020). Perceived behavioral control refers to the individual's belief in their ability to perform the behavior. This concept acknowledges that external factors, such as resources and opportunities, can influence whether a person feels capable of acting. For instance, someone may want to exercise but feel constrained by time or lack of access to facilities, affecting their overall intention and likelihood to act (Obiso, *et al*, 2023). The Theory of Planned Behavior (TPB) operates on several key assumptions that underpin its framework. One primary assumption is that individuals are rational decision-makers who weigh the pros and cons of their actions based on available information. This rationality implies that intentions are formed through a cognitive process where attitudes, subjective norms, and perceived behavioral control are systematically evaluated (Sarhaye & Marendi, 2021). Another assumption is that intentions are the strongest predictors of actual behavior, suggesting a direct link between what people plan to do and what they ultimately do. Additionally, TPB assumes that the influence of these components is consistent across different contexts and populations, allowing for generalizability of its findings (Munezero & Ndolo, 2022).

Despite its strengths, TPB has faced several critiques. One significant critique is its reliance on rationality, which may oversimplify the complexities of human behavior. Critics argue that emotions, habits, and unconscious influences often play a more significant role in decision-making than TPB accounts for. Furthermore, the model may not fully capture the dynamic nature of behaviors, as intentions can be influenced by immediate circumstances or environmental factors that are not adequately addressed in the framework (Anane, 2020). Another critique pertains to the assumption that all relevant beliefs and influences are captured by the three main components. In reality, other factors—such as past behavior, personality traits, and situational variables—can also significantly impact decision-making and may not be

sufficiently integrated into TPB (Njoroge, Mburu & Getuno, 2020). Additionally, the model's focus on individual-level factors can overlook broader social, cultural, and structural influences that shape behavior. This limitation raises questions about the model's applicability in community-based interventions, where collective norms and systemic barriers often play crucial roles (Obiso, *et al*, 2023). This theory was relevant in assessing the effect of green purchasing on the performance of cleaning companies in Nairobi City County, Kenya.

Sustainable Consumption Theory

Sustainable Consumption Theory was thought to be relevant in this study in order to understand the effect of green marketing on performance of cleaning companies in Nairobi City county, Kenya, hence it gives a theoretical background of this study. Sustainable Consumption Theory explores the patterns and behaviors associated with the consumption of goods and services in a way that minimizes environmental impact while promoting social equity and economic viability. This theory emphasizes the need for consumers to make informed choices that reflect sustainability principles, recognizing that individual consumption decisions can significantly influence broader societal and environmental outcomes. It integrates concepts from ecology, economics, and sociology to understand how consumer behavior can shift towards more sustainable practices, such as reducing waste, choosing eco-friendly products, and supporting ethical brands (Amegbe, Owino & Nuwasiima, 2021). Central to Sustainable Consumption Theory is the idea that consumption is

not just an economic activity but a social practice influenced by cultural norms, values, and individual lifestyles. This perspective encourages a shift from viewing consumption purely in terms of utility and convenience to considering its ecological and social implications. By fostering awareness about the lifecycle of products, including their production, use, and disposal, the theory promotes the idea that consumers can play an active role in driving change through their purchasing choices (Azunwo, Ikechukwu & Eleke, 2020).

Moreover, Sustainable Consumption Theory recognizes the importance of systemic change alongside individual actions. It advocates for policies and initiatives that encourage sustainable production practices, enhance access to sustainable products, and create environments that support sustainable behaviors (Jeremiah & Bonke, 2023). This dual focus on individual agency and structural factors is crucial for achieving long-term sustainability goals, as it acknowledges that while consumer choices are important, they must be supported by broader societal changes and institutional frameworks. Ultimately, the theory serves as a guiding framework for understanding and promoting consumption practices that contribute to a more sustainable future for both people and the planet (Afande, 2020).

Sustainable Consumption Theory is based on several key assumptions that guide its framework and understanding of consumer behavior. One primary assumption is that consumers can be educated and motivated to make more sustainable choices that reduce their environmental impact. This perspective posits that increased awareness of ecological issues and the benefits of sustainable products can lead to a shift in consumer preferences (Shah, 2022). Additionally, the theory assumes that individual consumption decisions are influenced by cultural norms, values, and social contexts, suggesting that sustainability is not solely a personal responsibility but a collective endeavor shaped by societal influences (Amegbe, Owino & Nuwasiima, 2021).

However, Sustainable Consumption Theory has faced various critiques that highlight its limitations. One significant critique is the overemphasis on individual behavior as the primary driver of sustainability. Critics argue that this focus can overlook the systemic and structural factors that shape consumption patterns, such as economic conditions, corporate practices, and policy frameworks. By placing the burden of responsibility primarily on consumers, the theory may inadvertently absolve corporations and governments from addressing their roles in fostering unsustainable practices and perpetuating environmental harm (Azunwo, Ikechukwu
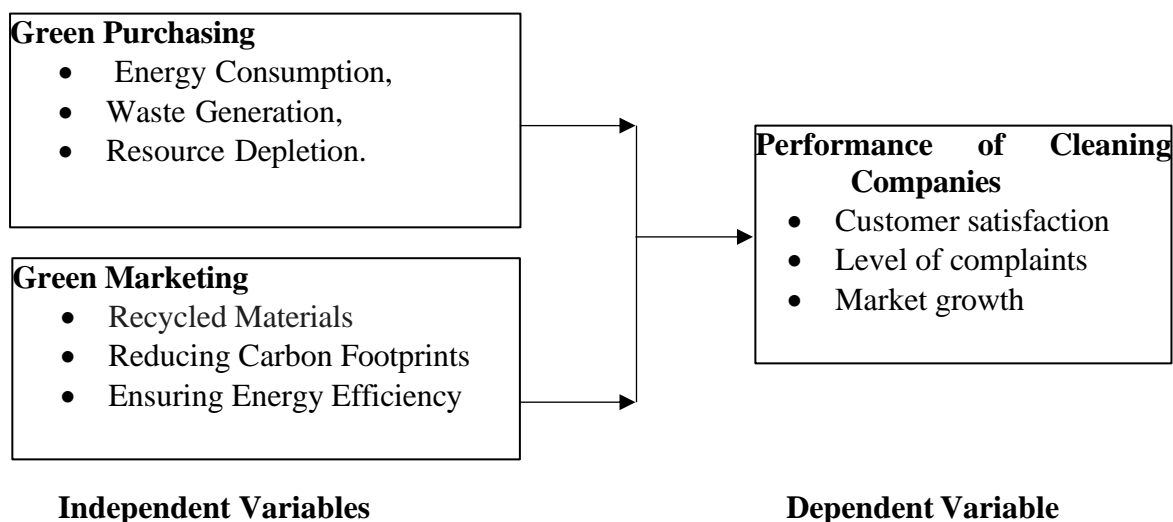
& Eleke, 2020). Another critique concerns the assumption that consumers have equal access to sustainable

options. In reality, disparities in socioeconomic status can significantly limit the choices available to individuals. For many, sustainable products may be perceived as more expensive or less accessible, creating a barrier to participation in sustainable consumption. This critique underscores the need for policies that promote equitable access to sustainable goods and services, ensuring that all consumers can participate in sustainable practices (Jeremiah & Bonke, 2023).

Additionally, the theory may not fully account for the complexities of consumer motivations, which can include convenience, status, and emotional factors. These motivations can sometimes overshadow environmental considerations, leading to contradictions in consumer behavior. For instance, a consumer may express a desire to be environmentally conscious but ultimately choose a less sustainable option due to convenience or social pressures. This complexity suggests that understanding sustainable consumption requires a more nuanced approach that integrates psychological, cultural, and economic factors (Afande, 2020). This theory was relevant in determining the effect of green marketing on the performance of cleaning companies in Nairobi City County, Kenya.

Conceptual Framework

A conceptual model is used to demonstrate the relationships of the variables in order to reinforce the research study. Thus, the primary goal of a conceptual model is to classify and explain the closely related concepts in study, demonstrating the relationship between them. The researcher may use a conceptual framework to describe the underlying research subject, show the scope of the investigation, categorize variables based on their relationships, and identify shortcomings in current literature. Figure 2.1 displays the dependent variable of the study, which is the Performance of Cleaning Companies. Green purchasing, and Green marketing are independent variable.

Green Purchasing
- Energy Consumption,
- Waste Generation,
- Resource Depletion.

Green Marketing
- Recycled Materials
- Reducing Carbon Footprints
- Ensuring Energy Efficiency

Performance of Cleaning Companies
- Customer satisfaction
- Level of complaints
- Market growth

Independent Variables　　　　　　　　　　　　　**Dependent Variable**

Figure 2. 1: Conceptual Framework

Green Purchasing

Green purchasing, also known as sustainable or environmentally responsible procurement, involves acquiring goods and services that minimize negative environmental impacts throughout their lifecycle, aligning with corporate social responsibility and addressing regulatory demands. Green purchasing is a procurement strategy that prioritizes environmentally friendly products and services, considering their entire life cycle, from raw

material extraction to disposal (Ongeri & Osoro, 2021). Key Aspects: Environmental Impact: Focuses on reducing the environmental footprint of procurement activities, including energy consumption, waste generation, and resource depletion. Sustainable Materials: Prioritizes materials that are renewable, recyclable, or have minimal environmental impact. Sustainable Processes: Chooses products and services produced using environmentally friendly processes and technologies. Supplier Selection: Evaluates suppliers based on their environmental performance and commitment to sustainability. Waste Reduction: Minimizes waste generation through efficient consumption, recycling, and responsible disposal. Transportation and Packaging: Opts for sustainable transportation methods and packaging materials that reduce environmental impact (Durach et al., 2017).

Benefits: Cost Savings: Sustainable procurement can lead to long-term cost savings through reduced energy consumption, waste disposal costs, and improved resource efficiency. Enhanced Reputation: Demonstrates a commitment to environmental responsibility, which can enhance an organization's reputation and attract environmentally conscious customers. Risk Management: Addresses potential environmental risks and liabilities associated with procurement activities (Ongeri & Osoro, 2021). Innovation: Drives innovation in sustainable products and processes, leading to more efficient and environmentally friendly solutions. Improved Supplier Relationships: Encourages collaboration with suppliers to improve environmental performance throughout the supply chain. Examples: Purchasing energy efficient office equipment. Using recycled paper and other materials. Choosing products with minimal packaging. Selecting suppliers with strong environmental policies. Implementing sustainable transportation practices. Relationship to Sustainable Procurement: Green purchasing is a core component of sustainable procurement, which also considers social and economic factors in addition to environmental ones (Durach et al., 2017).

Green purchasing, also known as environmentally responsible purchasing, refers to the practice of buying products and services that have a reduced impact on the environment. This approach

emphasizes the selection of goods that are made from sustainable materials, are energy-efficient, have lower emissions, and are recyclable or biodegradable (Sarhaye & Marendi, 2021). Eco-labels and certifications play a crucial role in guiding consumers and businesses toward environmentally friendly products. These labels signify that a product meets specific environmental standards and has undergone rigorous assessments. Examples include the ENERGY STAR label, which identifies energy-efficient appliances, and the Forest Stewardship Council (FSC) certification, which ensures that wood products come from responsibly managed forests. Other well-known certifications include the USDA Organic label, which indicates that agricultural products adhere to organic farming practices, and the Cradle to Cradle certification, which evaluates a product's safety, circularity, and sustainability. By choosing products with these labels, consumers can make informed decisions, supporting manufacturers committed to sustainable practices and encouraging a broader shift toward eco-friendly markets (Munezero & Ndolo, 2022).

Energy-efficient products are designed to use less energy while providing the same level of performance, making them a key component of green purchasing. These products range from household appliances, such as refrigerators and washing machines, to lighting options like LED bulbs. Energy efficiency not only helps reduce electricity bills for consumers but also contributes to a decrease in greenhouse gas emissions, as less energy consumption typically translates to lower fossil fuel usage. Many energy-efficient products are recognized by labels like energy star, which helps consumers identify the best options. By investing in these products, individuals and businesses can play an active role in reducing their environmental impact, promoting sustainability, and supporting the transition to cleaner energy sources (Anane, 2020).

Durable and long-lasting products are essential in the context of sustainable purchasing because they reduce waste and the need for frequent replacements. When consumers invest in high-quality, durable items—whether it's furniture, clothing, or Greens—they decrease the likelihood of contributing to landfill overflow and the environmental burden associated with manufacturing new products. Longevity often goes hand-in-hand with energy efficiency and resource conservation, as longer-lasting products typically require fewer resources over their lifetime. Brands that prioritize durability often emphasize sustainable materials and ethical manufacturing processes, reinforcing their commitment to environmental responsibility. By choosing products designed to last, consumers not only save money in the long run but also support a circular economy that values repair, reuse, and sustainability (Njoroge, Mburu & Getuno, 2020).

Green Marketing

Green marketing refers to the practice of developing and promoting products or services based on their environmental benefits. It involves sustainable and eco-friendly initiatives such as using recycled materials, reducing carbon footprints, and ensuring energy efficiency (Ongeri & Osoro, 2021). Key Aspects: Sustainability: Focusing on products and services that meet current needs without compromising the ability of future generations to meet their own needs. Environmental Impact: Considering the environmental consequences of purchasing decisions, such as energy consumption, waste generation, and resource depletion. Life Cycle Assessment: Evaluating the environmental impact of a product or service across its entire life cycle, from cradle to grave. Supplier Selection: Choosing suppliers who demonstrate a commitment to environmental sustainability and ethical practices (Bastas & Liyanage, 2018).

Benefits: Reduced Environmental Impact: Minimizing the negative effects of procurement activities on the environment (Ongeri & Osoro, 2021). Cost Savings: Implementing sustainable practices can lead to reduced energy consumption, waste, and resource use, potentially lowering costs. Improved Reputation: Demonstrating a commitment to sustainability can enhance an organization's reputation and attract environmentally conscious customers and stakeholders. Innovation: Green procurement can drive innovation in product design, manufacturing processes, and supply chain management. Green marketing refers to the strategies and practices used by companies to promote products or services based on their environmental benefits. Green marketing in procurement involves prioritizing and selecting products and services that minimize environmental impact throughout their lifecycle, from raw material extraction to disposal (Bastas & Liyanage, 2018).

This approach emphasizes sustainability, eco-friendliness, and ethical practices in the marketing of goods (Amegbe, Owino & Nuwasiima, 2021). Certifications and eco-labels play a vital role in guiding consumers toward sustainable choices and fostering transparency in the marketplace. Recognized labels, such as ENERGY STAR, Fair Trade, and the Forest Stewardship Council (FSC) certification, indicate that products meet specific environmental and ethical standards. For instance, the ENERGY STAR label identifies energy-efficient appliances, while the FSC certification ensures that wood and paper products come from responsibly managed forests. Other notable eco-labels include USDA Organic, which certifies organic agricultural practices, and Cradle to Cradle, which evaluates product sustainability across various criteria. These certifications help consumers make informed purchasing decisions, as they provide assurance that a product adheres to stringent environmental criteria. By leveraging these certifications, companies can enhance their credibility and appeal to a growing market segment that prioritizes sustainability (Azunwo, Ikechukwu & Eleke, 2020).

Corporate sustainability initiatives encompass a broad range of practices that companies implement to reduce their environmental impact and promote social responsibility. These initiatives often include setting measurable goals for reducing carbon emissions, conserving

water, and minimizing waste. Companies may also invest in renewable energy sources, such as solar or wind power, to power their operations sustainably. Additionally, many organizations focus on enhancing supply chain sustainability by working with suppliers who adhere to ethical and environmentally friendly practices. Engaging employees and stakeholders in sustainability efforts through training and community involvement further strengthens these initiatives. By adopting comprehensive corporate sustainability strategies, companies can not only improve their operational efficiency but also enhance their brand reputation, attract environmentally conscious consumers, and contribute positively to society and the environment (Afande, 2020).

Performance of Cleaning Companies

In procurement, the performance of cleaning companies refers to the extent to which they meet the defined requirements and objectives of the organization, including quality, cost, and timeliness of services provided, as well as adherence to contract terms and standards (Chakraborty & Gonzalez, 2018). Quality of Cleaning: This encompasses the thoroughness, cleanliness, and hygiene standards achieved by the cleaning company, as well as the use of appropriate cleaning products and equipment. Cost-Effectiveness: This involves achieving the desired cleaning outcomes within the agreed-upon budget and ensuring efficient resource utilization. Timeliness and Reliability: The cleaning company's ability to deliver services on schedule and consistently, as well as their responsiveness to any issues or requests. Adherence to Contract Terms: This includes meeting all obligations outlined in the contract, such as frequency of cleaning, specific tasks, and safety protocols (Siomos, 2018).

Customer Satisfaction: The overall experience and satisfaction of the end-users with the cleaning services provided. Measuring Performance: Key Performance Indicators (KPIs): These are specific metrics used to track and assess the performance of cleaning companies, such as cost per square foot, labor hour productivity, customer ratings, and ATP testing. Regular Audits and Inspections: These help to ensure that the cleaning company is meeting the required standards and identify areas for improvement (Chakraborty & Gonzalez, 2018). Feedback and Surveys: Collecting feedback from end-users can provide valuable insights into the quality and effectiveness of the cleaning services. Importance of Performance Assessment: Ensuring Value for Money: Performance assessment helps to ensure that the organization is getting the best value for its investment in cleaning services. Identifying Areas for Improvement: By tracking performance, organizations can identify areas where cleaning services can be improved and optimized. Building Strong Relationships: A focus on performance assessment can help to build strong and mutually beneficial relationships with cleaning companies. Improving Operational Efficiency: By optimizing cleaning processes and ensuring that services are delivered effectively, organizations can improve overall operational efficiency (Siomos, 2018).

A cleaning company is a business that provides cleaning services to residential, commercial, or industrial clients (Karanja, 2019). These services can range from routine housekeeping, carpet and upholstery cleaning, window washing, office cleaning, and specialized services such as deep cleaning, post-construction cleaning, and eco-friendly cleaning solutions. Cleaning companies may offer one-time services or recurring contracts, with some focusing on specific industries like healthcare, hospitality, or retail. They typically employ skilled workers and use professional-grade cleaning tools and supplies to ensure high standards of cleanliness and hygiene (Jeremiah, & Bonke, 2023).

Performance refers to the ability of an individual, organization, or system to achieve specific goals or outcomes, often within a set of defined standards or expectations. It encompasses how effectively tasks or functions are carried out and is typically measured against predetermined criteria or benchmarks. In a business context, performance is often assessed through various indicators such as financial results, customer satisfaction, productivity, efficiency, and overall success in achieving strategic objectives (Muthoni, & Kirima, 2018). For example, in a

cleaning company, performance can be evaluated based on the quality of service provided, customer feedback, client retention rates, market growth, and operational efficiency. High performance means meeting or exceeding the expectations of stakeholders, including customers, employees, and shareholders (Musau, 2021).

The performance of cleaning companies is crucial in determining their success and longevity in a competitive market. One of the most significant aspects of performance is customer satisfaction (Mwakaje, 2019). The quality of cleaning, attention to detail, reliability, and professionalism are essential factors in ensuring that customers are happy with the service. Companies that provide consistent, thorough cleaning services and are responsive to customer feedback often enjoy repeat business and positive referrals, which directly impact their growth. Moreover, customer satisfaction is not just about the result; it's also about the experience, including punctuality, communication, and ease of scheduling. Satisfied customers are more likely to return for future services and recommend the company to others (Ngatia, Osoro, & Nyang'au, 2024).

Another key measure of performance is client retention and repeat business. A cleaning company that fosters long-term relationships with clients, whether through recurring contracts or continuous engagement, is typically more successful. When a company consistently meets or exceeds expectations, clients are more likely to rehire them for regular cleanings or specialized services. A high client retention rate not only secures a steady stream of income but also boosts the company's reputation and market position. Furthermore, loyal clients may expand their service requests or refer the company to others, thereby increasing the customer base and enhancing performance (Obiso, *et al*, 2023).

Market share growth is also an important indicator of performance for cleaning companies. As businesses expand their client base, develop a reputation for reliability, and diversify their service offerings, they increase their market share. This growth can result from geographical expansion, entering new industries, or adopting innovative cleaning technologies (Rao, 2022). For example, cleaning companies that adopt eco-friendly practices or use advanced equipment like robotic cleaners may attract a broader audience, positioning themselves as leaders in their sector. Competitive pricing, effective marketing, and a strong brand identity also play roles in expanding a company's footprint and growing its market share (Pagell, & Wu, 2019).

Empirical Review

Green Purchasing and Performance of Cleaning Services

A green procurement or green purchasing policy (GPP) is put in place to guide businesses when acquiring materials, supplies and services and selecting such products based on their impact on the environment and human health. Munezero and Ndolo (2022), they observed that GPPs can apply to both products bought to run the business internally (Ex. office supplies and equipment) as well as for producing the goods and services of the business itself (Ex. materials used in business products). Green purchases are those that have a low environmental impact and are more sustainable in terms of the materials they're made from and the sourcing and manufacturing practices that make them. Green procurement also considers the immediate and future impacts of purchases through their consumption and eventual end-of-life stage. Green procurement policies embody the triple bottom line (TBL), a business framework for improving performance in all three areas – environmental, social, and financial**.**

Munezero and Ndolo (2022) examined on the influence of green purchasing on performance of cleaning companies in Rwanda. Using a descriptive research design, the study obtained a sample of 119 respondents from a target population of 238 through stratified random sampling. The study found that green purchasing was statistically significant in enhancing the performance of cleaning companies in Rwanda. The study concluded that green purchasing had significant positive relationship with performance of cleaning companies in Rwanda. Anane

(2020) assessed on the influence of green purchasing on performance of cleaning companies. Ghana water company ltd. and Bayport savings and loans Plc as point of convergence. This study employed a quantitative research approach; a structured questionnaire was used to solicit primary data from 160 staffs of both Ghana Water Co. Ltd and Bayport Savings and Loans Plc. The study found that green purchasing has a significant effect on performance of cleaning companies. The study concluded that there is no clear distinctiveness between green purchasing in both Ghana Water Co. Ltd. and Bayport Savings and Loans Plc in terms of performance, supplier collaboration and challenges.

Njoroge, Mburu and Getuno (2020) investigated on the effect of green purchasing on performance of cleaning companies in Kenya. The target population of the study was 168 cleaning companies. The study adopted a descriptive research design where a sample of 118 cleaning companies was considered. The study found that green purchasing had positive and statistically significant effect on performance of cleaning companies. The study concluded that green purchasing actors had positive and significant effect on performance of cleaning companies. Obiso, *et al* (2023) researched on the influence of green purchasing on performance of private oil and gas firms in Kenya: moderating role of government regulations. The research utilized a descriptive design. Target population was one thousand eight hundred and fifty employees working for the seventy- two private oil and gas firms in Kenya. The study found that green purchasing bore a positive and significant influence on firm performance. The study concluded that private oil and gas firms should invest in green purchasing to enhance performance.

Sarhaye and Marendi (2021) Buying sustainable products and purchasing from green suppliers and vendors promotes resource efficiency. Often GPPs instruct businesses to purchase products that consume less resources such as energy efficient light bulbs or low-flow faucets. Further, purchasing from a supplier who offers products with eco-friendly packaging or no packaging at all reduces your waste stream. These improvements in efficiency translate into cost savings for your business and resource conservation at large which is a win all the way around. Having a GPP in place also improves operational efficiency as it provides your team with clear guidance on which green products to look for across all areas of your business. Providing detailed information on your GPP requirements and product standards makes it easy for your business to make credible green purchases quickly and confidently

Green Marketing and Performance of Cleaning Services

Green marketing also referred to as eco-marketing or environmental marketing, is the practice of promoting a company's products to demonstrate their sustainability. This 360-degree approach is based on what is popularly known as the four R's: Reduce, Reuse, Recycle and Recover. The 3Ps of sustainability are a well-known and accepted business concept. The Ps refer to People, Planet, and Profit, also often referred to as the triple bottom line. Sustainability has the role of protecting and maximizing the benefit of the 3Ps. Green marketing is the practice of promoting products or services that are environmentally friendly or have a positive impact on the planet. Amegbe, Owino and Nuwasiima (2021), it involves incorporating sustainability principles into various aspects of marketing, such as product design, packaging, messaging, and promotion. Some green marketing strategies include: Creating eco-friendly products Using eco-friendly product packaging made from recycled materials. Reducing greenhouse gas emissions from production processes. Adopting sustainable business practices.

Marketing efforts communicating a product's environmental benefits. Investing profits in renewable energy or carbon offset efforts. Green marketing is becoming more popular as more people become concerned with environmental issues. Indeed, in 2020, more than three quarters of consumers (77%) cited a brand's sustainability and environmental responsibility as very important or moderately important in their choice of brands. While green marketing can be

more expensive than traditional marketing messages and practices, but it can also be profitable due to increasing demand (Azunwo et al., 2020). For example, products made locally in North America tend to be more expensive than those made overseas using cheap labor, but local sourcing and supply chain means they have a much smaller carbon footprint than goods flown in from overseas. For some consumers and business owners, the environmental benefit outweighs the price difference.

Amegbe, Owino and Nuwasiima (2021) Green marketing is one component of a broader movement toward socially and environmentally conscious business practices. Increasingly, consumers have come to expect companies to demonstrate their commitment to improving their operations alongside various environmental, social, and governance (ESG) criteria. To that end, many companies will distribute social impact statements on an ongoing basis, in which they periodically self-report their progress toward these goals. examined on the green marketing orientation (GMO) and performance of SMEs in Ghana. All the owners/mangers of various industries (SMEs) operating in the cities of Accra and Tema in the Greater Accra region of Ghana, that is, 128, were contacted using census method. The study found that there exists a strong relationship between green orientation employee satisfaction, green orientation customer satisfaction, green orientation employee retention and green orientation time. The study concluded that all the dimensions of the GMO scale have positive and significant impacts on performance of the firm.

Azunwo, Ikechukwu and Eleke (2020) researched on green marketing practices and organizational sustainability in corporate firms in Rivers State. The study adopted a descriptive and quantitative design. The study used a structured questionnaire to obtain data from 162 marketing managers and brand ambassador of different organization in Rivers state. The study found that there is a significant relationship between green marketing practices and consumer choice of product in corporate firms in Rivers state. The study concluded that green marketing practices influence organizational sustainability in corporate firms in Rivers State.

Jeremiah and Bonke (2023) conducted a study on the effect of green marketing practices on environmental performance: an empirical investigation in Kisumu Water and Sewerage Company in Kenya. The study population constituted 181 employees of KIWASCO, out, of which a sample of 25 respondents was drawn using a proportionate stratified sampling technique. The study found that dimensions of sustainable green products and sustainable distribution both had significant positive influence on environmental performance at KIWASCO. The study concluded that both green products and green distribution practices are all critical antecedents of environmental performance.

Afande (2020), observed that some brands and marketers have attempted to capitalize on consumer demand for environmental consciousness by taking a green marketing approach to products or services that are not necessarily green or sustainable. This practice is known as "greenwashing." Some popular examples of greenwashing include: Employing unregulated terms like "green" or "natural" to describe products. Using the color green or environmental symbols like leaves or trees on packaging. Promoting misleading studies or statistics to support an eco-marketing message. Portraying cost-cutting measures as motivated by environmental sustainability. Using greenwashing to falsely market your products as environmentally conscious is not only misleading to consumers: it can also be hazardous to a company's health. For example, following its 2015 scandal involving falsified emissions reports for its vehicle, Volkswagen's stock price tumbled more than 50 percent—and took six years to completely recover.

RESEARCH METHODOLOGY

This study used a descriptive research design. Mugenda and Mugenda (2008) explained the descriptive design is a process of collecting data in order to test a hypothesis or to answer the

questions of the current status of the subject under study. Target population was 630 respondents meaning the entire set of individuals (or objects) having the same characteristics as pointed out in the sampling criteria used for the study (Bryman, 2019). The target population makes a part of the universal population (Creswell, 2018). The unit of analysis is what is being targeted in the research. The study's target population included the senior officers from procurement, marketing, finance, human resources, administration and estate managers from all cleaning companies in Nairobi City County. According to KRA (2023), the total number of registered cleaning companies in Nairobi City County is 105. The total target population was therefore 630 respondents.

The study's sample size was reached at using Krejcie and Morgan sample size determination formula (Russell, 2019). Using this formula, a representative sample was obtained. The 239 respondents were chosen with the help of stratified random sampling technique. Stratified random sampling technique was used since the population of interest was and sub-divided into groups or strata to obtain a representative sample. This sampling technique divides the population into stratus. The strata are reached upon on the basis of the shared traits (Singpurwalla, 2017). One of the advantages of stratified random sampling techniques was to allow equity representation from each strata (Bryman & Cramer, 2018). The study then used simple random sampling to select respondents from each group.

Primary data was used in this study. Data analysis was done with the help of Statistical Package for Social Sciences (SPSS) version 28. To summarize the respondent's responses in relation to their views on the various aspects of the variables, and the respondents' demographic information analysis was undertaken using descriptive statistics (Bhattacherjee, 2019). Multiple regression analysis in research is a statistical technique used to examine the relationship between a dependent variable and multiple independent variables, allowing researchers to predict outcomes and understand the influence of various factors

RESEARCH FINDINGS AND DISCUSSION

Out of 215 questionnaires that were circulated to the respondents, 174 (81%) of the respondents dully filled and retuned questionnaires; yielding a good response rate. This was considered to be a very reliable response rate for the generalization of study findings is in line with Sharma (2018), states that a response rate of 70% and above is believed to be a reliable response rate. This was less 24 (10%) respondents who were pilot tested.

Descriptive Statistics

In this section, the study presents findings on Likert scale questions on the role of Green supply chain practices and performance of Cleaning companies in Nairobi, Kenya. The study specifically presents the effect of green purchasing and green marketing on performance of Cleaning companies in Nairobi County, Kenya. Respondents were asked to use a 5-point Likert scale where 5 (SA) = Strongly Agree, 4(A) = Agree, 3(UD) = undecided, 2 (D) = Disagree, and 1(SD) = Strongly Disagree. Results obtained were interpreted using means and standard deviations where a mean value of 1-1.4 was interpreted as strongly disagree, 1.5-2.4 disagree, 2.5-3.4 neutral, 3.5-4.4 agree and 4.5-5 strongly agree.

Green Purchasing

Respondents were requested to give their responses in regard to Green purchasing in a five point Likert sale where SA=Strongly Agree, A=Agree, N= Neutral, D=Disagree, and SD= Strongly Disagree. Results obtained were presented in Table 4.7 below:

Respondents were requested to give their opinion on the variable Green purchasing. From table 1, the respondents unanimously agreed that Energy consumption ensured performance of Cleaning services in Nairobi City County, Kenya (M=3.374, SD=1.064); More energy consumption assessments like use of electric equipment affects the performance of cleaning

companies in Nairobi City County, Kenya (M=3.813, SD=.9202); waste generation assessment has contribution to the quality and innovation and likewise to the performance of cleaning companies in Nairobi, city (M=3.903, SD=.9307); More wastes generated from cleaning operations affects the performance of cleaning companies(M=4.060, SD=.07950).

Resource depletion can affect the performance of cleaning services in Nairobi City County, Kenya (M=3.840, SD=1.306); Excessive resource depletion affects the performance of cleaning companies (M=3.565, SD=.8016). These outcomes concur with the discoveries of Nyile *et al.* (2022) who observed that clear description of Green purchasing, can enhance effective performance of cleaning services in Nairobi City County.

Table 1: Green Purchasing

Statement	Mean	Std. Dev.
Energy consumption can affect the performance of cleaning	3.374	1.064
More Energy consumption can affect performance of		
services in Nairobi City County	3.813	.9202
Waste generation has contribution to performance	3.903	.9307
of cleaning services County		
More waste generation has effect on performance	4.060	.7950
Resource depletion has effect on performances of cleaning services	3.840	1.306
More resource depletion has effect on performance		
of cleaning services in Nairobi City County	3.565	.8016

Green Marketing

Respondents were asked to give their responses in regard to Green marketing on performance of cleaning services in Nairobi City County, Kenya i.e. 5 point likert sale where SA=Strongly Agree, A=Agree, N= Neutral, D=Disagree, and SD= Strongly Disagree. Respondents were requested to give their opinion on the variable Green marketing. From table 2, the respondents unanimously agreed that recycled materials in marketing has a direct influence of the performance of Cleaning services in Nairobi City County, Kenya (M=4.338, SD=.7306); More recycling of marketing materials like use banners from recycled materials has an effects on the performance of cleaning companies in Nairobi City County, Kenya (M=4.094, SD=.17406); carbon foot prints has some contribution to the performance of cleaning companies in Nairobi, city (M=4.013, SD=.71740); more carbon foot print to the environment has an effect on the performance of cleaning companies(M=3.926, SD=.17405).Energy efficient items have an effect on the performance of cleaning services in Nairobi City County, Kenya (M=4.108, SD=0.8054); More energy efficient marketing items have an effect on the performance of cleaning companies (M=4.084, SD=.8157). These results are in agreement with the result of Nyile *et al.* (2022) who observed that the characteristic of Green marketing are the best value reaction to sort out non-performance of, after Green marketing, for resolving return on investment. The problem areas giving rise to disputes are mainly related to Cleaning County's matters.

Table 2: Green Marketing

Statement	Mean	Std. Dev.
Recycled materials can affect the performance of cleaning	4.338	.7306
More recycled materials can affect performance of		
services in Nairobi City County	4.094	.17406

carbon footprints have contribution to performance of cleaning services County	4.013	.71740
More carbon foot print has effect on performance	3.926	.17405
Energy efficiency has effect on performances of cleaning services	4.108	.8054
More energy efficiency has effect on performance of cleaning services in Nairobi City County	4.084	.8157

Performance of Cleaning Services in Nairobi City County

Respondents gave their level of agreement on various statements relating with performance of cleaning services in Nairobi City County, Kenya. The results were as presented in Table3. From the findings, respondents were in agreement that performance of Cleaning services in Nairobi City County, Kenya is being affect by non -improvement of complaints by 52.2%. 70.6% of the respondents suggested that Non-attention to the level of complaints from clients affects the performance of cleaning companies.56% of the respondents agreed that non-improvement of the market share has an effect on performance cleaning companies .69.7% agreed that non growth of market share affects performance of cleaning companies.57.8% concurred that customer satisfaction is directly related to performance of cleaning companies and likewise not addressing customer satisfaction issues affects the performance of cleaning companies. The discoveries is in line with the discoveries of Mutai and Osoro (2021) they observed that some of the factors that contribute to inefficiency in public as corruption, delayed payments, poor planning, statutory amendments, insufficient use supplier evaluation low public participation, and improper payment procedures negatively affects performance of Cleaning services in Nairobi City County, Kenya.

Table 3: Performance of Cleaning Services

Statements	Yes (%)	No (%)
Non improvement of complaints can affect performance of Cleaning services in Nairobi City County, Kenya	52.2	47.8
Non-attention to level of complaints can affects performance of Cleaning services in Nairobi City County, Kenya	70.6	26.4
Non-improvement of market share can affect performance of Cleaning services in Nairobi City County, Kenya	56	44
Non-growth of market share can affect performance of Cleaning services in Nairobi City County, Kenya	69.7	31.3
Improvement of customer satisfaction affects performance of Cleaning services in Nairobi City County, Kenya	42.2	57.8
Non-customer satisfaction can affect performance of Cleaning services in Nairobi City, Kenya	74.1	25.9

Pearson Correlation Analysis

The study further conducted inferential statistics entailing both Pearson and regression analysis with a view to determine both the nature and respective strengths of associations between the conceptualized predictors such as Green purchasing and Green marketing and performance of Cleaning services in Nairobi City County, Kenya.

Table 4: Correlation Coefficients

		Performance	Green purchasing	Green marketing
Performance Cleaning services	Pearson correlation	1		
	Sig. (2-tailed)			

Green purchasing	Pearson correlation	.331[*] 174*	1	
	N.			
	Sig. (2-tailed)	.000		
Green market.	Pearson correlation	.421[*] 174*	.240 174	1
	N			
	Sig. (2-tailed)	.000	.038 174	174

From the findings, a positive correlation is seen between each variable and performance. Green marketing and performance of Cleaning County (r = 0.421). while Green marketing and performance of Cleaning services in Nairobi City County, Kenya were found to be strongly and positively correlating with performance of Cleaning services in Nairobi City County, Kenya correlation coefficient of 0.421. This is tandem with the outcomes of Ongeri and Osoro (2021), who observed that all independent variables were found to have a statistically significant association with the dependent variable at over 0.05 level of confidence.

Regression Analysis

To establish the degree of the effect of cleaning services for a regression analysis was conducted, with the assumption that: variables are normally distributed to avoid distortion of associations and significance tests, which was achieved as outliers were not identified; a linear relationship between the independent variables and dependent variable for accuracy of estimation, which was achieved as the standardized coefficients were used in interpretation.

Table 5: Regression coefficient Results

	Unstandardized coefficients		Standardized Coefficients	T	Sig.
	B	**Std. Error**	**Beta**		
(constant)	-.134	.060	-1.144	.004	.003
Green Purchasing	.471	.132	.858	5.472	.002
Green market	.266	.115	.321	2.657	.003

a. Predictors: (constants), Green purchasing, Green marketing

b. Dependent Variable: performance of Cleaning services in Nairobi City County, Kenya

A unit change in green purchasing would lead to a .471 effect on performance of Cleaning services in Nairobi City County, Kenya sector ceteris paribus; while a unit change in Green marketing would have an effect of .266 change in performance of Cleaning services of Cleaning County; This outcome is in line with the results of Ongeri and Osoro (2021). This implies that among other factors, Green purchasing, and   Green marketing are significant determinants of performance of cleaning services in Nairobi City County, Kenya.

Conclusion

Green Purchasing

The study concludes that there is a positive relationship between Green purchasing performance of cleaning services in Nairobi City County, Kenya. The study further concludes that by implementing Green purchasing through the use of energy efficient machinery, proper generation of wastes and disposal of the said wastes and the sustainable utilization of the resources the performance of Cleaning services in Nairobi City County, Kenya, is enhanced. Improved operational efficiency and effectiveness in cleaning operations through effective use of accessories and detergents enhances quality services provided by cleaning companies in Nairobi City County, Kenya.

Green Marketing

The study concludes that there is a positive relationship between Green marketing and performance of cleaning services in Nairobi City County. Partnership enforcement policy, collective bargaining, alternative dispute resolution processes, free expression of concerns by involved practices are among the coordination   factors that significantly influenced the performance of cleaning services in Nairobi City County, Kenya. The study further concludes that by adopting alternative coordination and partnership mechanisms as it was observed at Cleaning services in the level of performance of cleaning services has increased. Therefore, the study concludes that cleaning services in Nairobi City County, Kenya has been experiencing significant increase in service delivery, reduction in customer complaints and increased market growth through embracing proper green marketing in the cleaning services brand enhancement.

Recommendations

Green Purchasing

The study recommends that Green purchasing, which is a major component of green supply chain management should be adopted in cleaning companies in Nairobi city county. The focus on selecting products and services that have lower environmental impact, sourcing from vendors who have a keen interest in sustainability issues to include ethical labour practices, avoidance of resource depletion and management of wastes generated through reuse, repurpose and recycling is key in the improvement of the performance of cleaning companies in Nairobi City county. Supplier collaborations and partnership engagements in efforts of enriching the environments through prudent means of resource harvesting and consumption. It's recommended that cleaning companies should work with products for example detergents that are environmental friendly and animal friendly to avoid depletion of the ecosystem. Cleaning companies should prioritize energy efficient cleaning equipment and services to reduce energy consumption and associated emissions. Cleaning company suppliers, should be transparent and be ready to learn on gathering sufficient information on green purchasing and other emerging sustainability efforts to improve the performance in terms of market growth.

Green Marketing

This study recommends that Green marketing had a strong relationship with performance of cleaning services in Nairobi City County, Kenya. The development and promotion of products and services that minimizes environmental impact have a great significance in the performance of cleaning companies in Nairobi, Kenya.

Consumer education in the adoption of sustainable services and goods and the making of informed choices on environmental friendly goods consumption has a key benefit in enhancing market growth of cleaning companies in Nairobi county. It was recommended that brands and institutions that have integrated   green marketing to include green branding, green pitching, green brand awareness had major customer satisfaction index. Therefore, this study recommends to the management of cleaning services in Nairobi City County, Kenya to enhance and upgrade on the implementation of all applicable alternative green marketing strategies in the reduction of level of complaints to cleaning services stakeholders.

Areas for Further Studies

This study focused on Green purchasing, and Green marketing and performance of   cleaning services in Nairobi City County, Kenya. The study therefore recommends a further study to be conducted to other counties in Kenya. Then get their findings and compare with this and agree or disagree. The study also recommends replication of the study in other sectors such as manufacturing and hospitality to allow comparison of research findings. Future researchers can investigate the factors affecting cleaning services, some of the best practices to adopt in green supply chain in order to increase the performance of cleaning services in Kenya.

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