

Green management and effectiveness of beverage firms in Aba, Abia State

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Abstract

The study investigates green management and effectiveness of beverage firms in Aba. The objectives of the study were to evaluate the level of correlation between pollution control and customer satisfaction; pollution control and employee retention; and to examine the level of correlation between waste management and backward integration in beverage firms in Aba. The study was guided by three research objectives, three research questions and three hypotheses. Empirical reviews were used to beef up the study. The researchers employed the survey research design in the research. A five-point Likert Scale structured questionnaire was the major instrument for data collection. The validity of the instrument was done by showing the questionnaire to research experts for their corrections and inputs. Cronbach Alpha statistic was used for obtaining 0.79 as the reliability ratio of the survey instrument. Data analysis was committed to descriptive statistics of mean and standard deviation. Correlation analysis was used to test hypotheses. It was found that there is a significant level of correlation between pollution control and customer satisfaction; there is significant level of correlation between pollution control and employee retention; there is a significant level of correlation between waste management and backward integration in beverage firms in Aba. It was concluded that green management improved the effectiveness of beverage firms in Aba. The study recommended that management of beverage firms should make more efforts to control all forms of pollution in the enterprises for improved customer satisfaction. Management should always work harder to achieve higher degrees of employee retention with the instrumentality of green management. Waste to wealth strategy should be employed by beverage firms for improved business effectiveness.

Keywords: Green management, Effectiveness, Beverage, Pollution control, Waste management.

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1. Introduction

Background of the Study

Any business organization that desires sound effectiveness no doubt sees sustainability as its watchword. This is the central focus of green management. Green management as a concept has been widely discussed by researchers especially in recent times (Njoku, Udo-Orji and Anyanwu, 2023). Sah (2023) in Njoku et al (2023) opines that green management is a way of applying environmental considerations into corporate decision-making procedure or process. It pays great attention to adopting sustainability in the conduct of business and its practices with a view to curbing unfavourable and bad impacts on the environment while conserving resources and encouraging eco-friendly business practices. Elshaer, Azazz and Fayyad (2023) are of the view that green

management focuses on conscious and intentional prevention of pollution, waste and emissions.

This research focuses on pollution control and waste management aspects of green management. Pollution is generally seen as a situation whereby harmful substances are introduced into the environment. Nathanson (2023) maintains that pollution can be air, water or land pollution. This agrees with the position of Robb (2021) who asserts that pollution is the consequence of contaminating the air, water and/or land with various kinds of materials. These materials can be chemicals; they may be trash or other substances. The WHO (2023) describes air pollution as that health threat that is quite invisible and it is a public health emergency. WHO reveals that air pollution is just less fatal than

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hypertension and the smoking of tobacco in addition to the dangers of high glucose. Nathanson (2023) sees land pollution as a situation whereby solid or liquid waste items are deposited on land or even underground in a harmful manner capable of contaminating the soil and groundwater while posing a threat to public health and leading to nuisances and creation of eye sores and/or unsightly conditions. In the same vein, water pollution, according to Denchak (2023) occurs when harmful substances contaminate water bodies thereby causing it to be toxic to human beings or the environment.

Pollution control has become a major environmental and green management issue in Nigeria. Efforts have been observed to have been made by different key players in the national economy to control pollution in Nigeria. Pollution control represents the reduction or elimination of the release of harmful substances into the environment (Smarter, 2023). Olugbode (2023) reveals that the Federal Government of Nigeria has introduced the National Generator Emission Control Programme (NGECP) as well as the National Vehicular Emission Control Programme (NVECP) for the purpose of combating air pollution in the nation. Ayeyemi (2023) reveals that in Nigeria, there are attempts to ban the use of plastics hence the meeting of various stakeholders in Lagos for the purpose of reviewing the draft National Environmental (Plastic waste Control) Regulation, 2023. Also, Odeniyi (2023) maintains that the 51.35% of Hydro chlorofluorocarbons consumption would be phased out by the end of 2023 hence they are chemical compounds which the foam, refrigerator and air conditioning sectors use and they destroy the protective ozone layer while contributing to climate change. Indeed, Akindele (2022) opines that businesses, individual persons, communities and governments have roles to play in fighting pollution in the environment. Pollution is dangerous to business. In fact, Tiamiyu (2023) opines that polluting with plastic wastes adversely affects tourism activities and the entire economic sectors of the Nigerian economy.

Another index of green management which this study evaluates is waste management. The general idea of waste management is the disposal of wastes, reducing of wastes, reusing of wastes and preventing of wastes. Tayo (2023) in Njoku et al (2023) reports that one of the most significant problems facing the Giant of Africa is the problem of waste management. The Africa's biggest economy, according to Tayo (2023) generates per annum, thirty-two million tonnes of solid waste. An insignificant percentage of the waste generated in Nigeria is recycled. Allen-Taylor (2023) describes waste disposal in the Africa's largest economy (Nigeria) as a mess. Nigeria lacks accurate and documented data over the quality of waste she generates. This is despite the fact that the Nigerian National Municipal Waste Management Policy has the capacity for managing wastes efficiently in Nigeria. It is however worrisome that waste management in Nigeria is yet to be managed in a way that showcases sustainability. Nkwocha, Phil-

Eze, Shettima, Ihekumere and Zulum (2023) reveal that the management of solid waste in the South-Eastern part of Nigeria is not adequate hence there are infrastructural gaps and inappropriate water disposal practices in addition to poor public awareness. Its waste management policies to remain alive instead of doing away with them. Idowu-Adegoke and Beinisch (2023) maintain that President Tinubu suspended a ten per cent tax plan in the form of green taxation on plastics used once known as single-use plastics which former Nigerian Leader Mr Buhari introduced in fifth month of 2023 as he was about leaving office; a development seen by environmental groups as unfortunate. Worrisome situations of this kind may have prompted institutions like the Nigerian Institute of Town Planners to call on the public authorities to create a plan with the objective of receiving and managing of plastic waste in Nigeria as revealed by Ogundeji (2023) in Njoku et al (2023).

Waste management has become so serious in Nigeria that different groups have started creating waste management awareness in critical Nigerian cities. Mojeed (2023) opines that the staff of the Center for Journalism Innovation and Development (CJID) in collaboration with other entities on World Cleanup Day, 2023 sensitized the public at the streets of Abuja on plastic waste management and climate change. There is also a challenge with management of waste in the country's (Nigeria's) neighborhoods with income levels that are quite low and where many businesses also exist. Agbo (2023) maintains that for three decades now, major cities in the Nigerian nation have continued to speedily urbanize. This leads to a lot of rural-urban migration hence people look for greener pasture. Agbo asserts that the World Bank reports serious population growth in Nigerian urban cities hence high volume of wastes are generated. This is confirmed by the Nigerian Institute of Town Planners (2023) which asserts that it is unarguable that the rates of waste generation are on the increase in the most populous black nation. Udensi, Anyanwu, Opara, Okafor, Duru and Emenonu (2023) opine that most persons dispose waste by themselves and most of the wastes are dumped in the gutter/drains while little is dumped by roadsides and approved dumpsites. These persons include individual and corporate persons which may include beverage firms in Aba.

Green management may have the capacity to influence effectiveness in beverage firms. Effectiveness as used in this research means the use of pollution control to enhance customer satisfaction and employee retention while using waste management to boost backward integration in beverage firms. Customer satisfaction is another measure of stakeholders' satisfaction which this study investigates. Szyndlar (2023) opines that customer satisfaction is a measurement that determines how well a company's products or services meet customer expectations. It is one of the most important indicators of purchase intentions and customer loyalty. Perzynska (2023)

maintains that a high level of customer satisfaction is a business goal for every brand and a key to its success. Customer satisfaction affects business revenue. To improve customer satisfaction, there is need to collect customer feedback, turn customer feedback into action, improve the product or service and follow up with the customers. There is need to offer multi-channel support; make collecting feedback a company process; measure customer satisfaction regularly; ask for feedback across all touchpoints; actively ask customers for feedback; share feedback across all the teams; reply to all feedback and act on complaints and negative reviews. In fact, Staff (2023) asserts that by collecting data about the customers' expectations, needs, and desires, the business can improve its products, services and overall customer experience. Customer satisfaction manifests in market share increases. March (2023) opines that with market share, a business actually measures its success within the market. Sales revenue is used to determine market share, and it is normally evaluated within a fiscal year or quarter. Burgess (2023) opines that businesses that enjoy high level of market share often become very profitable and profit-wise, they are often better than their rivals. There are also factors that improve market share or market value. Raphel, Edet and Nduonofit (2023) assert that return on assets and firm size influence market value of companies. Also, Emudainohwo and Tarurhor (2023) opine that accounting information enhances market share value of equity in Nigeria. Indeed, Etim, Umoffong, Inyang and Umanah (2023) in Njoku et al (2023) maintain that the factors that influence market share and/or earnings quality of a firm include managerial ownership, firm size and liquidity. It is therefore ideal to believe with Bhattacharya, Morgan and Rego (2023) that market share remains a product of an entity's marketing efforts which comprises the firms advertising, promotion, quality of products, its pricing strategies, its customer relationships and its sales activities.

Employee retention is another index of organizational outcomes. It is the ability which an organization has to retain its own workers. The retention of employees is the opposite of employee turnover. Beasley and Que (2023) states that in employee retention, an organization prevents its staff from leaving the organization. To do this, the organization must make employee pay to be competitive; give orientation to the worker; ensure that job description and, job expectations are unambiguously clear and ensure open and transparent communication. There ought to be a prioritization of work-life balance, performance reviews, growth opportunities, inclusive work environment, employee recognition, employee promotion and stay interviews. Njoku, Donatus and Salamatu (2023) maintain that employee retention can be influenced by employee recognition. Employee retention can also be influenced by sensitivity training and team building. Indeed, Njoku and Uzodimma (2023) opine that sensitivity training and team building are correlates

of employee retention and they seriously influence employee retention. In fact, Awolaja (2023) reveals that the employee retention strategies include opportunities for growth in the job, compensation arrangement that is competitive as well as sound balance between work and life. Also, Musa, Ahmed, Hamza (2023) maintain that the employee retention strategies include organizational justice, work-life balance, training and development, the support of the supervisors and job satisfaction. Reasoning in the same direction, Odunukwe and Nnanyelugo (2023) maintain that employee turnover often has a link with the way employee compensation is managed. This calls for effective compensation regimes for improved employee retention.

Backward integration is yet another index of effectiveness which this study investigates. Backward integration is a strategic approach that allows organizations to gain control over their supply chain by acquiring or establishing operations that supply raw materials or intermediate goods for their products. It is a vertical integration strategy that enhances a firm's autonomy over its production process, from sourcing raw materials to manufacturing the final product (inbounlogistics.com). Thakur (2023) reveals that backward integration encourages positive differentiation and better inventory management.

The study focuses in Aba. The reasons for focusing on Aba include that no visible empirical study conducted in Nigeria in the area of green management especially the relationships covered in this study, has ever been done in Aba. This situation was discovered after the researchers had carefully searched various sources that showcase studies that are visible to the global research community especially online sources like google. This is a worrisome situation that shows a deep research gap hence this study. Another reason is that the rate of establishment of industrial entities and indeed beverage enterprises in Aba City has been noticed by the researchers to have continued to increase in recent times – a development that requires the adoption of green management options for sustainability and desirable organizational effectiveness. This study therefore on green management and effectiveness of beverage firms in Aba is geared towards investigating how the beverage firms handle pollution for increased customer satisfaction and employee retention and how the firms use waste management to improve backward integration. This is with a view to bridging research gaps and contributing to knowledge.

2. Statement of the Problem

Any organization that values sustainability in its operations may unarguably never toil with green management practices for enhanced corporate effectiveness. This is both a fact and the ideal situation. However, it is quite worrisome that many business organizations have been observed by the researchers to have relegated green management practices to the background and such attitude is feared to have adversely

influenced corporate effectiveness. This ugly situation cannot be to the best interest of the enterprises.

Business organizations have been observed by Akindele (2022) in Njoku et al (2023), to have consistently polluted the environment in which they carry out their operations and a lot of land pollution and air pollution have been observed to be the lot of many enterprises in both the rural and urban areas. Some of the firms neither consider the health and safety of their workers and customers nor that of the residents of their host communities. Firms in various industries have been further observed to have failed to recycle their waste products in the form of waste to wealth. Many of the enterprises are foreign to the reuse aspect of waste management and they have not been observed to have not taken any safe measure in destroying or disposing wastes (Allen-Taylor, 2023; Elshaver, 2023; Idowu-Adegoke and Beinisch, 2023) in Njoku et al (2023).

Empirical works on green management which the researchers consulted did not indicate or show how pollution control influenced customer satisfaction and employee retention in beverage firms in Aba. The studies did not also show how waste management influenced backward integration in beverage firms in Aba. Evidences abound. For example, Alao, Adegbe and Joshua (2023) did a research in the area of environmental sustainability. Goni, Binti, Isa and Abdullah (2023) did a study in the area of green innovation in Kano. Also, Soyeye, Makinde and Akanlabi (2023) concentrated in Lagos in their study in the area of green supply chain management. They did not pay attention to green management issues in Aba. These evidences show that a research gap exists. It is therefore the research gap discovered by the researchers that constitutes the problem of this study.

3. Objectives of the Study

The major purpose of the research is to investigate green management and effectiveness of beverage firms in Aba. The study was specifically conducted to:

I. Evaluate the level of correlation between pollution control and customer satisfaction in beverage firms in Aba.

Ii. Assess the level of correlation between pollution control and employee retention in beverage firms in Aba.

Iii. Examine level of correlation between waste management and backward integration in beverage firms in Aba.

4. Research Questions

The research questions below guide this study:

i. What is the level of correlation between pollution control and customer satisfaction in beverage firms in Aba?

ii. What is the level of correlation between pollution control and employee retention in beverage firms in Aba?

iii. What is the level of correlation between waste

management and backward integration in beverage firms in Aba?

Hypotheses

The null hypotheses for the study are as shown below:

H01: There is no significant level of correlation between pollution control and customer satisfaction in beverage firms in Aba.

H02: There is no significant level of correlation between pollution control and employee retention in beverage firms in Aba

H03: There is no significant level of correlation between waste management and backward integration in beverage firms. in Aba

5. Scope of the Study

The study focused on selected beverage firms in Aba. Aba constitutes the geographical area which the study covers. The research evaluates the link between control of pollution and customer satisfaction; pollution control and employee retention; waste management and backward integration in Aba. The unit scope consists of all the functional units in the study beverage firms. For the time scope, it took the researchers a period of three months to handle this study.

6. Review of Related Literature

Theoretical Review

The study employed the following theories;

Icek Ajzen Theory of Planned Behaviour

Icek Ajzen theory of planned behavior which sees behavior as a product of intentions and attitudes which are basically beliefs about a behavior as well as subjective norms which are beliefs about the attitudes of others toward behavior, has remained a popular theory in Management literatures. It was propounded in 1985, Njoku et al (2023). The theory predicts human behavior on the basis of personal attitudes; on the basis of subjective norms and on the basis of behavioural control as may be perceived. Bosnjak, Ajzen and Schmidt (2020) opine that human behavior is directed with the instrument of believes that are behavioural; believes that are normative as well as believes that are called control beliefs. Belief that is behavioural is that which has to do with the behavioural outcomes of the behavior. Believes that are described as normative have to do with those believes that anchor on the expectations of other people. These expectatations are the normative ones. The believes referred to as 'control beliefs' are those ones that include forces or factors which boost or incapacitate performing the behavior. LaMorte (2022) maintains that this theory has over the years, been appropriately used to forecast and/or give explanation of various behaviours. The theory supposes that behavioural achievement is a function of motivation which is the intention as well as ability which is the behavioural control. The model is characterized by 6 (six) dimensions that altogether

indicate one's real control over the behavior. Indeed, the dimensions are: attitudes, behavioural intention, subjective norms, social norms, perceived power and perceived behavioural control. In fact, this theory relates to this study which emphasizes pollution control and waste management. People ought to exhibit sound behaviours over issues of pollution, waste and even environmental health.

7. Empirical Review

The following empirical studies were used to boost the study:

Soyeye, Makinde and Akinlabi (2023) in Njoku et al (2023) examined green supply chain management and organizational performance of fast moving consumer goods firms in Lagos Nigeria. It was a survey research. Data analysis was committed to multiple regressions, Cronbach Alpha and descriptive statistics. It was found that green supply chain management had positive and significant effect on the performance of fast-moving consumer goods companies in Lagos.

Asubiojo, Dagundoro and Falana (2023) evaluated environmental conservation cost and corporate performance of quarry companies in Nigeria: an empirical analysis. It was a survey research. A structured questionnaire was their major instrument for data collection. Descriptive and inferential statistics were used for data analysis. It was found that research and development, legal and regulatory compliance costs exhibited a significant positive relationship with the corporate performance of quarry firms in Nigeria.

Su, Bei-Bei, Shan, Xu and Jin-Long (2023) did an empirical analysis of green finance and high-quality economic development in the Yangtze River Delta based on VAR and coupling coordination model. It was an ex post facto study. VAR, gray correlation method and gray prediction method were used for data analysis. It was found that green finance has short-term mutual promotion effects with high-quality economic development. It was recommended that more professionals need to be involved in green finance innovation.

Li, Wang and Nutakor (2023) did an empirical research on the influence of corporate digitalization on green innovation. They used ex post facto research design. Resource-based theory was employed. Regression analysis was used for data analysis. It was found that corporate digitalization improved green innovation by improving human capital. It was concluded that enterprises that boost their digital strategies do better in green innovation. It was recommended that organizations need to encourage green innovation for sustainable business development.

8. Gap Identified in Literature

The gap identified in literature is that various empirical researches that the researchers accessed in the area of green management did not show how each of pollution control and waste management influenced

customer satisfaction and employee retention; and backward integration in beverage firms in Aba.

9. Methodology

The researchers used the survey research design in the research. The managers and workers of two quoted beverage firms in Aba constituted the population of the study. The firms were purposively chosen. The reason for choosing the firms is that they were very accessible to the researchers. Also, issues of insecurity and bad roads could not allow the researchers to access certain parts of Aba where other beverage enterprises exist. The study population of the study was 150. The researchers used the Taro Yamen's formula for sample size determination to obtain a sample size of 109 for the study. Accordingly, the researchers administered one hundred and nine (109) copies of the research instrument to the respondents in the study firms. Data sources included both primary and secondary sources. While the questionnaire was the major instrument of collection of data which was used for the study, the researchers relied on texts, journals and internet sources for secondary data. Indeed, the research instrument's validity was handled by involving experts in research who made useful contributions that made it possible for the study to focus on the stated research questions. The reliability of the study instrument namely the questionnaire was done by adoption of a pilot study whose results were committed to Cronbach alpha statistic. A ratio of 0.79 was obtained thereby making the instrument to be reliable to the degree of 79%. The study employed mean and standard deviation statistics for data analysis. Spearman Product Moment Correlation analysis was used to test hypotheses. The null hypothesis was rejected on the basis of $P < 0.05$.

10. DATA PRESENTATION & ANALYSIS/ DISCUSSION OF RESULTS

Out of the 109 questionnaire copies distributed to the respondents, only 85 copies were properly filled and returned. This means 78% return.

Research Question 1:

What is the level of correlation between pollution control and customer satisfaction in beverage firms?

The table above shows the level of relationship between pollution control and customer satisfaction in beverage firms in Aba. The results indicate that: pollution control attracts more customers to the beverage firm hence improved market share ($\bar{x} \pm S.D$ of 4.13 ± 0.712); pollution control creates very cordial relationship between the firm and immediate environment hence sound patronage from the host community to the beverage firms (with a $\bar{x} \pm S.D$ of 3.96 ± 0.749).

Research Question 2:

What is the level of correlation between pollution control and employee retention in beverage firms?

The table shows the level of relationship between pollution control and employee retention in beverage firms. It shows that pollution control helps to avert employee turnover in beverage firms as the result accounted for a mean of 3.82 and a standard deviation of 0.813. And management budgets for effective pollution control each year to the admiration of employees whose health and safety are protected by such gesture (with a $\bar{x} \pm S.D$ of 3.69 ± 0.788).

Research Question 3:

What is the level of correlation between waste management and backward integration in beverage firms?

Report on Research Question 3 is presented on Table 3

The table above shows the level of relationship between waste management and backward integration in beverage firms. It shows that: sound waste management improves background integration in beverage firms with a ($\bar{x} \pm S.D$ of 3.69 ± 0.788); management punishes workers who are indifferent to effective waste management so as to always improve backward integration (with a $\bar{x} \pm S.D$ of 3.73 ± 0.851).

Testing of Hypotheses

H01: There is no significant level of correlation between pollution control and customer satisfaction in beverage firms in Aba.

The result on Table 4 presents the correlation analysis between pollution control and customer satisfaction in beverage firms in Aba. The result shows a p-value of 0.001 and correlation coefficient of 0.822. The result shows a p-value less than 0.05 being the level of significance; therefore, rejecting the null hypothesis and accepting the alternative hypothesis. Therefore, the correlation coefficient between pollution control and customer satisfaction in beverage firms in Aba is statistically significant. Therefore, there is a significant relationship between pollution control and customer satisfaction in beverage firms in Aba.

H02: There is no significant level of correlation between pollution control and employee retention in beverage firms in Aba.

The result on Table 5 presents the correlation analysis between pollution control and employee retention in beverage firms. The result shows a p-value of 0.001 and correlation coefficient of 0.743. The result shows a p-value ≤ 0.05 level of significance, thereby rejecting the null hypothesis and accepting the alternative which states that there is a significant level of correlation between pollution control and employee retention in beverage firms in Aba.

H03: There is no significant level of correlation between waste management and backward integration in beverage firms in Aba.

The result on Table 6 presents the correlation analysis between waste management and backward

integration in beverage firms. The result shows a p-value of 0.001 and correlation coefficient of 0.807. The result shows a p-value ≤ 0.05 level of significance; therefore, rejecting the null hypothesis and accepting the alternative which states that there is a significant relationship between waste management and backward integration in beverage firms in Aba.

11. Findings

Sequel to analysis of numerical data, it was found that:

i. There is a significant level of correlation between pollution control and customer satisfaction in beverage firms in Aba.

ii. There is a significant level of correlation between pollution control and employee retention in beverage firms in Aba.

iii. There is a significant level of correlation between waste management and backward integration in beverage firms in Aba.

12. CONCLUSION AND RECOMMENDATIONS

Conclusion

This study concludes that green management improves effectiveness in beverage firms in Aba. Pollution control is essential for the good of both the customers and the employees hence it boosts customer satisfaction and employee retention. Waste management is a critical element in the practice of green management by organizations hence it enhances backward integration in beverage firms. The study therefore submits that any organization that relegates the green management practices of pollution control and waste management to the background makes itself vulnerable to avoidable effectiveness crisis.

The researchers further infer that this study contributes to knowledge by providing empirical literature and by bridging research gaps on the relationships between pollution control and each of customer satisfaction and employee retention; then between waste management and backward integration. The study also adds to the already existing body of knowledge in green management.

Recommendations

The researchers developed the following recommendations:

i. Management of beverage firms should make more efforts to control all forms of pollution in the enterprises for improved customer satisfaction.

ii. Management of beverage firms should manage all forms of pollution in the enterprises prudently for enhanced employee retention.

iii. Waste to wealth strategy should be employed by beverage firms so as to always boost backward integration.

Table 1: Pollution control and customer satisfaction in beverage firms in Aba

| Qs/No | Item | S.A | A | UN | D | SD | N | Mean | Std. Dev. |
|-------|--|-----|----|----|---|----|----|------|-----------|
| 1 | Pollution control attracts more customers to the beverage firm hence improved market share. | 41 | 28 | 7 | 4 | 5 | 85 | 4.13 | 0.712 |
| 2 | Pollution control creates very cordial relationship between the firm and immediate environment hence sound patronage from the host community to the beverage firm. | 38 | 25 | 9 | 7 | 6 | 85 | 3.96 | 0.749 |

Field Survey (2024)

Table 2: Pollution control and employee retention in beverage firms

| Q/No. | Item | SA | A | UN | D | SD | N | Mean | Std. Dev. |
|-------|---|----|----|----|---|----|----|------|-----------|
| 3 | Pollution control helps to avert employee turnover in beverage firms.. | 40 | 29 | 8 | 5 | 3 | 85 | 4.15 | 0.804 |
| 4 | Management budgets for effective pollution control each year to the admiration of employees whose health and safety are protected by such gesture.. | 32 | 21 | 20 | 9 | 3 | 85 | 3.82 | 0.813 |

Field Survey (2024)

Table 3: Waste management and backward integration in beverage firms

| Q/No. | Item | SA | A | UN | D | SD | N | Mean | Std. Dev. |
|-------|---|----|----|----|----|----|----|------|-----------|
| 5 | Sound waste management improves backward integration in beverage firms. | 29 | 26 | 14 | 7 | 9 | 85 | 3.69 | 0.788 |
| 6 | Management punishes workers who are indifferent to effective waste management so as to always improve backward integration. | 31 | 21 | 17 | 11 | 5 | 85 | 3.73 | 0.851 |

Field Survey (2024)

Table 4: Correlation analysis between pollution control and customer satisfaction in beverage firms

| Item | Mean | Standard Deviation | Correlation Coefficient | P-value |
|-----------------------|------|--------------------|-------------------------|---------|
| Pollution control | 4.13 | 0.712 | 0.822 | 0.001 |
| Customer satisfaction | 3.96 | 0.749 | | |

SPSS Correlation Analysis Output (2024)

Table 5: Correlation analysis between pollution control and employee retention in beverage firms

| Item | Mean | Standard Deviation | Correlation Coefficient | P-value |
|--------------------|------|--------------------|-------------------------|---------|
| Pollution control | 4.15 | 0.804 | 0.743 | 0.001 |
| Employee retention | 3.82 | 0.813 | | |

SPSS Correlation Analysis Output (2024)

Table 6: Correlation analysis between waste management and backward integration in beverage firms

| Item | Mean | Standard Deviation | Correlation Coefficient | P-value |
|----------------------|------|--------------------|-------------------------|---------|
| Waste management | 3.69 | 0.788 | 0.807 | 0.001 |
| Backward integration | 3.73 | 0.851 | | |

SPSS Correlation Analysis Output (2024)

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