

# Identifying the key factors of sustainable entrepreneurship in the Nigerian food industry: The role of media availability

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## ABSTRACT

**Objective:** The article's objective is to identify how media could facilitate the effect of sustainable entrepreneurship on consumer purchase behaviour, based on evidence from the food industry in Nigeria.

**Research Design & Methods:** The research population was experts who have sufficient information, expertise, and experience in the field of sustainable entrepreneurship and marketing, and pay attention to online social platforms and consumer purchase behaviour. There population amounted to 33 interviewed experts. A combination of Delphi-ANP (Analytic Network Process) approaches was used. Results showed that customers' satisfaction was the key dimension that affects sustainable entrepreneurship in the Nigerian food industry.

**Findings:** 'Access to the internet' had the highest rank (F15) (0.33741), which showed that it was the most important factor in developing sustainable entrepreneurship of food industry, regarding to media role in Nigeria. 'production process and the environment' (F1) (0.33461) ranked second and was close to the 'price satisfaction' (F17) (0.32049) in importance. In addition, managers should not ignore the 'excellent functional quality of the brand,' 'personal attributes of customers' care' and 'packaging quality,' since these three factors were ranked fourth, fifth and sixth, respectively.

**Implications & Recommendations:** The entrepreneurs should focus more on this dimension to develop a sustainable food industry in Nigeria. Meanwhile, media availability had a significant role in developing sustainable entrepreneurship in Nigeria.

**Contribution & Value Added:** Most researchers focused on sustainable entrepreneurship without considering the impacts of media as a channel of achieving it by changing the consumers' behaviours towards consuming a particular product. Therefore, this research -investigated how media could moderate the effect of sustainable entrepreneurship on consumer purchase behaviour, taking evidence from the food industry in Nigeria.

**Article type:** research article

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## INTRODUCTION

Many customers of the food customers are unaware of the effects of the use of chemicals on the natural environment and their health (Organization, 2019; Schreinemachers & Tipraqsa, 2012; Ivanov *et al.*, 2021; Pilelienė & Tamulienė, 2021). However, through the use of media, it will be made known to them, and it will change their purchasing behaviour that will also affect production processes. Most researchers, however, focus on sustainable entrepreneurship without considering the impacts of media as a channel of achieving it through changing the consumers' behaviours towards the consumption of a particular

product. Therefore, this research investigated how media could facilitate the effect of sustainable entrepreneurship on consumer purchase behaviour, taking evidence from the food industry in Nigeria. To have sustainable food production, new innovation needed to be put in place, which is termed 'agropreneur.' To meet the food demand of the growing Nigerian population and reduce economies of scale, the food processing industries in Nigeria need to increase their production scale (Ogori & Joeguluba, 2015). Therefore, marketing becomes a vital tool in increasing productivity and making the products acceptable to the teeming customers. The media provide a better channel for communicating with customers and changing their purchasing behaviours towards locally made food products.

Decision making and evaluation of products are greatly affected by the flow of information, which give social media the great advantage of changing customers' purchase behaviours and their preferences for products' brand (Kotler & Armstrong, 2012; Kohli *et al.*, 2015, as cited in Vafaei *et al.*, 2016; Streimikiene & Ahmed, 2021). Therefore, social media has become a vital tool in need by industries to express their operation and attract customers (Kaplan & Haenlein, 2010). The introduction of social media into entrepreneurship has significantly removed time constraints by providing online tools that facilitate sharing multimedia contents with easier interfaces that allow non-professionals to share content (Fotis, 2015). Through social media, consumers can access a lot of vital information on utility on given products, costs, and reviews of satisfaction ratings by other customers. These change consumers' behaviours and business activities, greatly impacting e-commerce (Vafaei & Farkas, 2015). Meanwhile, knowledge sharing based on e-commerce may also affect consumer behaviour.

Various environmental developments over the past years has resulted in a hope for a better environment in future. One may even state that recently, there has been a shift to a circular economy, where materials are reused, and if new materials are needed, they must be obtained sustainably so that the environment is not damaged (Shpak *et al.*, 2021; Richterová *et al.*, 2021; Skvarciany *et al.*, 2021). This resulted in a challenge to make all activities of economic development sustainable. This led to the emergence of many pieces of research on sustainable agriculture and entrepreneurship (Sargani *et al.*, 2020). The need for sustainable economic development gave rise to sustainable entrepreneurship, bringing together economic gain, environmental protection and social equity (Henriques & Richardson, 2013; Jaki & Siuta-Tokarska, 2019; Yeasmin, 2016; Androniceanu & Georgescu, 2022).

Through the past decades, there have been positive achievements on the environmental protection attitudes and activities that resulted from customers that have good orientation on the need of the environment, and this affects people and set values that make them realise the impact of their purchasing behaviour on the physical environment and change their consumption choices (Zhuang *et al.*, 2021). However, this change in activities affects only the informed consumers about the need for sustainable entrepreneurship, while customers without the knowledge of the green products make no impact on the production and consumption of the products. Therefore, media has a role to play in informing and reaching consumers about the new business innovation that offers both the present and the future needs of the environment, which is sustainable entrepreneurship (Onete *et al.*, 2013). This may involve using social networks such as Facebook, Twitter, YouTube, Instagram, etc. Ellison *et al.*, (2007) point out that Facebook gives the company the ability to pass messages to customers freely. Consumers normally respond to a product based on the adequate knowledge and information they have about it at a given time (Falkowl, 2010; Musova *et al.* 2021). This allows the customers to assess different companies and organisations based on their content and offer. The green products should then be advertised through media to educate the potential customers to know how their purchasing power affects their social environment both now and in the future.

Once the consumers are informed, it may affect their decisions, which will significantly impact sustainable entrepreneurship. Family members, peers, associates, and relatives can easily be influenced by a committed customer who has more information about the products, which will affect consumers' purchasing behaviours (Belwal & Amireh, 2018; Mnerie *et al.*, 2014; Herhausen *et al.*, 2019; Cong *et al.*, 2021). Social media is a good messenger that can easily be advertised and allow review of products by customers and also recommendations from benefited customers (Kaplan & Haenlein, 2010). Channelling the use of media in the food industry will therefore be of great value and importance to both the producers and consumers.

However, the major concern should be on sustainable entrepreneurship according to which the food industries should adhere to the green economy and focus of the sustainable development goals (Baldesku & Ilysheva, 2022). Due to demand in increased production, many farmers that provide the raw material for food industries are adopting the use of chemicals in their production as means to reduce time waste and increase their yields (Valbuena *et al.*, 2021). However, this contrast with the need for a green economy that offers sustainable entrepreneurship.

The article's objective is to identify how media can facilitate the effect of sustainable entrepreneurship on consumer purchase behaviour based on evidence from the food industry in Nigeria. The article answers the following research questions:

**RQ1:** How can the media facilitate the effect of sustainable entrepreneurship on consumer purchase behaviour of the Nigerian food industry?

**RQ2:** What are the main dimensions and factors of sustainable entrepreneurship?

**RQ3:** Which factor has more priority in comparison with other factors?

This article is structured as follows. Firstly, we will present the literature review to introduce our research variables. Secondly, we will introduce the study's methodology and discuss the results of data analysis, and finally, we will present the theoretical and practical contributions, along with the limitations and suggestions for future research.

## LITERATURE REVIEW

Sustainability refers to a conscious effort of carrying out development or any form of activity to avoid depleting the natural settings. This shows that sustainability is the ability to maintain the social, economic, and environmental factors equally in activities that provide the present needs without harming future generations' needs (Strange & Bayley, 2008; Matuszewska-Pierzynka, 2021; Stanek-Kowalczyk, 2021; Florek-Paszowska *et al.*, 2021). The act of teaching or training individual's innovation, combining factors of production into products, taking a financial risk of investing capital, social risk of efforts and time into a business to achieve profits and satisfaction is termed entrepreneurship (Ismail Kayode *et al.*, 2016). The diverse nature of the natural endowment in Nigeria has made entrepreneurial activities very possible in the early period (Raimi *et al.*, 2010). One should add entrepreneurship is the vehicle through that which the economic system is entered (Meyer & Krüger, 2021). Entrepreneurship, therefore, provides the platform to exploit different business opportunities with the available resources using new ideas and innovation. Therefore, sustainable entrepreneurship is a key factor in pursuing economic opportunities that bring into existence future products that have both economic and non-economic gains to society and individuals ((Ibe *et al.*, 2020; Chigozirim *et al.*, 2021; Gregori & Holzmann, 2020; Hahn *et al.*, 2018; Bouzari *et al.*, 2021). This made businesses consider the impacts of all activities economically, environmentally and socially to ensure a greener way of life both now and in the future. This enables linking economic activities with social and environmental values to sustain well-being for future generations rather than limiting all activities to financial gain to the detriment of environmental standards (Tiba *et al.*, 2021; Davidson *et al.*, 2021). It is needed to provide solutions to environmental problems rather than adding to the existing ones. Sustainable entrepreneurship should bring changes in the market products and services that require less use of natural resources and energy, which adheres to the productive empowerment and decent work of UN sustainable development goal 8 (Moya-Clemente *et al.*, 2020). Therefore, a business should always look for ways of consuming less energy, recycling or renewing resources to protect social and environmental conditions while achieving profits (Delibasic, 2022).

Although the concept of sustainable entrepreneurship is becoming an emerging topic in some African countries, there is a need to study how key factors of sustainable entrepreneurship in specific countries, such as Nigeria, have evolved, especially in such a significant sector as the food industry (Lin, & Ayegba, 2020). Moreover, the role of media availability in promoting sustainable entrepreneurial activities in these countries needs major attention. Nevertheless, only a few studies have implicitly mentioned such an important topic. For instance, Ibadunni *et al.* (2021) have generally investigated the disruptive power of innovation to improve sustainable entrepreneurship through small and medium

firms in Nigeria. They suggest that by focusing more precisely on improving sustainable entrepreneurship in Nigeria through SMEs, the country's socio-economic situation will improve significantly. In another study, Moya-Clemente *et al.* (2020) identified a number of factors to develop Nigeria in terms of environmental and economic aspects by highlighting sustainable entrepreneurial activities. They used the approach proposed in sustainable development goals, which is used predominantly in African countries. Chukwu *et al.* (2021) also highlight the need for sustainable entrepreneurship education in Nigeria. Nevertheless, they overlooked the role of media in such an approach. In another relevant research, Baporikar and Fotelela (2020) explored the main socio-cultural aspects for sustainable entrepreneurship development in African countries. Their analysis was focused on particular aspects of sustainable entrepreneurship development at a micro-level.

The literature on the connection between sustainable entrepreneurship and media is also rare. For instance, in a relevant study, Giessen (2015) studied the two concepts of sustainable entrepreneurship and media-based learning. The research sheds light on how the media could contribute to sustainable entrepreneurship development. Besides, in their seminal work, Gregori and Holzmann (2020) explore the concept of digital sustainable entrepreneurship as an emerging topic. Their study was firm-level research that highlighted the business models that could help embed digital technologies to create socio-environmental values. Crecente *et al.* (2021) also believe that sustainable entrepreneurship could impact media. They implicitly indicate this issue, but their research does not provide specific insights. Verdugo and Villarroel (2021) measured the relationship between how students were exposed to social media and their insights about sustainable entrepreneurship. This research also was mainly focused on how students' attitudes could be changed to improve sustainable entrepreneurship. Moreover, Matzembacher *et al.* (2020) mention that promoting sustainable entrepreneurship education campaigns on the Internet, social media platforms, and other types of media could help improve sustainable entrepreneurial activities. Anderson *et al.* (2017) also believe that using social media could empower communities to engage in sustainable entrepreneurial activities.

In sum, although a series of studies shed light on various aspects of the questions raised in this research, many aspects of the topic have remained unaddressed. Therefore, this research contributes to the extant body of the literature by providing more precise answers to the research questions.

## RESEARCH METHODOLOGY

### Variables for the Delphi method

Based on the in-depth literature review, we used five various groups of variables (D1-D5) for our Delphi method (Table 1), which we discuss in detail below. Each group included a couple of factors and in total we investigated 20 various factors (F1-F20).

#### Green innovation

Entrepreneurship can greatly influence consumers' purchase behaviours by bringing about scientific innovation and employment opportunities that will boost competitiveness (Schultz *et al.*, 2011). Over the decades, green entrepreneurship was significantly investigated by diverse scholars and policymakers, which resulted from the growing need for new ideas that result in profitable ventures (Hussain *et al.*, 2021).

#### Media availability

The advance of social media means and their accessibility facilitates reaching out to all customers while saving transportation costs. The availability of social media is a vital tool that aids green entrepreneurs' promotion amongst young people (Himel *et al.*, 2016; Mazurek *et al.*, 2019). Therefore, it is of utmost importance to determine the number of customers that have access to *e.g.* the Internet, social networking sites, mobile phones, and laptops, as it directly affects the flow of information. Hennig-Thurau *et al.* (2004) and Ismail (2017) maintain that social media has taken over consumers lives which affects their interactions with producers and marketers.

### Products quality

Although media has a vital role in advertising green products, the product quality goes a long way in attracting consumers and affecting their behaviours. The quality of the products provides consumers with functional benefits that satisfy their needs, this describes products' quality as conformance to requirements or fitness for it uses (Russell & Taylor, 2019). In addition, Lakhali & Pasin (2008) support the International Organisation for Standardisation's definition of product quality 'as the ability to satisfy the customer and market.' Therefore, product quality deals with the features, reliability, and conformance of products presented to the customers via social media advice and physical products.

### Quality of service

The quality of service provided by either the manufacturers or marketers to the consumers has a major role in influencing their purchase behaviours. This has to do with all the services provided before and after the sale. Shaharudin *et al.* (2010) state that an after-sale service could create a long-term customer relationship with producers or distributors. Unconsumable products like electric appliances require different services such as repair, replacement, installation, warranty, cashback, and assistance in their operations and maintenance (Bei & Chiao, 2006). The quality of service should never be compromised as it greatly affects customers' ways of thinking.

### Customer satisfaction

The satisfaction derived from the use of a product influences the demand for the product again. Kotler & Armstrong (2012) define consumer satisfaction 'as a condition in which consumer expectations is met by a product.' This is consumers' psychological response to the positive evaluation of their actual consumption experience that meets their expectations of a product (Shukla, 2004). This revealed the customer assessment in respect to sacrifice, efforts, and cost incurred in accessing a product or service and the benefits derived from the products or service (Chitty *et al.*, 2007). Therefore, consumer satisfaction is paramount for all entrepreneurs from start to end of the production process, which is meeting its final user or consumer.

**Table 1. Dimensions and factors based on Delphi technique and literature review**

Dimensions	Factors	References
D1: Green Innovation	F1: Production process and the environment	Schultz <i>et al.</i> (2011)
	F2: Production and social value	Hussain <i>et al.</i> (2021)
	F3: Minimising risk and maximising profit	
	F4: Opportunities created	
D2: Media Availability	F5: Access to the internet	Hennig-Thurau <i>et al.</i> (2004)
	F6: Access to social media gadgets	Himel <i>et al.</i> (2016)
	F7: Availability of social networking sites	Ismail (2017)
	F8: Ability to provide a comparison between brands	
D3: Products Quality	F9: Excellent functional quality of the brand	Lakhali & Pasin (2008)
	F10: Durability of the products	Russell & Taylor (2006)
	F11: Reliability of the products	
	F12: Aesthetic features of the products	
D4: Quality of Service	F13: Packaging quality	Bei & Chiao (2006)
	F14: Delivery time reliability	Shaharudin <i>et al.</i> (2010)
	F15: After-sale service provisions	
	F16: Personal attributes of customers' care	
D5: Customers' Satisfaction	F17: Price satisfaction	Chitty <i>et al.</i> (2007)
	F18: Distribution satisfaction	Kotler & Armstrong (2018)
	F19: Brand satisfaction	Shukla (2004)
	F20: Quantity satisfaction	

Source: own study.

### Expert sample

This study population included experts who had sufficient information, expertise, and experience in the field of sustainable entrepreneurship and marketing, with special attention to online social platforms and consumer purchasing behaviour. There were 33 experts interviewed in this study. Data were collected from experts within three months (July-September). In the research sample, 51.5% and 48.5% of the respondents were men and women, respectively. The highest number of respondents (54.5%) were in the age groups of 40-50 years, 45.6% of the respondents held master's degrees suggesting that most respondents have completed higher education. Most of the respondents were entrepreneurs (online and offline businesses). The pairwise questionnaire sheets were sent via email to respondents.

To check the validity of the measurement tool, content validity was used (Moghadamzadeh *et al.*, 2020), and a pairwise questionnaire was provided to experts to confirm question's accuracy. The purposeful sampling of the present study was a purposeful judgmental sampling, and 33 experts answered the questions. The experts had at least 15-years of experience in work or marketing research related to entrepreneurship, the food industry, and consumer purchase behaviour.

Most of the respondents were entrepreneurs in the field of online social platforms and answered pairwise questionnaires via an online link sent to them in online social platforms channels. Sampling continued until the theoretical saturation stage. To determine the reliability, the ICC coefficient value was confirmed in terms of consistency (Ebrahimi *et al.*, 2020; Janavi *et al.*, 2021; Salamzadeh *et al.*, 2021). Experts were asked to rate the questionnaire based on 'average measure of every factor,' and these scores were used to calculate the ICC coefficient. Meanwhile, the absolute agreement coefficient value was also confirmed in 95% confidence intervals.

### Analytic network process (ANP)

The ANP, a method derived from the analytic hierarchy process (AHP) proposed by Saaty (1996), adds the dependence and feedback relationships to the AHP and provides a more generalised framework than the AHP for dealing with decision-making problems in which there is a need to consider assumptions about dependencies between criteria and alternatives (Matin *et al.*, 2020). The ANP uses a super matrix algorithm to determine the priority weights of the goals, criteria, and alternatives. The ANP (Saaty, 1996), the general form of the AHP (Saaty, 1980), was used in Multiple-Criteria Decision-Making (MCDM), which allows for inclusion of interdependent relationships. This method has been widely applied to many fields (Chang *et al.*, 2013). This research follows the steps proposed by Saaty (1996).

### The Delphi method

A case study is presented here to examine the practicality of the proposed evaluation framework. A group of experts in entrepreneurship was formed to define the key constructs regarding sustainable entrepreneurship. With an previously mentioned review of the literature and consultation of the group based on the Delphi technique, 17 factors were determined. A list of factors constructs was identified (Table 1). This study followed the steps proposed in previous studies (Brooks, 1979; Kamble & Raut, 2019; Mehta *et al.*, 2014). In the next step, outputs of the ANP approach are interpreted.

## RESULTS AND DISCUSSION

The ANP method was employed to rank the importance of all factors in this section. The nine-point scale pairwise comparison by Saaty (1996) was used to prepare a questionnaire. The consistency property of each matrix from each expert was checked first to ensure the consistency of judgements in the pairwise comparisons. The results of pairwise comparisons showed the priorities of dimensions and factors with respect to dimensions when the inter-relationship among factors was not considered. In fact, pairwise comparisons are used to establish the element relationships within each cluster.

Each column of a super-matrix was either a normalised eigenvector with possibly some zero entries or all of its block entries are zero. The unweighted super-matrix illustrated in the first part of

Appendix 1 was then multiplied by the priority weights from the clusters (calculated by super decision software), which yields the weighted super-matrix (second part of appendix 1). This was done because a matrix must be stochastic, *i.e.* its columns must add to one. Finally, the system solution was derived by multiplying the weighted super-matrix of model variables by itself, which accounts for variable interaction, until the system's row values converge to the same value for each column of the matrix. This 'power method' process yields the limiting matrix, which provides the relative importance weights for every factor in the model (Appendix 1).

In brief, the unweighted super-matrix was normalised to form a weighted super-matrix. The weighted super-matrix was then raised to limiting powers to capture all the interactions and achieve convergence. In the weighted super-matrix, we could obtain the priorities shown in Table 2.

According to Table 2, the importance weighted of the five dimensions were  $D5=0.33245$ ,  $D2=0.31103$ ,  $D1=0.13505$ ,  $D3=0.12987$  and  $D4=0.09159$ . Customers' satisfaction ( $D5$ ) was the key dimension that affects sustainable entrepreneurship in the food industry of Nigeria. The entrepreneurs should focus more on this dimension on developing the sustainable food industry in Nigeria. Meanwhile, Media availability had an important and significant role in developing sustainable entrepreneurship in Nigeria.

Moreover, considering the global weights, the priorities of factors were  $F5>F1>F17>F9>F16>F13>F18>F2>F10>F6>F15>F8>F12>F20>F11>F3>F19>F14>F4>F7$ . 'Access to the internet' had the highest rank ( $F15$ ) (0.33741), which shows that it is the most important factor to develop sustainable entrepreneurship of food industry, regarding to media role in Nigeria. 'Production process and the environment' ( $F1$ ) (0.33461) ranked second and was close to the 'price satisfaction' ( $F17$ ) (0.32049) in importance. In addition, managers should not ignore the 'excellent functional quality of the brand,' 'personal attributes of customers' care' and 'packaging quality,' since these three factors were ranked fourth, fifth, and sixth, respectively.

**Table 2. Priorities of dimensions and factors**

Dimensions	Factors	Weights (Normalised by cluster)	Limiting
D1: Green Innovation (0.13505)	F1: Production process and the environment	0.33461	0.04168
	F2: Production and social value	0.25248	0.03145
	F3: Minimising risk and maximising profit	0.20756	0.02585
	F4: Opportunities created	0.20535	0.02558
D2: Media Availability (0.31103)	F5: Access to the internet	0.33741	0.08209
	F6: Access to social media gadgets	0.23723	0.05772
	F7: Availability of social networking sites	0.20450	0.04975
	F8: Ability to provide a comparison between brands	0.22086	0.05373
D3: Products Quality (0.12987)	F9: Excellent functional quality of the brand	0.31681	0.03839
	F10: Durability of the products	0.24873	0.03014
	F11: Reliability of the products	0.21550	0.02611
	F12: Aesthetic features of the products	0.21896	0.02653
D4: Quality of Service (0.09159)	F13: Packaging quality	0.27969	0.02537
	F14: Delivery time reliability	0.20548	0.01864
	F15: After-sale service provisions	0.22746	0.02063
	F16: Personal attributes of customers' care	0.28738	0.02607
D5: Customers' Satisfactions (0.33245)	F17: Price satisfaction	0.32049	0.13470
	F18: Distribution satisfaction	0.25554	0.10740
	F19: Brand satisfaction	0.20642	0.08676
	F20: Quantity satisfaction	0.21755	0.09143

Source: own study.

## CONCLUSIONS

Regrettably, Nigerians have lots of challenges in their food sectors; this has resulted in 65% of Nigerians facing challenges of food insecurity (Federal Ministry of Agriculture and Water Resources, 2010). Despite all agricultural programmes aimed at improving agricultural productivity in the country, fewer results were achieved as billions of dollars are being spent annually on the importation of processed agricultural food such as rice, wheat, sugar, frozen fish etc. Owing to the population growth rate in Nigeria, it is paramount to improve its food productivity by setting up new agro-allied enterprises that will bring innovative measures into agribusiness in the country (Owoade, 2017).

This article analysed how media could moderate the effect of sustainable entrepreneurship on consumer's purchase behaviour based on evidence taken from the Nigerian food industry. Different dimensions with their respective factors were considered, as presented in Table 1. According to their weights, all the dimensions and their respective factors were ranked using ANP. Therefore, this shows that consumer satisfaction plays a vital role in influencing the food industry's sustainability in Nigeria and should be an area of focus and concern for all entrepreneurs who work in the food industry or planning to join it. The ability of the product to meet the consumer's expectation is what Kotler and Armstrong (1999) term as 'consumers satisfaction.' Therefore, food industries should prioritise the ability of their products to satisfy the consumers and their environment. There is no iota of doubt that once the products meet the expectation of the consumers, they are willing to sacrifice their means, efforts, and time to access the products (Chitty *et al.*, 2007). Amongst the five dimensions, consumers' satisfaction carried the heavyweight in influencing the sustainability of food industries, and this should be prioritised if the goal of sustainable entrepreneurship is to be achieved.

Adding to the costumers' satisfaction, media availability was also ranked second in influencing consumer purchase behaviour in Nigerian food industries. The availability of media provides access to the dissemination of information about products and the process of production. Since the target of sustainable industries is meeting both the need of their customers and also maintaining process of production that maintains the environment, this should be made known to the customers, so they should know the production process has no negative impact on the environment and purchasing such products helps in preserving the environmental quality and standards. Various forms of media should be used in achieving this. Currently, there is no overstatement in saying that social media has taken over consumers' lives and this greatly affects their interaction with both the producers and the marketers (Hennig-Thurau *et al.*, 2004; Ismail, 2017).

Looking at the global weights, that is considering the rank priorities of all the factors in the dimensions, access to the Internet was ranked first (0.33741). This implies that for sustainable entrepreneurship of food industry in Nigeria, the Internet should be made available to offer connectivity of all the social platform that will enable advertisement and dissemination of vital information about the products and quality rendering customers services with less cost. Social networks is playing an ever-increasing role in economics, and will play it in years to come (Ebrahimi *et al.*, 2019). Social media remains the vital tool for entrepreneurship promotion amongst young people (Himel *et al.*, 2016). According to the ranking, the second factor was the production process and the environment (0.33461). The production process has an essential role in sustainable entrepreneurship in Nigeria, influencing the customers' decisions concerning environmental quality. The production processes should consider economic opportunities that bring products that have both economic and non-economic gains to society and individuals (Gregori & Holzmann, 2020; Hahn *et al.*, 2018). The food industries should consider both the impacts of all activities economically, environmentally and socially to ensure a greener way of life both now and in the future. Economic activities should be linked with social and environmental values in their production process to sustain good well-being for future generations rather than limiting all activities to financial gain to the detriment of environmental standards (Tiba *et al.*, 2021). It is needed to provide solutions to environmental problems rather than adding to the existing problems.



In addition, the satisfaction of consumers on the price of products, functional quality of the brand and brand satisfaction also have good weight amongst factors that influence costumers' behaviours in the food industry.

The results provided a perspective on the development of sustainable entrepreneurship in the developing country of Nigeria. The results emphasised the importance of the two dimensions of 'customers' satisfaction' and 'media availability.' In fact, the first step in developing sustainable entrepreneurship is creating public interest in it and the media is a powerful tool to do it. Especially online social platforms can play a significant role in this regard. The research results emphasise the important role of media availability in developing sustainable entrepreneurship. Internet access and presence on social networks can lead to transferring data very quickly. Although this study does not mention the role of government in the development of the Internet, it seems that government support is needed to further develop sustainable entrepreneurship in the Nigerian food industry. Creating and developing an Internet infrastructure should be a priority. From another point of view, it should be noted that innovation is the key to success in entrepreneurship and the need to pay attention to innovation, especially in the food industry, which has experienced high competition in recent years. The fact that the Internet access is the most important factor in sustainable entrepreneurship development is a testimony to the high importance of social media and online commerce. Concerns about the production process and environmental issues also have an important place that the research results emphasise. It is important to note that price is also mentioned as an essential factor in the direction of sustainable entrepreneurship, and specifically, price satisfaction is an important factor in sustainable entrepreneurship research. From a managerial point of view, the need to pay attention to customer satisfaction and environmental issues has always been discussed. In the developing country of Nigeria, the food industry plays a vital role. Therefore, the scientific and economic views of this field should be considered.

There are some limitations to this research. Access to field experts was one of the most important concerns of researchers. On the other hand, data collection in COVID-19 pandemic conditions made the research difficult (Androniceanu, 2020). Due to the limitations of the ANP method, this research has only emphasised prioritising and weighting dimensions and factors. Future researchers are suggested to use a combination of ANP and ISM methods to identify strategic factors. Furthermore, due to the importance of resource allocation in the food industry, innovative methods such as the Non-Compartmental Analysis (NCA) analysis are recommended. Future researchers are encouraged to use the Importance Performance Map Analysis (IPMA) approach to develop the present study to identify the 'importance' and 'performance' of research factors and dimensions. Finally, research variables can be predicted in the form of a practical model using machine learning.

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#### **Conflict of Interest**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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