



GREEN INNOVATION AND STAKEHOLDERS' SATISFACTION IN DEPOSIT MONEY BANKS IN OWERRI

Njoku, Kenneth Chukwudi PhD ²Udo-Orji, Chidinma, PhD and
³Adioha, Lynda Ekwutosi, PhD

Department of Business Administration, University of Agriculture and Environmental Sciences, Umuagwo, Imo State.

*Department of Marketing, Kingsley Ozumba Mbadiwe University, Ideato, Imo State.
Department of Management, Imo State University, Owerri*

Abstract

Ideally, organizations that go green appear to stand better chances of being the true custodians of sustainability in predetermined corporate outcomes. However, a lot of research gaps have been observed in the area of green innovation in business organizations. This situation calls for this study on green innovation as a predictor of stakeholders' satisfaction in Deposit Money Banks in Owerri. The objectives of the study are to examine the relationship between use of solar panels(USP) and employee satisfaction; evaluate the level of correlation between use of solar panels(USP) and customer satisfaction; assess the extent to which eco-friendly business conferences(EBC) influences employee satisfaction and determine the level of correlation between eco-friendly business conferences(EBC) and customer satisfaction. The study develops a problem statement that captures the research gaps which call for the empirical investigation. The study is guided by four research objectives, four research questions and four hypotheses. Empirical reviews are used to beef up the study. The research employs the survey research design in the research. A five-point Likert Scale structured questionnaire is the major instrument for data collection. The researchers determined the validity of the instrument by showing the questionnaire to research experts for their corrections and inputs. The study uses Cronbach Alpha statistic for obtaining 0.86 as the reliability ratio of the survey instrument. The research commits data analysis to descriptive statistics of mean and standard deviation and employs correlation analysis for testing hypotheses. The findings show that there is a significant relationship between use of solar panels(USP) and employee satisfaction; there is significant level of correlation between use of solar panels(USP) and customer satisfaction; it is to a great extent that eco-friendly business conferences(ESC) influences employee satisfaction and there is significant level of correlation between eco-friendly business conferences(ESC) and customer satisfaction. The study concludes that green innovation predicts stakeholders' satisfaction in Deposit Money Banks in Owerri. The study recommends that management of Deposit Money Banks should always use solar panels to eliminate severe noise pollution for greater stakeholders' satisfaction. Deposit Money Banks should always use zoom and allied facilities for their conferences since such is eco-friendly.

Keywords: *green innovation, employee, customer, stakeholders' satisfaction, deposit money bank, Owerri.*

Introduction

It is a truism that any organization that sincerely desires to be a higher flyer in the corporate world in this 21st Century also yearns to go green for the seamless achievement of its objectives. Generally speaking, green innovation is the use of creative or technological solutions to reduce negative environmental impacts and maximize sustainability.

Roue (2023) opines that green innovation is an instrument to position the world to be a very sustainable and pleasant place despite the fact that it is expensive. Hasna, Jaumotte and Pienknagura (2023) are of the view that to reduce harmful emissions, it is essential to make low-carbon technologies more affordable and more available.

Green innovation is therefore the development of new technologies and processes that are environmentally friendly and sustainable (Institute of Innovation & Knowledge Exchange, 2023). It implies anything that ranges from development of new renewable energy source to the creation of more efficient way of materials recycling. In the context of this study, green innovation is the use of solar panels and eco-friendly business conference to improve stakeholders' satisfaction.

This accounts for the reason why Sun, Gao, Titan, and Guan (2023) describes green innovation as an essential driver in achieving an economic growth that is sustainable in developing countries.

This study focuses on the use of solar panels and eco-friendly business conferences as the indices of green innovation. Chanchangi, Adu, and Mallick (2023) lament the high level of energy poverty in Nigeria while associating same with population increase and consequent energy supply gap which have created the need for clean, reliable and stable energy supply. Indeed, Adedeji, Deveci, Saiman and Abiola (2023) maintain that the most abundant form of energy in the planet earth is solar energy. The most populous African country, Nigeria obtains about 19.8 MJm² per day of equally distributed solar energy as solar energy is progressively used for electrification, communications, lightening and even irrigation. With the use of photoelectric effect, solar cell (a photovoltaic) has the capacity to convert sunlight wholly into electricity. Diemuodeke, Mulugetta, Njoku, Briggs and Ojapah (2021) opine that the solar resource potential across the six geo-political zones in Nigeria ranges from 3.393 – 6.669 KWh/m² per day with the Northern zones exhibiting better potentials over the Southern zones. There is a growing interest in the development and deployment of renewable energy technologies as a result of the rapidly declining cost of solar pv, the intensified climate change challenges, breakthrough in battery technologies and energy security.

Another index of green innovation which this study handles is eco-friendly business. EcoSmart (2023) maintains that 'eco' comes from the Latin root 'oeco' meaning household. Eco is often used now to mean habitat, home or earth. Eco-friendly is

therefore being earth-friendly. Eco-friendly products are designed to do the least possible damage to the environment. It is all about doing no harm to the environment. According to Events (2023), organizing eco-friendly events is a growing trend in the event industry, driven by increasing awareness of environmental issues and the desire to create a more sustainable future. By prioritizing sustainability and environmental responsibility in any event planning, one can reduce one's firm's impact on the environment while also improving one's brand reputation and attracting a more engaged and enthusiastic audience. Eco-friendly conferences save costs associated with events while enhancing attendee experience. When planning an eco-friendly conference, it is important to consider ways to reduce waste, conserve energy and minimize carbon footprint.

Stewart (2023) opines that the benefits of sustainable corporate events planning are reduced environmental impact, cost reduction, improved reputation, better stakeholder partnerships and it pioneers change in the industry. The strategies for hosting sustainable corporate conferences include to create an eco-friendly event policy and budget, organize a virtual conference, opt for a hybrid conference model, choose a green and accessible event venue, work with sustainable event vendors, offer eco-friendly event transportation service, combine accommodations with the venue, use digital event invites, design an App for corporate events, focus on recycling practices, and donate leftover food from the corporate events. Others are: keep recyclable giveaways, choose sustainable décor for corporate events, share eco-friendly messaging with event attendees and stakeholders and encouraging others in the industry to organize sustainable corporate events.

Green innovation may in fact, influence stakeholders' satisfaction in Deposit Money Banks. In the context of this study, satisfaction is the use of solar panels and eco-friendly business conference to improve employee satisfaction and customer satisfaction in Deposit Money Banks. Employee satisfaction, a broad term used to describe how satisfied or content employees are with elements like their jobs, their employee experience, and the organization they work for, is a critical aspect of corporate management. Alig (2023) opines that a satisfied workforce has greater potential to drive productivity and efficiency while leading to greater employee retention. Improving employee satisfaction means more than just monetary compensation – it requires the improvement of various factors that impact a person's overall well-being, engagement and motivation. Employee satisfaction is therefore the degree of contentment that team members experience concerning their roles in the organization. Qualee (2023) reveals that the most impactful ways employee satisfaction can be promoted in the workplace are by recognition, work-life balance, improved company values, nurturing autonomy among employees, fair remuneration, ensuring that employees are performing within the scope of their job descriptions and expectations, effective management, creation of opportunities for career development, process efficiency and flexibility. Agubosim, Arshad, Alias and

Mousavi (2023) opine that job satisfaction encourages employee confidence while boosting job performance.

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.

This study on green innovation and stakeholders' satisfaction in Deposit Money Banks in Owerri is geared towards investigating how the use of solar panels and eco-friendly business conferences may influence and indeed aid employee satisfaction and customer satisfaction. It is with a view to not only bridging existing research gaps but it is also intended to contribute to knowledge.

Sustainability has become a driving force for any business that intends to remain relevant in the 21st century global economy. This may have also become the reason why green innovation may be the desire of any enterprise that sincerely desires to consistently satisfy its key stakeholders. This remains the ideal situation in modern business management. The researcher has however observed that many businesses relegate to the background, the use of solar panels and eco-friendly business conferences in their operations. They are yet to fully embrace green innovation strategies in their going concerns and such attitude to green innovation has been further observed to have adversely influenced both employee satisfaction and customer satisfaction. This cannot be to the best interest of business stakeholders in the present day world when the global economy is heading towards sustainability and green. Many businesses seem to have insisted on using environmentally unfriendly energy sources in their day to day operations thereby causing air and noise pollutions while unnecessarily raising the cost of doing business while adopting eco-friendly approaches to their business conferences. These situations have the capacity to trigger employee turnover and dissatisfaction as well as customer defections and disloyalty.

In fact, empirical studies accessed by the researcher in the area of innovation and sustainability did not show how the use of solar panels influenced employee satisfaction neither did they indicate the relationship between the use of solar panels and customer satisfaction in Deposit Money Banks in Owerri. Also, the studies did not show how eco-friendly business conferences influenced employee satisfaction and customer satisfaction in Deposit Money Banks. This shows that a wide research gap exists. It is based on these research gaps that this present study was conducted to bridge the gaps and contribute to knowledge.

The researchers have observed that managements of many quoted companies are yet to embrace green innovation dimensions of use of solar panels and eco-friendly business conferences for enhanced stakeholders' satisfaction. This seems to have adversely influenced employee satisfaction and customer satisfaction in the public limited liability companies. Empirical studies assessed by the researchers on green innovation did not show how use of solar panels and eco-friendly business conferences influenced employee satisfaction and customer satisfaction in quoted firms especially beverage firms in Owerri. A research gap therefore exists. The research gap therefore constitutes the major problem of this study.

The objectives of the study are to examine the relationship between use of solar panels and employee satisfaction; to evaluate the level of correlation between use of solar panels and customer satisfaction; to assess the extent to which eco-friendly business conferences influence employee satisfaction; and to determine the level of correlation between eco-friendly business conferences and customer satisfaction.

The researcher developed the following research questions: What is the relationship between use of solar panels and employee satisfaction? What is the level of correlation between use of solar panels and customer satisfaction? To what extent do eco-friendly business conferences influence employee satisfaction? What is the level of correlation between ecofriendly business conferences and customer satisfaction?

Hypotheses

H₀₁: There is no significant relationship between use of solar panels and employee satisfaction. **H₀₂:** There is no significant level of correlation between use of solar panels and customer satisfaction.

H₀₃: There is no significant extent to which eco-friendly business conferences influence employee satisfaction.

H₀₄: There is no significant level of correlation between eco-friendly business conferences and customer satisfaction.

The geographical scope of the study is Owerri Municipal, Imo State. For the content scope, the study concentrates on the relationship between use of solar panels and employee satisfaction; use of solar panels and customer satisfaction; eco-friendly business conferences and employee satisfaction; eco-friendly business conferences and customer satisfaction. The unit scope comprises of the Managers and other workers in the Deposit Money Banks.

REVIEW OF RELATED LITERATURE

Conceptual Framework

- Use of Solar Panels

Solar panels, by definition, are those devices designed to absorb the rays of the sun while converting same to heat or electricity. It is indeed, a collection of solar or photovoltaic used for the generation of electricity via photovoltaic effect. In fact, it is in a grid-like pattern that the cells are arranged on the panels' surface. One can also explain a solar panel to be a set of photovoltaic modules which is mounted on a structure that supports it. It is important to state further that a photovoltaic module is a packaged and connected assembly of 6 x 10 solar cells. It is characterized by wearing out very slowly hence in a period of twelve months, a panel's effectiveness only decreases about 1 to 2 percent or even less than that. Most of the panels are composed of crystalline silicon solar cells.

The very act of installing solar panels in offices is a tool for fighting lethal emissions of greenhouse gases and indeed it helps in reducing global warming. The solar panels never allow for pollution of any kind and they are very clean. The panels reduce the rate at which human rely on fossil fuels and traditional or conventional sources of power. Thought expensive, solar panels are fixed outdoors since they require sunlight to get charged(economicstimes.com). Ashok (2024) describes solar energy as radiation from the sun which has the capacity to produce heat, leading to chemical reactions and generates electricity. The aggregate amount of solar energy incident in the world is quite in excess of the global present and anticipated energy needs. If prudently harnessed, solar energy, a very seriously diffused source, has the ability to take care of all future energy needs. In the 21st Century, this source of energy could become expansively attractive as a renewable energy source over its unending supply as well as its zero pollution characteristic as against finite fossil fuels, coal, natural gas and petroleum. Collins and Mack (2023) reveal that solar energy exposes people to savings in their energy bills; it makes offices and home self-reliant and independent from the electric grid; it avails enterprises of the opportunity to have cleaner energy source; and the installation of solar panels increases the value of business houses.

Eco-friendly Business Conferences

Chomsky (2023) reveals the top 10 sustainability conferences around the world in 2023. The must-attend sustainability events in 2023 include sustainability Live London (September 6-7 at London); Sustainable Development Goals Summits (September 18-19) at New York, USA; Climate Week NYC 2023 (Sept. 17-24) at New York, USA; Sustainable Development of Energy, Water and Environment Systems (SDEWES) (Sept 24-29 at Dubrovnik, Croatia); Sustainable Brands SB'23 (October 16-19) at San Diego, USA; PSX which focuses on product stewardship and its commitment to reducing the impact of consumer goods on health, safety and environment (Oct 17-19) at Boston, USA; Verge 23 (October 24-26) at California, USA; UN Climate Change Conference – UNFCCC (Nov 30-Dec., 12) at UAE; ACESD 2023 which facilitated expert discussions (Nov. 3-5) at Sapporo, Japan; and Cleantech Forum Europe (Nov. 14-16) at Tallin, Estonia. The key topics discussed at the eco-friendly business conferences are climate change and sustainability, supply chain sustainability and achieving net zero emissions.

Fohet (2023) opines that ideally, conferences are characterized by large consumption of energy, water, materials and other resources and the conferences lead to the generation of much waste; they contribute to emissions of carbon via transportation and operations at the venue while adopting heavily, non-renewable resources. It is by way of prioritizing sustainability that their effect on the environment may be adequately reduced. Again, once conferences are made to be more sustainable, it implies that there is minimization of resource usage and optimization of resource management. The employment of technologies that are efficient energy-wise, the reduction of the consumption of water and the implementation of those options that reduce waste give rise to major conservation of resources. This method is beneficial to the environment and makes the event more cost-effective for the organizers and the exhibitors. Also, by the implementation of practices that are sustainable like local participation promotion, aiding public transportation and the use of renewables; adoption of waste reduction and recycling programmes, the conferences can effectively reduce their carbon-emissions. Eco-friendly conferences enhance positive brand image, engages and educates attendees, encourages sound industry leadership and innovation.

Employee Satisfaction

Alig (2023) maintains that employee satisfaction is the degree of contentment that employees or organizational workers experience with regards to their roles in the organization. Employee satisfaction breeds happier customers and encourages employee retention. Connolly (2023) opines that employee satisfaction is a factor in employee motivation, employee goal achievement, cost savings, customer satisfaction, employee productivity, positive employee morale, and more in the workplace. Some of the factors that drive employee satisfaction include when workers feel energized/strengthened by work; when they have sense of belonging;

when there is sense of purpose; when they achieve goals; and when there is inclusiveness by management. Employee satisfaction is achievable when management gives workers greater autonomy; when employees are allowed to shape their own roles; by stopping micro-management; by way of employee recognition; by way of driving communication and transparency; by promoting good health among employees; providing standard facilities to employees; training and investment, use of strong sociable culture and reduction of bureaucracy, rep-tape and time-wastes.

Customer Satisfaction

Barron (2022) defines customer satisfaction as a metric used to quantify the level to which a customer is happy with a product, service or experience as it relates to a business. It is a measure of how a customer feels about interacting with the business brand. Tomas, Hult, and Morgeson (2023) opines that customer satisfaction is a key corporate asset and it ought to be optimized. The organization must strive to understand the expectations of the customers while insisting on quality corporate performance and being conscious of the link between value and price. Management must appreciate complaining customers because satisfied customers become loyal customers and drive financials. There is therefore need to fix company-customer disconnects while understanding and indeed knowing the eco-system.

This accounts for the reason why Smith (2022) reveals that customer satisfaction is an index that enables businesses appreciate the way happy customers who are also satisfied patronizers are with their tangible and intangible products or even functionalities. Customer satisfaction is measured using surveys. To improve customer satisfaction, the organization needs to focus on education and onboarding; ask customers questions and listen to their answers; train up support team; make use of personalization which in turn drives loyalty; implement omni channel support; and provide proactive support.

Theoretical Framework

Theory of Planned Behaviour (1985)

The Icek Ajzen theory of planned behavior which holds that behavior is a function of intentions, attitudes (beliefs about a behaviour) and subjective norms (beliefs about the attitudes of others toward a behavior) has remained a popular theory in behavioural, management and clinical literatures. It was propounded in 1985. The theory predicts human behavior based on personal attitudes, subjective norms and perceived behavioural control. Bosnjak, Ajzen and Schmidt (2020) opine that human behavior is guided by behavioural beliefs, normative beliefs and control beliefs. Behavioural belief is the belief about the behavioural consequences of the behavior. Normative beliefs are the beliefs about the normative expectations of others. Control

beliefs are beliefs about factors that facilitate or inhibit the performance of the behavior. LaMorte (2022) maintains that the theory of planned behavior has been effectively utilized to forecast and give explanation of a variety of behaviours. The theory supposes that behavioural achievement is a function of motivation (intention) and ability (behavioural control). It is characterized by six dimensions which altogether show a person's actual control over the behavior and these constructs are: attitudes, behavioural intention, subjective norms, social norms, perceived power and perceived behavioural control. The theory of planned behavior relates to this study which emphasizes green innovation and stakeholders' satisfaction in Deposit Money Banks hence the use of solar panels and adoption of eco-friendly business conferences are all planned behaviors (Njoku, Udo-Orji and Anyanwu, 2023).

Empirical Review

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.

Elshaer, Azazz and Fayyad (2023) evaluated green management and sustainable performance of small and medium-sized hospitality businesses: moderating the role of an employee's pro-environmental behavior. It was a survey research. The study used the Smart PLS-structural equation modelling technique to analyze data. It was found that green management improved environmental, economic and social performance of businesses. It was recommended that enterprises should concentrate

on creating the culture of environmental stewardships and involvement in green initiatives for improved sustainable corporate outcomes.

Goni, Binti, Isa and Abdullah (2023) investigated green innovations and environmental performance of hotels in Kano, Nigeria: moderating role of green transformational leadership. It was a survey research. PLS-SEM was used for data analysis. It was found that green innovation positively and significantly influenced environmental performance of Kano-based hotels. The study concludes that green innovations affect environmental performance. It was recommended that management should use facilities that do not expose the environment to pollutions.

Wiredu, Agyemang and Agbadzidah (2023) handled the topic: Does green accounting influence ecological sustainability: evidence from a developing economy? The survey research design was used in the study that focused on pharmaceutical enterprises. Data analysis was committed to PLS-SEM and SMART-PLS 4 was used to test hypotheses. It was found that environmental compliance and business efficiency have major and constructive effect on sustainability.

Soyeye, Makinde and Akinlabi (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.

Osaloni and Oso (2023) did an evaluation of environmental accounting information and financial performance of listed manufacturing firms in Nigeria. It was an ex post facto research. Data analysis was committed to descriptive statistics and multiple regression analysis. It was found that environmental accounting information had a significant influence on the financial performance of the manufacturing enterprises. It was recommended that manufacturing firms should make investments in ecological development a top priority.

Ali, Gyamfi, Bekun, Ozturk and Nketiah (2023) did an empirical assessment of the tripartite nexus between environmental pollution, economic growth and agricultural production in sub-Saharan African countries. It was an ex post facto research. It employed the panel econometrics method of the generalized method of moments (two-step difference GMM). It was found that economic growth contributes significantly to environmental pollution in Africa. Food Price Index capital and FDI enhance pollution. Also, agricultural production and labour reduce pollution.

Si and Tiwari (2023) did a study on understanding the green procurement behavior of household appliance manufacturing industry: an empirical study of the enablers.

It is a survey research. Data analysis was committed to Structural Equation Model(SEM). The findings show that exogenous driving powers are more inclined to encourage household appliance manufacturers to perform green procurement strategy compared with endogenous factors. Business strategy, governmental regulations and customer awareness show greater influence on green purchasing behavior unlike the little impact of corporate culture, production system and suppliers. Taxation policies, environmental awareness and green strategies are the key driving forces for promoting green procurement from the government, individual and organizational dimensions.

Alao, Adegbe and Joshua (2023) examined green intellectual capital and environmental sustainability of listed manufacturing companies in Nigeria. It was a research. Multiple regression was used to handle data analysis. It was found that green intellectual capital positively and significantly influenced environmental sustainability. It was recommended that corporate entities need to invest in environmental systems.

Njoku and Uzodimma (2023) conducted a study on organizational development and corporate outcomes in Owerri-based health facilities. It was a survey research. Data analysis was committed to descriptive statistics of mean and standard deviation. Spearman product moment correlation was used to test hypotheses. It was found that sensitivity training and team building positively and significantly influenced employee retention and capacity expansion.

Njoku, Donatus; and Salamatu (2023) examined employee recognition as a correlate of employee retention in hospitality enterprises in Owerri. It was a survey research. Their study employed the Kenneth Chukwudi Njoku's Ken-C theory of Social Honour. Data analysis was committed to descriptive statistics of mean and standard deviation. Spearman product moment correlation coefficient was used to test hypotheses. It was found that public recognition, monetary recognition and promotional recognition positively and significantly influenced employee retention in hospitality enterprises. The researchers concluded that employee recognition influenced employee retention in the enterprises.

Gap Identified in Literature

The gap identified in literature is that, based on studies the researcher was able to access, empirical studies were not conducted on the relationships in the conceptual model as can be seen in conceptual model of the study. The relationships include: use of solar panels and employee satisfaction; use of solar panels and customer satisfaction; eco-friendly business conferences and employee satisfaction; eco-friendly business conferences and customer satisfaction. This present study bridges the gaps.

Methodology

The researchers used the survey research design in the study. The population of the study was made up of the managers and workers of 10 DMBs in Owerri. The total population of the study was 150. The researcher used the Taro Yamen's formula for sample size determination to obtain a sample size of 109 for the study. Accordingly, 109 copies of the questionnaire were administered to respondents in the study DMBs. The sources of data included the primary and secondary sources. While the questionnaire was the major instrument of data collection used for the study as a primary data tool, the researchers relied on texts, journals and internet sources for secondary data. The validity of the instrument was done by showing the instrument to research experts for their inputs and by ensuring that the study focused on the research questions. The reliability ratio of the instrument was done with the use of pilot study whose results were committed to Cronbach alpha statistic. A ratio of 0.72 was obtained. The instrument was therefore 72% reliable. The study employed the descriptive statistics of mean and standard deviation for data analysis. Spearman Product Moment Correlation analysis was used to test hypotheses. The rejection of null hypothesis was based on $P < 0.05$.

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 relationship between use of solar panels and employee satisfaction?

Table 1: Respondents' responses on the level of correlation between use of solar panels and employee satisfaction

Q/No	Item	SA	A	UN	D	SD	N	Mean	Std. Dev.
1	Use of solar panels increases employee satisfaction in business organizations.	41	28	7	4	5	85	4.13	0.712
2	Many satisfied employees in the organization do not practice employee turnover over the availability of solar panels and uninterrupted power supply.	38	25	9	7	6	85	3.96	0.749

Field Survey (2023)

The Table 1 above presents data from responses by the respondents under study. The result also disclosed a strong agreement by the respondents on their opinion on the level of correlation between use of solar panels and employee satisfaction. The results further shows that the respondents agreed to the facts that: use of solar panels increases employee satisfaction in business organizations ($\bar{x} \pm S.D$ of 4.13 ± 0.712); many satisfied employees in the organization do not practice employee turnover over the availability of solar panels and uninterrupted power supply (with a $\bar{x} \pm S.D$ of 3.96 ± 0.749).

Research Question 2:

What is the level of correlation between use of solar panels and customer satisfaction?

Table 2: Respondents' responses on the level of correlation between use of solar panels and customer satisfaction

Q/No.	Item	SA	A	UN	D	SD	N	Mean	Std. Dev.
3	Availability of solar panels helps to reduce the costs of business services hence improved customer satisfaction.	40	29	8	5	3	85	4.15	0.804
4	Management saves a lot from the efficiencies created by the use of	32	21	20	9	3	85	3.82	0.813

	solar panels hence improved quality delivery and customer satisfaction.								
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Field Survey (2023)

The Table 2 above presents data from responses by respondents on the level of correlation between use of solar panels and customer satisfaction. The results show that majority of the respondents affirmed to the statements. There is a high level agreement by the respondents on the opinion that availability of solar panels helps to reduce the costs of business services hence improved customer satisfaction as the result accounted for a mean of 3.82 and a standard deviation of 0.813. The result has indicated that the majority of the respondents agreed to the item statement that management saves a lot from the efficiencies created by the use of solar panels hence improved quality delivery and customer satisfaction (with a $\bar{x} \pm S.D$ of 3.69 \pm 0.788).

Research Question 3:

To what extent do eco-friendly business conferences influence employee satisfaction?

Report on Research Question 3 is presented on Table 3

Table 3: Respondents’ responses on the level of correlation between eco-friendly business conferences and employee satisfaction

Q/No.	Item	SA	A	UN	D	SD	N	Mean	Std. Dev.
5	Eco-friendly business conferences improve hygienic conditions in the workplace hence improved employee satisfaction.	29	26	14	7	9	85	3.69	0.788
6	Employees gain job satisfaction each time they are exposed to eco-friendly business conferences hence a lot of knowledge flow into the employees during the conferences.	31	21	17	11	5	85	3.73	0.851

Field Survey (2023)

The Table 3 above presents data from responses by the respondents under study. The result also disclosed a good agreement by the respondents on their opinion on the level of correlation between eco-friendly business conferences and employee satisfaction. The results further show that the respondents agreed to the facts that: eco-friendly business conferences improve hygienic conditions in the workplace hence improved employee satisfaction with a ($\bar{x} \pm S.D$ of 3.69 ± 0.788); employees gain job satisfaction each time they are exposed to eco-friendly business conferences hence a lot of knowledge flow into the employees during the conferences (with a $\bar{x} \pm S.D$ of 3.73 ± 0.851).

Research Question 4:

What is the level of correlation between ecofriendly business conferences and customer satisfaction?

Table 4: Respondents’ responses on the relationship between ecofriendly business conferences and customer satisfaction

Q/No.	Item	SA	A	UN	D	SD	N	Mean	Std. Dev.
7	Eco-friendly business conferences keep customers informed of what they stand to benefit from the business hence improved customer satisfaction.	36	24	19	4	2	85	4.04	0.866
8	Management sometimes sponsors customers to eco-friendly conferences in various branches and such boosts customer satisfaction.	33	27	21	2	2	85	4.02	0.793

Field Survey (2023)

The Table 4 above presents data from responses by respondents on the relationship between ecofriendly business conferences and customer satisfaction. The results show that majority of the respondents affirmed to the statements. There is a high level agreement by the respondents on the opinion that eco-friendly business conferences keep customers informed of what they stand to benefit from the business hence improved customer satisfaction as the result accounted for a mean of 4.04 and a standard deviation of 0.866. The result has indicated that the majority of the respondents agreed to the item statement that management sometimes sponsors customers to eco-friendly conferences in various branches and such boosts customer satisfaction (with a $\bar{x} \pm S.D$ of 4.02 ± 0.793).

Testing of Hypotheses

Ho: There is no significant relationship between use of solar panels and employee satisfaction.

Table 5: Correlation analysis between use of solar panels and employee satisfaction

Item	Mean	Standard Deviation	Correlation Coefficient	P-value
Use of solar panels	4.13	0.712	0.822	0.001
Employee satisfaction	3.96	0.749		

SPSS Correlation Analysis Output (2023).

The result on Table 5 presents the correlation analysis between use of solar panels and employee satisfaction in Deposit Money Banks in Owerri. 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 use of solar panels and employee satisfaction in Deposit Money Banks in Owerri is statistically significant. Therefore, there is a significant relationship between use of solar panels and employee satisfaction in Deposit Money Banks in Owerri.

H₀₂: There is no significant level of correlation between use of solar panels and customer satisfaction.

Table 6: Correlation analysis between use of solar panels and customer satisfaction

Item	Mean	Standard Deviation	Correlation Coefficient	P-value
Use of solar panels	4.15	0.804	0.743	0.001
Customer satisfaction	3.82	0.813		

SPSS Correlation Analysis Output (2023).

The result on Table 6 presents the correlation analysis use of solar panels and customer satisfaction. The result shows a p-value of 0.001 and correlation coefficient of 0.743. The result shows a $p - value \leq 0.05$ level of significance, thereby rejecting the null hypothesis and accepting the alternative which states that there is a significant level of correlation between use of solar panels and customer satisfaction.

H₀₃: There is no significant extent to which eco-friendly business conferences influence employee satisfaction.

Table 7: Correlation analysis between eco-friendly business conferences and employee satisfaction

Item	Mean	Standard Deviation	Correlation Coefficient	P-value
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Eco-friendly business conferences	3.69	0.788	0.807	0.001
Employee satisfaction	3.73	0.851		

SPSS Correlation Analysis Output (2023).

sult on Table 7 presents the correlation analysis between eco-friendly business conferences and employee satisfaction. The result shows a p-value of 0.001 and correlation coefficient of 0.807. The result shows a p-value less ≤ 0.05 level of significance; therefore, rejecting the null hypothesis and accepting the alternative which states that there is a significant extent to which eco-friendly business conferences influence employee satisfaction.

H₀₄: There is no significant level of correlation between eco-friendly business conferences and customer satisfaction.

Table 8: Correlation analysis between eco-friendly business conferences and customer satisfaction

Item	Mean	Standard Deviation	Correlation Coefficient	P-value
Eco-friendly business conferences	4.04	0.866	0.809	0.001
Customer satisfaction	4.02	0.793		

SPSS Correlation Analysis Output (2023).

The result on Table 8 presents the correlation analysis between eco-friendly business conferences and customer satisfaction. The result shows a p-value of 0.001 and correlation coefficient of 0.809. The result shows a p-value less ≤ 0.05 level of significance; therefore, rejecting the null hypothesis and accepting the alternative which states that there is a significant level of correlation between eco-friendly business conferences and customer satisfaction.

Findings

After the data analysis, the study found that:

1. There is a significant relationship between use of solar panels and employee satisfaction.
2. There is a significant level of correlation between use of solar panels and customer satisfaction.
3. There is a significant extent to which eco-friendly business conferences influence employee satisfaction.
4. There is a significant level of correlation between eco-friendly business conferences and customer satisfaction.

Conclusion

This study concludes that green innovation is a predictor of stakeholders' satisfaction in Deposit Money Banks in Owerri. The use of solar panels is very useful to both employees and customers as it enhances employee satisfaction while boosting customer satisfaction. Eco-friendly business

conference is essential for effective practice of green innovation in organizations hence it enhances both employee satisfaction and customer satisfaction. The study therefore submits that any organization that relegates the green innovation indices of use of solar panels and eco-friendly business conferences to the background exposes itself to avoidable stakeholders' dissatisfaction especially as it affects employees and customers.

Recommendations

Based on the findings, the researcher made the following recommendations:

- i. Management of Deposit Money Banks should always use solar panels to eliminate severe noise pollution for greater stakeholders' satisfaction.
- ii. Management of Deposit Money Banks should manage all available solar panels in the enterprises very effectively for enhanced customer satisfaction.
- iii. Eco-friendly business conferences should be always employed by Deposit Money Banks so as to boost employee satisfaction.
- iv. Deposit Money Banks should always use zoom and allied facilities for their conferences since such is eco-friendly.

Contribution to Knowledge

The researcher further infers that this study contributes to knowledge by providing empirical literature and by bridging research gaps on the relationships between each of use of solar panels and employee satisfaction; use of solar panels and customer satisfaction; eco-friendly business conferences and employee satisfaction and eco-friendly business conferences and customer satisfaction. The study adds to the body of existing knowledge in the field of green innovation.

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