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Synthesis of Energy Development of Sustainable Policy for Integrated Marketing Communications Based on Consumer Behaviour in The Global South: A Case Study of Nigeria

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Abstract

Our research focuses on the Synthesis for Energy Development of Sustainable Policy for Integrated Marketing Communications (IMC) based on Consumer Behaviour (CB) in the Global South (GS): A Case Study of Nigeria. The knowledge and the need of sustainable energy is evolving globally and so is evidence of increase consumption as long as the energy is available and affordable to the citizens. It has been positioned that Integrated Marketing Communication (IMC) should adopt a step-by-step approach to understand consumer behaviour when making an argument for sustainable energy. It has further been established that when structuring environmental values in sustainability debate, it is paramount to apply IMC to spread awareness. There exists laxity on issues such as consumer willingness, awareness, buying decision, knowledge gap, environmental benefits, costing (operation, installation and maintenance) of alternative energy products. This paper argues for the need for adopting the established five phases comprising of “behaviour selection, user orientation, communication, elements of intervention and measurement of behavioural changes”. Given the dynamics of Consumer Behaviour (CB) in the selection of energy products and the awareness created by IMC, the paper proposes the use of both positivism (deductive) and interpretivism (inductive) as a research philosophy while recognising the limitations imposed by data collection and reliability in the Global South (GS). This paper builds on the inadequacy and inability of the hitherto existing CB theories to adequately explain what drives consumer decision process to buy a product or service, by offering the practiced and tested 4Ps of marketing (that is Product, Price, Place, and Promotion). The discussion in the paper argues that the economic development of Nigeria’s future depends on the long-term availability of affordable, open and harmless energy for the ecosystem, and that security, climate change and general well-being are closely related to the underpinning energy policy. It further argues for the need for sustainable energy policy in electricity generation capacity, grid connection, electricity transmission, while highlighting the limited range of alternative energy generation. The paper concludes that alternative energy, energy efficiency, asset

analysis and valuations are prerequisite to determine the energy potential of Nigeria in her pursuit for sustainable development under the right policy regime. Finally, the paper recommends the promotion and awareness of alternative energies and energy efficiency leveraging on global partnerships for finance and creative alliance. Given the differences in cultural, economic and lifestyle of over 200 million Nigerians, future work will include collection of exhaustive primary data using a survey questionnaire and analytical tools i.e. IBM SPSS.

Keywords: *Consumer Behaviour, Renewable Energy Sustainable Integrated Marketing Communications*

1. Introduction/Background

This paper formulates and clarifies issues around the chosen topic of renewable energy (RE) as sustainable energy which has gained significant research attention across the globe due to its ability to reduce environmental damage. A detailed overview of the topic is required in the introduction chapter, as the study is based on “Development of Sustainable Integrated Marketing Communications based on the Consumer Behaviour for Renewable Energy Industry in Nigeria.” Relevant contemporary researches and scholarly studies are reviewed to establish the background for this paper. The present work attempts to understand the relationship between environmental concerns and consumer choice behaviour to purchase RE. Related literature on RE suggested that RE has proven to be the significant solution to the energy crisis in Nigeria. It further explained that RE is becoming one of the major drivers of sustainable social-economic development [1]. In this paper, Consumer Behaviour is understood as factors which determine consumers decision making process, while renewable energy (RE) resources are energies which are derived from the sources that are renewable, and would not extinguish from continuous use by the humans. RE is the opposite of non-renewable energy, which is derived from the sources which are limited, and could not replenish at faster pace. Sustainable Integrated Marketing Communications are tools of marketing communications which are technology

and internet based and repeatable without damage to the environment. The current study assumes that having sufficient knowledge about the RE products are key factors in determining how the consumers of renewable energy will purchase and use these RE products [2].

The justification for this paper is that the erstwhile studies on consumer behaviours have hitherto focused on variants of psychological discipline such as psychoanalytic, Pavlovian, behavioural and sociological models of needs [3]. These models of consumer behaviour are linked to factors influencing demand for consumption. However, it is understood that individuals are not exactly alike and differences in perceptions, behaviours, preferences and motivation play vital role in consumer behaviours [4]. What causes an individual to act in a particular way or have interest in a product or service belong in the realm of motivation, and motivation is from internal forces [5]. Nonetheless, marketers believe that the right product, price and in the right place, as well as the skillful use of people's emotions stimulate demand for a product [5]. Hence, the paper makes a case for Integrated Marketing Communications (IMC) as tool to spread awareness and usage of RE, and qualitative research is applied to understand emotions, with the application of quantitative research tool to measure and quantify the role of emotions in consumer behaviours.

As one of the top-ranked producers of fossil energy, Nigeria is still facing the challenge of provision of a reliable supply of power and keeping energy affordable for consumers. The 3000 MW generated is insufficient electricity for over 200 million citizens [6]. This begs the question, why is the generation of RE not being supported for the wider usage among consumers? Additionally, there is a dearth of existing academic work on how to divert consumer demand to the use of RE as alternative solutions to the energy shortage in Nigeria. This paper proposes the application of IMC as tool to help to achieve widespread awareness and usage of Renewable Energy (RE). Applying IMC requires one to have sufficient knowledge about the RE products and the key factors in determining how the consumers of renewable energy will purchase and use these RE products [2].

Currently, there is a lack of structural constructs in literature that define how the consumer's knowledge, commitment, and general awareness regarding RE products as indicators interact with different dimensions of consumers' sustainable or green consciousness while choosing RE products [7, 8, 9]. Also, there is the dearth of adequate knowledge about the importance of using renewable energy in the country [10]. The most suitable key indicators for the development of a structural construct is consumer awareness, and IMC can help

in enlightening and creating awareness for consumption renewable sources of energy. However, the current way of taxonomising IMC does not go far enough for the purpose of this work and does not encourage an all-encompassing way of thinking about integration. A more comprehensive new view of IMC will be adopted which will include both personal and non-personal forms of communication and the interaction and management of corporate communications, market communications and customer contact which are based on the development and management of appropriate database information and systems to enable IMC to include all available tools and forms of communication [11]. In view of this, a new perspective will make IMC transit into Integrated Marketing Dialogue (IMD) [12]. Hence, a structural construct will be designed in this research to collect data from the respondents in the dedicated region to fill this gap. The outcome of the study will be used to construct a model that should reflect consumers' knowledge, commitment, and general awareness of consumers about RE products. So far, no such model exists that can demonstrate how consumers make use of their general awareness or knowledge and commitment to RE products through consciousness about environmental benefits, economic benefits, RE reliability, and sustainability in such a way that can lead to purchasing a RE product. Additionally, the impact of Integrated Marketing Communications (IMC) has not been evaluated to develop policy frameworks that would also give importance to customer awareness of renewable energy. Yet, each generation of consumers grows up in a certain environmental and social milieu, where media, culture, and events in the international arena contribute to shape particular behaviour, including consumer demand for RE [5].

The theoretical contribution in this paper is the identification of the inputs that make up the decision-making process of consumers [13]. Ervin Goffman [14] proposed that people behave differently depending on the situations they find themselves so as to identify and sustain the image attached to such situations. To this end, the paper applies the marketing model of System 1 and System 2, and Personas marketing model to identify the emotional forces that drive consumer behaviours in order to make marketing communications or IMC impactful [5]. This approach has so far never been contextualised in consumer research on RE in Nigeria setting. If this is done, it will help to improve the focus of the marketing messages that can make a consumer want to buy a particular product.

The aim of this this paper is to develop a sustainable Integrated Marketing Communications framework based on the consumer behaviour for renewable energy industry using Nigeria as a case study. The major objective of this paper is to

investigate the factors that are influencing consumer decision-making while choosing RE products by building on the hitherto existing consumer theories using contemporary marketing models. The second objective is to determine factors that enable the application of IMC model to promote awareness and usage of RE products, by developing a model of consumer behaviour that links the use IMC tools to spread awareness and usage of RE.

The questions to enable a logical conclusion are: what are the factors influencing consumer decision-making when choosing RE products? What are the underpinning factors which may support the application of an IMC model to promote awareness and usage of RE? Thirdly, could a model of consumer behaviour be developed that links the use IMC tools to spread awareness and the consumption of RE products?

2. Literature Review

Balasubramanian and Summey [12] acknowledge that marketing involves the whole business process which closely integrate all efforts to discover, create, arouse, and satisfy customer needs, and that "integrated marketing" (IM) manages and integrates all marketing mix variables of the 4 P's of marketing namely; product, price, place, and promotion to enhance their collective marketing impact. Both authors further trace the genesis and prognosis of IMC and delineate environmental factors that enable an evolutionary movement from Integrated Marketing (IM) toward IMC in recent decades and conclude that advances in communication technology will cause another evolutionary move from IMC toward Integrated Marketing Dialogue (IMD), where customers will search for marketers for informational dialogue and exchange, thereby building relationships together.

Pickton [15] described IMC as the bringing together of all marketing communications activities. IMC is recognised here as the process of integrating all the elements of the promotional mix. This view does not highlight other critical features which IMC should embrace. The American Association of Advertising Agencies in describing IMC [15] highlight 'planning', 'strategic roles', 'mc mix', 'clarity', 'consistency' and 'impact'. In other words, IMC has moved towards a more holistic view of communication as the backbone of business organisations. Therefore, IMC is a process which involves the management and organisation of all 'agents' in the analysis, planning, implementation and control of all marketing communications contacts, media, messages and promotional tools focused at selected target audiences in such a way as to derive the greatest enhancement and coherence of marketing communications effort in achieving

predetermined product and corporate marketing communications objectives [16].

Still, a more comprehensive conceptualisation of IMC is required to include both personal and non-personal forms of communication and the interaction and management of corporate communications, market communications and customer contact which are based on the development and management of appropriate database information and systems to enable IMC to include all available tools and forms of communication [11]. In view of this new perspective this makes IMC to transit into Integrated Marketing Dialogue (IMD) [12]. It is this new concept of IMC that will suffice for this paper as the concept encompasses features such as: planned approach, range of target audiences, range of promotional tools, range of messages, range of media, clearly identified marketing communications objectives, management of all forms and places of contact, effective management and integration of all promotional activities as well as people involved and incorporate all product or brand and 'corporate' marketing communication (MC) efforts.

Pickton [15] further suggests the inclusion of the following characteristics in order for IMC to create demonstrable benefits of integration. 4Es which stand for: Enhancing – improving, augmenting, intensifying economical – least cost in resources, Efficient – doing things right, competent and Effective – doing the right things, achieving objectives. The 4Cs which involve: Coherent – logically connected, fused, Consistent – not self-contradictory in harmony, accord, Continuity – connected and contiguous over time and Complementary – a balanced whole, supportive. The 4Ss mean: Synergistic – $2+2=5$ phenomenon, the whole is greater than the sum of the parts; Synchronistic – timed and in appropriate sequence; Symbiotic – mutually dependent but benefiting from uniqueness and independence of individual elements; Systemic – part of a unified system.

Hitherto, the marketing of RE products have been done by using different marketing strategies. Among these is the use of Integrated Marketing Communications (IMC), which is one of the most useful marketing communications that could help for the major boost of the RE sector [17]. According to the principles supported by Philip Kotler et al. [18], marketing for the RE products would be done with the help of social processes. This will involve consumer benefits to be gained from the government and the target audience could also be identified for benefits. Chris Fill and Turnbull believe that the effective use of IMC as a combination of all promotional tools for communication of messages would help in developing ideas related to the understanding of RE over the key drivers of market based on influencing brand strategies [19]. This idea would support the identification of issues and

delineating progress in meeting objectives set for the marketing plan. Some of the IMC tools which have been identified for use include digital marketing which is reflected in the advertisements and could be posted on YouTube, Facebook or on any other social media platform [20]; Public relations which could be used to deliver valuable messages and make the public understand the importance of the product [21].

According to Kotler [18], IMC is the concept under which a company integrates and coordinates its multiple communication channels to deliver a clear and consistent message with care. Considering the foregoing discussion, IMC have been conceptualised within a framework of three integrated and inter-linked IMC models that represent the process by which marketing communications occur, the way in which they are planned and the tools and techniques that can be used to put IMC into practice. These three IMC framework models include the IMC process Model, Wheels of IMC model and the IMC RABOSTIC planning model which are discussed below.

The IMC Process model describes how marketing communications flow from senders to receivers and beyond. Receivers may either be members of the intended target audience(s) (including customers, consumers and other stakeholders and publics both within and external to the organisation) and non-audience members. Receivers may then promulgate further communications with others. In an increasingly sophisticated 'mediascape' [15], such communications will include use of electronic and non-electronic media within a 'web' of social communications and in a micro and macro communications environment [15]. This means how marketing communication flows from the sender of the message to the receiver. In this context the receiver of these messages are the consumers of the renewable energy [22]. The communication can be targeted to few individuals who will then propagate the same information to other consumers thus will highly promote the knowledge on the consumption of renewable energy and it will then improve the sales of renewable energy. This model therefore is very significant for a faster passage of information from sender to the receiver of the significance of the consumption of renewable energy.

The IMC RABOSTIC Planning model refers to how integrated marketing communications are planned, organised and managed. It centres on the management aspects of marketing communications and focuses on the tasks and decisions that have to be made when planning and, ultimately, implementing marketing communications. Although there may be some argument about the sequence in which the decisions should take place, the decision areas are basically common to all general business

and marketing planning [23, 24, 15]. In this model, the planning cycle forms the acronym RABOSTIC: R = research and analysis; A = audiences; B = budget; O = objectives; S = strategy; T = tactics; I = implementation; and C = control, and an information stream is constantly tapped into throughout the cycle as an iterative process. This IMC Model deals with the management and planning issues of IMC, and deals with analysis and research of the situation and feedback from prior activities and campaigns of the marketing communication of renewable energy. The key element in this is a set of decision which must be put together to make a final plan of marketing communication. In case the integration is to occur, the whole series will need to be formulated [25]. The model, however, is the same where marketing plans refers to the market target in which the consumers of the renewable energy are target for marketing communication plans.

The Wheel of IMC model is about how IMC is put into action through the mix and the media. This model describes the mix of marketing communications activities that can be incorporated into IMC. Typically, the promotions or marketing communications mix has been classified into a set of four items (e.g. Public Relations, Advertising, Sales Promotions, Personal Selling). Despite whatever drawbacks this may have, it serves as a simple and easy to grasp typology as long as its limitations are appreciated - categories that overlap, are not discrete or exclusive, and subject to difficulties in knowing where to place some promotional activities. The Wheel of IMC uses as its basis the four categories and presents them in a circle to highlight their overlapping nature. The outer circumference indicates the media which are the means by which IMC activities 'gain voice' through transmission. The hub of the Wheel emphasises that activities need to be integrated to achieve their full effect [15]. This model of IMC is about the mixture of marketing communications activities which can be incorporated into IMC. The marketing communication mix lies at the marketing communication foundation. Marketing mix has been the most famous known as 4Ps. This model actually reflects the IMC enactment, and it is based on the frequency of use of the 4-item categorisation which includes the personal selling, sales promotions, public relations and advertisement of the renewable energy [26]. Albeit it has its own problems as a model, its importance lies in its simplicity as well as its general acceptance.

Overall, a proper understanding of the consumer perception would be considered as extremely helpful and raise consciousness about the fact in which they make use of energy for their daily needs before an IMC modelling can be impactful. In this regard, it has been understood that most of the people in Nigeria do not have a proper access to energy supply for 24 hours [27]. Also, Integrated Marketing

Communications Assessment Profile (IMCAP) is about how to measure IMC. Although, academics and practitioners have favoured ‘output’ or ‘outcome’ metrics, but two ways to measure and control most operations have been suggested – through the use of output controls and process controls [15], “Output controls evaluate the results of programs. Process controls evaluate how programs are developed. Up to now, however, process controls have seldom been used in marketing communications”. For these reasons, it is suggested that it is preferable to use process measures for IMC assessment which can still be used alongside ‘traditional’ metrics. How this might be achieved for IMC is not within the scope of this study.

The transition to renewable energy (RE) globally can be traced, and Global South perspectives on RE can also be tracked. The use of technology could be understood as one of the primary contributing factors towards transition to RE in different regions of the world. Hence, the different forms of RE technology adoption and the level of technology could be considered as one of the major factors that would lead towards economic growth and development of RE sources [28]. Technological progress or innovation in RE within different countries can be considered as an indicator towards progress in adoption of RE.

Table 1. Categorisation of RE technologies in different countries [28]

RE Technologies	Category	Countries
Wind Energy	High	Australia, Argentina and America
Solar Energy	Medium	South Africa, Maldives, India and Philippines
Hydropower Energy	High	Nigeria, Egypt, Jordan and Australia
Biomass Energy	Low	India, Australia and South Africa, Jordan, Nigeria
Geothermal Energy	Low	Europe

The Table 1 shows that solar energy is mainly considered as a medium supported technology, which is installed within major countries in the Global South. This form of renewable energy is being considered as the most important kind of

energy that is supporting the economies of these countries [28]. The issue with this typology is that the metrics which were used to determine the high, medium and low technologies were not disclosed. However, transition to RE in Nigeria is not without its problematics. The Nigerian economy has faced tremendous population boom, which has stretched the supplies of power and soared the emissions of carbon to a certain breaking point. The given reasons have been how does one turn an oil-rich Nigeria into a renewable-based economy [29]. Nigeria, which is one of the most populous countries in Africa, requires 10 times of the current output of electricity based on guaranteeing supply to 200 million people. From various estimations, it has also been seen that half of the population in Nigeria do not have access to electricity supplies. Different campaigners who have initiated the transition process to renewable energy sources have discovered it as the most efficient way of bringing the different rural communities into a common platform [30]. This transition is further aimed to clean a bit of the population from the worst form of population problems. According to Thomson Reuters Foundation, it has been discussed that ready and easy access to electricity to every home would further help in reducing the unemployment rates in youth. This would further help in increasing productivity within the country [31]. Renewable energy if brought within the economy would lead to greater form of contribution towards the reduction in carbon footprint based on the energy demands from an urban population.

Nonetheless, RE is having some obstacles which make consumers to stay away from this type of energy in Nigeria. The amount of renewable energy produced is always in small quantity as compared to traditional sources, this is very crucial in the country where a higher percentage of population requires a lot of energy to meet the demand. The country produces higher fossil fuels hence it may be very hard to fully adopt the use of renewable sources of energy which do not meet the demand of the country [32]. Therefore, it means that the country cannot solely depend on renewable sources. Renewable energy is also unreliable which scares consumers from using this type of energy. The technology of renewable energy fully depends on weather, since weather is subjected to variation, the production of renewable energy will also change. It means that if atmospheric conditions are not favourable enough then the renewable energy produced will be in smaller quantities. The cost of renewable energy can be relatively expensive since it requires a huge amount of initial capital to set up renewable energy production [33]. This will discourage consumers from using this type of energy and they will opt to go for traditional sources which are in abundance in the country at affordable cost.

Benefits of RE for Nigeria cannot be overemphasised. Efficiency in energy leads to many forms of social benefits such as reduced energy bills for every poor household within the Nigerian economy. From an economic standpoint, it can be discussed that the implementation of renewable energy target within the country would have much form of significant costs [34]. The Nigerian economy could majorly benefit from the use of targeted interventions, which would further aim towards the reduction of local air pollution. This would also help the country in tackling the emissions from greenhouse gases. The lack of irregular supply of power and reliable access can be defined as a persistent problem that is affecting several businesses across the country. This kind of problem based on the supply of energy resources mostly discourage various foreign investors from investing within the country [35]. From an estimation of the world power in energy production, Nigeria is situated at the bottom of the world power ranking. According to the World Bank Business Report, Nigeria is ranked at 187 among 189 countries from all across the world [35].

Nigeria energy mix has largely been dominated with the extreme use of oil that constitutes up to 57 percent and a 36 percent of natural gas [36]. Hydropower and solar power majorly represent 7% and 13% respectively. Most of the Nigerian population primarily depends on the utilisation and burning firewood for the purpose of generating energy. The burning of firewood has several forms of serious health implications that would brought heart and lung diseases [37]. Needless to say, that the utilisation and development of renewable energy should be given topmost priority. Nigeria is mostly blessed with a large form of renewable energy resources [38]. The full form of utilisation and development would lead to sustainable development and reduction in poverty for the economy. The use of renewable energy resources leads to less impact on the environment than any other form of energy sources [30]. For this reason, Nigeria may need to invest more to support development of renewable energy resources. This means, technologies should be developed in such a manner that it would remove all forms of constraints and barriers towards the diffusion of renewable energy. Although there are some problematics of Renewable Energy in Nigeria, however, the country has abundant sunshine, solar installation projects are only in the country between 7.0 kWh/m² /day within the northern coastal regions and 4.0 kWh/m² /day within the Southern coastal regions. The availability of sunshine can be considered as the major form of positive indicator that the country is investing towards the development of solar energy resources [39]. Furthermore, the government of Nigeria has also initiated the operation based on “Light up Rural

Nigeria” since 2014 which primarily aims towards providing constant supply of electricity in the rural areas with the help of an off-grid system. However, Nigeria faces a low level of investment for generating power from renewable energies [40]. Low costs of investment but higher costs of maintenance have resulted for the low development of renewable energy strategies and products in Nigerian households. There are many consumer behaviour (CB) theories and models that can be applied to understand individual consumers and their consumption pattern. Some of these CB theories are enumerated below.

The psychoanalytic model says consumers will always respond to symbolic concerns as much as they will always respond to those functions and economics. In this theory it implies that external factors like income and age do not fully account for the behaviour of consumers since motivations of the consumers to purchase a product is the vital parameter [41]. In this context, consumers will not purchase renewable energy based on their age and income without motivation and the required information about the energy. This is based on the principles of Sigmund Freud, which explains that the behaviour of the individual is under the internal forces Eros and Thanatos. These impulses are manifested implicitly, so they are allowed by society, while satisfying the Eros of the consumer.

Pavlovian theory talks about the reactions to the stimuli of human behaviour. It is based on four basic concepts: impulse, clues, responses, and reactions. The impulses called needs or motives are the strong stimuli that incite the individual to act (hunger, thirst, cold ...). The impulse generally induces a reaction in relation to a key configuration. The modern version of Pavlov does not pretend to present a complete theory of behaviour but offers some original ideas about aspects of behaviour. Pavlov's model provides guide in the field of advertising strategy. Repetition of advertisements produces two desirable effects and serves as reinforcement, because the consumer after purchasing is selectively exposed to the advertisements for the product. This provides guidelines for coping strategies. Identify the strongest impulses related to the product; the announcer has to fully exploit his treasure trove of words, colours, or images by selecting the key settings that may represent the strongest stimulus for those impulses [42]. This Pavlovian theory proves highly significant for marketers, and it is linked to the positive experience of the consumers.

Sociological theory presents the consumer as a social being that seeks integration, according to Thorstein Veblen (1827-1929) in [3] “The main reason that guides people's behaviour is their need for integration into their social group.”. In this way, it can be seen that consumers have a certain

consumption behaviour that differs from previous theories, since the acquisition is made to satisfy the need to belong to a social group and differentiate themselves from others. These behaviours present preferences for those products that are in fashion and that meet social trends and expectations. An example of the application of this theory is given in the acquisitions of fashion products or of products most used by the majority. In this model the buyer is part of the institution known as society. Since a buyer lives in a society, he will be influenced through it and in turn influences it in developmental path. The buyer plays lots of roles as a part of various informal and formal organisations such as a firm's employees or a family member [3]. Peer groups also play a key role as they act as an influencing factor on the consumption of renewable energy in the country.

The inadequacy in these existing consumer behaviour models lies in their emphasis on factors influencing consumer behaviours, but they do not adequately explain what drives the decision process to buy a product or service – as these models are variants of psychology discipline such as psychoanalytic, Pavlovian, behavioural and sociological models of needs [3]. They are all connected to factors which influence consumer behaviour to demand a product or a service. However, consumer behaviour is not as straightforward as these models make out. There are individual differences in perceptions, behaviours, and preferences. Indeed, motivation plays a more critical part in consumer behaviours [4] than these models suggest. Herein lies the major gaps in literature. To offer a more suitable model for this particular study, these existing models on consumer behaviour need to be expanded and built upon by juxtaposing consumer behaviours models with contemporary knowledge of IMC. The practiced and tested 4Ps of marketing has shown that having the right product, the price and in the place as well as effective promotion using people's emotions drive consumers' demand for a product or service [5]. So far, the literature reviewed above can be synthesised for clarity. RE is recognised as part of the significant solution to energy crisis in Nigeria and that RE is becoming one of the major drivers of sustainable social economic development [1]. Nonetheless, sufficient knowledge about the RE products are key factors which determine how the consumers of the renewable energy will purchase and use these RE products [2]. Although, Nigeria generates insufficient amount of electrical energy which makes the availability of electricity in the country to worsen over years [6]. Moreover, the lack of sufficient amount of electricity in the country makes some industrial and commercial sectors to rely heavily on self-generated power through the use of diesel and petrol generators. This accounts for about half of the total electricity consumed in the country [43]. Also,

there is lack of structural constructs defining how the indicators of consumer's knowledge, commitment, and general awareness of consumers regarding RE products interact with different dimensions of consumers' sustainable or green consciousness while choosing RE products [7, 8, 9]. The major gap in literature is the inadequate knowledge of the importance of using renewable energy in the country [10]. In any case, there is a high need for supplementing power plants supported with RE [44]. Any effective marketing of RE products would have to involve social processes whereby consumer benefits to be gained from the government support for RE and the target audience will need be identified based those identified benefits [18].

Further to the above, IMC would help in developing ideas which are related to the understanding of RE over the key drivers of market based on influencing brand strategies [19]. In addition to the problematics of RE in Nigeria is the low costs of investment but higher costs of maintenance which have resulted in the low development of renewable energy strategies and products in Nigerian households [40]. Therefore, any reforms made on the power sectors and RE should play a major role towards the economic growth of the Nigerian economy [45]. The problem of adopting RE becomes intractable as the Nigerian economy has faced tremendous population boom, and half of the population do not have access to electricity supplies which has stretched the supplies of power and soared the emissions of carbon to certain breaking point. This has been a major factor towards turning an oil-rich Nigeria into a renewable-based economy [29]. Despite this, RE has been noted as the most efficient way of bringing the different rural communities into a common electricity platform and cleaning a bit of the population from the worst form of pollution [30]. Moreover, a ready and easy access to electricity to every home would further help in reducing the unemployment rates among the youth which would further help in increasing the productivity within the country [31]. Perhaps, because Nigeria produces higher fossil fuels, it may be very hard to fully adopt the use of renewable sources of energy which do not meet the demand of the country [32]. Finally, the prohibitive initial cost to set up renewable energy production infrastructure may discourage consumers from using this type of energy and they may opt to stay with traditional sources which are abundant in the country at affordable cost [33].

In summary, the literature review suggests that consumer's environmental concern and products functional attributes such as price, quality and benefits of product have emerged as the two major determinants of consumption of RE. The gap in the existing theoretical models (see paragraph on inadequacy of consumer theories in the literature review) for consumer behaviour shows that in order

to adequately account for the RE purchase behaviour, these theories namely; Environmental concern and Re consumption, Functional attributes of RE consumption, Energy consumption trends and the role of RE in Nigeria, and Availability of RE in Nigeria will need to be examined empirically in order to develop the understanding of a valid IMC model in light of the current marketing models. An exploration in the literature indicates that the current trend in energy consumption in Nigeria is tolerant for the full use of RE in the country. The knowledge on renewable energy is increasing, and so is the increase in its consumption for as long as the energy is available and affordable. It is clearly demonstrated in literature, that currently in Nigeria, there is no government policy which discourages the use of fossil fuel energy in the country more so because the country highly depends on fossil fuel energy which it has in abundance for its economic growth as the main source of foreign earning.

The literature review notes the major gap that needs to be filled is the lack of structural constructs defining how the indicators of consumer's knowledge, commitment, and general awareness of consumers regarding RE products interact with different dimensions of consumers' sustainability consciousness while choosing RE products [7], [8], [9].

3. Methodological Approach

This paper proposes a methodology that has objectivism as its ontological position, while its research philosophy is both positivism (deductive) and interpretivism (inductive) [46]. The strategy adopted here is the survey and the instrument used is the questionnaire. The tools and techniques for analysis are the SPSS tools such as Factors analysis for validity of the questionnaire, Cronbach's Alpha for reliability of the questionnaire. The approach of descriptive statistics helps in drawing major kinds of inferences about the estimation of parameters and populations [47] which was sampled.

The limitation of this study lies in the assumptions made from the small, selected sample which is hoped to be generalized to the population of 200 million people in different regions and cultures of the country. Also, the cost and finance as well as political factors may hinder the application of relevant innovative use of RE raw materials as technology is not readily available. Still, Nigeria has fossil fuel in abundance as major source of foreign reserve and high price of RE may prevent political will and consumers to focus on RE. Further, the small data collected from one particular region may affects its applicability of the construct in Nigeria because of differences in cultural, economic and lifestyle in different regions of the country.

The conceptual framework adopted is based on the Engel Kollat Blackwell (EKB) Model of consumer behaviour decision-making cognitive process that helps predict what consumers are going to buy [13, 48].

The variables used in this paper are derived from the hypotheses in Figure 1.

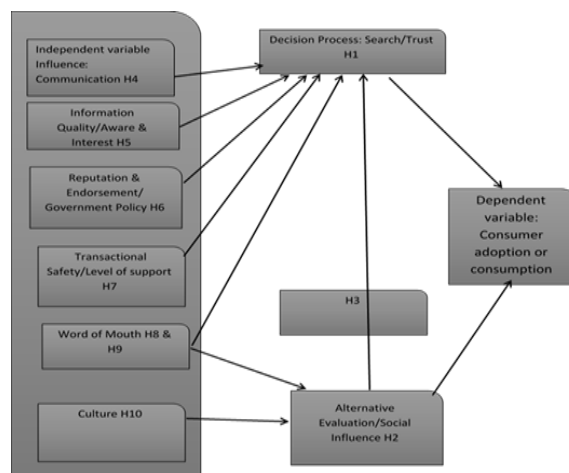


Figure 1. Adapted Conceptual Framework for this study [54]

Hypothesis 1. A higher level of trust among consumers will result in a higher level of consumer Adoption/Consumption (CAC).

Hypothesis 2. A higher level of social influence among consumers will result in a higher level of consumer consumption in CAC.

Hypothesis 3. A higher level of social influence among consumers will result in a higher level of trust in CAC.

Hypothesis 4. An increase in the level of communication among consumers has a positive impact on the level of trust in CAC.

Hypothesis 5. The quality of information (level of support for RE, e.g. sponsored events) social media has a positive impact on the level of trust in CAC.

Hypothesis 6. An increase in the level of a company's reputation has a positive impact on the level of trust in CAC.

Hypothesis 7. An increase in the level of transaction safety/ supportive government policy has a positive impact on the level of trust in CAC.

Hypothesis 8. An increase in the level of word of mouth (WOM) has a positive impact on the level of trust in CAC.

Hypothesis 9. An increase in the level of WOM has a positive impact on the level of social influence in CAC.

Hypothesis 10. Culture has a positive impact on the level of social influence in CAC. This conceptual framework will be tested and refined based on the data collected from the survey which will be analysed to determine the consumer behaviour regarding RE consumption and adoption and to develop an IMC model.

4. Initial Findings

The development of sustainable IMC based on the consumer behaviour for RE are presented in Figures 1 to 6:

H1a: There is a significant impact of consumer behaviour toward renewable energy on the sustainable development of IMC in Nigeria.

H1b: There is no significant impact of consumer behaviour toward renewable energy on the sustainable development of IMC in Nigeria.

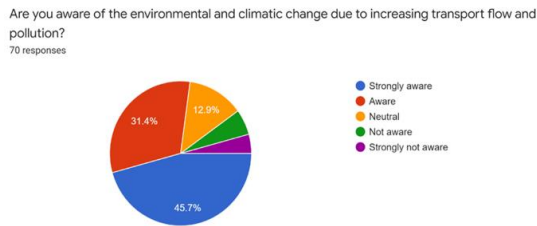


Figure 2. Awareness of climate change due to pollution

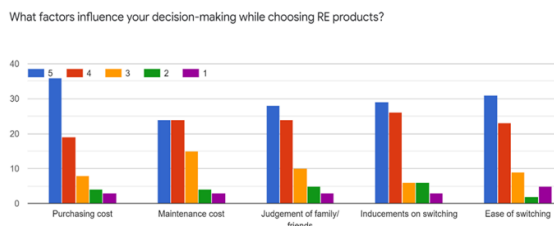


Figure 3. Factors influencing decision-making regarding buying RE products

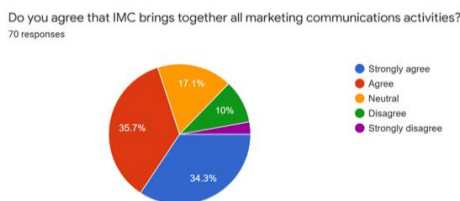


Figure 4. IMC encompasses all marketing communication activities

Do you agree that IMC is one of the most useful marketing communications that could help for the major boost the RE sector?
70 responses

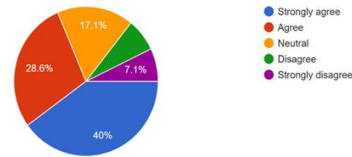


Figure 5. IMC most useful marketing communications to boost RE sector

Do you agree that advertisements influence your decision on renewable energy consumption?
70 responses

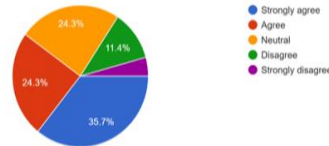


Figure 6. Influence of advertising on decision-making on RE consumption

4.1. Widespread use of RE vital to energy sustainability in Nigeria

The demand for sustainable energy is growing, but the widespread use of renewable energies is crucial to achieving sustainability in the energy sector in Nigeria [53].

Once Nigeria renewable resources are fully exploited and used, they will lead to reduced demand on fossil fuel and sustainable development [52]. Renewable energies and advanced technologies are the basic components of sustainable development. Practices in Nigeria's industrialization process have been described as unsustainable for the climate [51]. The study shows that ecological degradation can have a variety of structures, as seen in the unsustainable use of natural resources extracted in the Niger Delta in Nigeria in which Ogoni land suffer the most [27]. Despite widespread expectations on RE, the survey reveals a lack of adequate consumer information on RE issues which is a problem for consumers when shopping for RE products because a large proportion of consumers really feel that environmentally friendly products are not functioning adequately [50]. However, when consumers are fully aware of a specific problem, they cannot pay a high price for RE products. Therefore, advertisers will need to understand how to fulfil the two main objectives: environmental improvement and customer loyalty [49].

Since the beginning of electricity generation in Nigeria, all established laws and institutional methods have tried to achieve the development of the electricity grid and thus expand the country's electricity market, but these efforts have not yet fully yielded results. This means, outside the grid, limited

generation of electricity from renewable energies is urgently needed as an effective and sensible option for electricity production.

5. Conclusion

The Study and findings reveal that people are influenced by factors such as price of the energy, need for sustainability, less global warming, stable price of energy, ease of switching, and other factors. It is important that these issues are recognised, and future study is conducted so that these issues can be resolved in Nigeria and adoption of RE can be made possible in country. Since the beginning of electricity generation in Nigeria, all established laws and institutional methods have tried to achieve the development of the electricity grid and thus expand the country's electricity market. These efforts have not yet fully yielded results, hence the need for generation of electricity from renewable energies.

This work is hoped to contribute to literature and knowledge based on the application of IMC model showing interactions of variables which influence consumers' RE decision-making for purchasing RE products. Also, it will demonstrate how consumers weigh personal, environmental and economic benefits while choosing RE products. The major contribution will be the development of a sustainable IMC marketing model based on understanding of consumer behaviour on RE to help to spread awareness and usage of RE products in Nigeria in particular and in the Global South as a whole. This will influence government policy changes which will lead to social, economic, and environmental impact that will positively affect citizens wellbeing and technological developments. There are few recommendations that can be suggested based on the findings of this study. Firstly, it will be helpful for Nigeria government to establish an organisation to promote the use of energy efficient products and ensure correct practices which will promote the environmental consciousness among citizens. The establishment of a public enlightenment agency within the Nigeria Federal Ministry of Information will be helpful to the IMC model to further promote the usage of renewable energies e.g., solar and wind, while leveraging on global partnerships like the UK's Residential Energy Efficiency Project to help the country build a creative alliance for renewable energy systems. Furthermore, the creation of renewable energy financing or lending institutions, such as the Indian Renewable Energy Agency in India will help to provide foreign investment in Nigeria RE system, and the Clean Energy Office can be integrated with all sectors of the Nigerian economy as driver for implementation of various government policies on RE.

In future work, a wider critical review of existing communication models will be explored to enable a more robust model of IMC, while further study in available and affordable technology that adds innovation to the use of RE raw materials will go a long way in promoting uptake of RE by consumers.

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