

E-MARKETING AND THE PATRONAGE OF AGRICULTURAL PRODUCTS IN NIGERIA

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Abstract

The main purpose of the study was to examine e-marketing and the patronage of agricultural products of selected organisations in Cross River State, Nigeria. The objectives sought were to: Examine the effectiveness of e-mail marketing on the patronage of agricultural products in Cross River State, and determine how social network marketing influences the patronage of agricultural products in Cross River State. The Descriptive research design was adopted for the study. Subjects were selected using the purposive sampling techniques. The population comprised all the one hundred and seventy-seven top and middle level management staff of the selected agricultural organisations in Cross River State that have registered their presence on the internet. The data collected was summarized and analyzed using descriptive (mean and standard deviation) and inferential statistics (multiple regressions). The findings revealed that; Email marketing significantly influence the patronage of agricultural products. No significant relationship was found between social network marketing and the patronage of agricultural products. We concluded among others that email marketing influences patronage of agricultural products while social network marketing does not influence patronage of agricultural products in Cross River State. We recommended among others that, agricultural organisations should employ the use of internet communication tools like email, and social network in the marketing of agricultural products. Agricultural organisations should endeavor to register their presence on the internet by either creating a website for the organisation, or register with an independent 'netpreneur'. And after registering their presence on the internet, a deliberate effort should be made to direct traffic to the website through the use of emails, social network etc.

Keywords: E-marketing, Social Network Marketing, Agricultural Marketing, Patronage.

Introduction

The internet is without any doubt the most important technological and communication breakthrough of the twentieth century, and has impact majorly on various spheres of modern life. It has changed the way we communicate, seek information and do business. During the last decade, the internet went through its most important growth as a medium of global communication and exchange. From a general point of view, the number of websites increased from 23,000 in 1995 to over 55 million in 2005 (Schibrowsky, Peltier, & Nill, 2007). As of 2017, there was an estimated 3.9 billion Internet users in the world (Statista, 2019). The figure rose to 4.1 billion Internet users as at December 2018 (HostingFacts, 2019). This accounts for more than half of the global population, with China having the biggest online population of 829 million users, followed by India at 560 million

and the United States with 293 million users (Statista, 2019). Nigeria with a population of about 200 million has 119.5 million internet users' rate as at June 2019, and this accounts for an internet penetration rate of about 59.1 percent of the population. With this record, in country by country analysis, Nigeria now ranks the 7th highest internet users in the world just coming behind China, India, United States, Brazil and Indonesia. It is also the first in Africa, translating to a huge internet-marketing opportunity.

Global statistics of internet-driven sales of various countries in 2019 again shows that China commands \$426.26billion businesses done online, followed by the US with \$305.65billion, UK having \$82.00billion, Japan coming next with \$70.83billion, Germany with \$63.38billion, France having \$38.36billion, South Korea commanding \$33.11billion sales online, Canada having \$24.63billion, Russia coming next with \$17.47billion, and Brazil the only Latin American country among the top-ten having \$16.28billion. The internet has allowed corporations to diversify from current distribution channels into new markets never before imagined possible (Oudan, 2010). The internet being a new channel of distribution has become an important area of interest for researchers (Ngai, 2000). Hence, the academic community is therefore having a growing interest in internet marketing as an area for valuable research. Tian and Emery (2002) explained that internet marketing became a hot topic also for professional marketers in the business.

Meanwhile, e-commerce or online sales from many developing countries seems to be at the low ebb, notwithstanding the high rate of internet users in some of them like Nigeria. Many of them like Nigeria are also agrarian countries with over 70 percent of their populations engaged in agricultural production, as it is the case with Nigeria (NBS/CBN, 2006). Agriculture also provides subsistence for two-thirds (2/3) of their people as can be witnessed in Nigeria, where majority are low income earners (Usman, 2006). As it is in Nigeria, so it is in most developing countries, hence, Nigeria will be used in this study as a case study for other developing countries of the world. Nigeria is generally endowed with abundant natural resources, numerous all-season rivers and a favourable tropical climate. Rainfall is generally adequate and fairly well distributed throughout the country (Ukpong et al., 1995). Out of the 98.321 million hectares of land available in the country, about 75.30 percent is arable land, while 10 percent is under forest reserves and the remaining 14.70 percent is assumed to be made up of permanent pastures, built up areas and uncultivable waste (Olayemi, 1998). In the light of the foregoing, agriculture is still a major sector as well as remains the cornerstone of the economy (Igboeli, 2000). This same picture holds true in many other developing countries.

In the present era of globalization, trade liberalization and privatization, Information Technology (IT) play vital roles to make a product/service competitive in the global market through all its manifestations like e-mail, social network, search engine, and so on (Talathi, 2007). Agriculture has tremendous influence in all spheres of human activities because without food, human beings cannot exist. Agriculture is not only one of the largest sources of livelihood for people in developing countries, but also a tool for poverty alleviation of the populations. It is a component of domestic products and touches almost every sphere of economic life (Alatise, 1979). Doing agribusiness through internet is generally referred to as "E-agribusiness". It is also referred to as application of e-commerce in agribusiness; basically, it is Information Technology (IT) based agribusiness (Boone & Kurtz, 2001). Internet marketing can be defined as any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact (Ernst & Ehmke, 2000). In this twenty-first century, the way firms and companies do business have changed, furthermore, it is readily apparent that such changes are attributable to the advent of the internet (Ainin & Noor, 2003). An overview of the internet shows that this phenomenon is not only a

networking media but also a place for producers/consumers to conduct their transactions in the global market.

Undoubtedly, usage of the internet has an important influence on the issue of marketing agricultural products. Nowadays, we can easily see that for many people, use of the internet, search engine as well as emails and even logging on to social media sites like facebook, twitter, google+ and so on has become an essential daily need (Raad, Yeassen, Alam, Zaidan, & Zaidan, 2010). Consumers are purchasing more and growers are selling more produce using their own websites and other online applications, allowing access to a larger customer base (Thilmany, Bond, & Bond, 2006). This new trend has encouraged other farmers to consider new marketing strategies including electronic technology such as websites, social media and emails for business. One effective strategy for potential gains from better marketing is internet technologies (Fox & Ernst, 2009). Farm income can be increased by improving marketing practices and expanding market access through the internet. Use of web-based marketing is one of the new trends in direct marketing for farm products that can be utilized in a variety of marketing strategies. Growers or producers can sell their products online through e-marketing, simply by using a website to advertise their operations (Briggeman & Whitacre, 2008). Internet-marketing for agricultural produce if promoted in developing countries could serve as a great way of boosting the income and livelihood of the people by linking them to the outside world with better purchasing powers.

Statement of the problem

One of the problems facing agricultural countries like Nigeria is how to market their products beyond their locality. Information technology tools have been tested and accepted widely and can be used to solve the problem of marketing faced by their farmers. Nigeria is endowed with various kinds of resources needed to place her amongst the top emerging economies of the world. Unfortunately, the nation has not adequately benefitted from the economic prosperity expected of a nation so richly blessed. Ironically, global economic indices from reputable international organisation have consistently categorized Nigeria as an economically backward state. For instance, in 1995, the UNDP human development index ranked Nigeria as 164th and 141st amongst 197 nations with low per capital income and “low quality of life” respectively (Ezike & Ogege, 2012). Considering the weather conditions in Nigeria, production is really encouraging but the condition of marketing of farm produce is yet to meet the expectation of the farmers. Looking at the present forms of marketing of farm products in Nigeria, the farmers are still operating traditional forms of marketing. There are so many defects in the present marketing system such as the ways of making the prospective customers know the products the farmers have, locating the right farmers that have the actual needed products, and educating potential customers about the features and usage of the products. This same problem besets many other developing countries with a lot of viable exportable agricultural products needed by people in developed countries.

For instance, many of the developing countries can boast of the following agricultural products for exports: cotton, cocoa, coffee, cassava flour, snail, ginger, leather & footwear, palm kernel oil, palm kernel cake, yam flour, textiles and garments, cocoa butter, gum arabic, cashew nuts, charcoal, cosmetics and soap, gallstone, rubber, shea butter, sesame seed, garlic, chili pepper, pure honey, fruit juice, shrimps and yam. The growth of the internet as a marketing tool can be deployed for huge benefits in the agricultural sector (Barnes & Hinton, 2007). The agricultural sector in Nigeria has not really benefitted in e-marketing, as it is evident from the few agricultural firms that have established their presence on the internet, just like in other developing countries. Thus, the real benefit of the internet as a tool for boosting the patronage of agricultural products from

developing countries like Nigeria is of major concern to this study.

Objectives of the study

The main purpose of this study was to examine the effect of e-marketing on the patronage of agricultural products of the few agricultural firms involved in online marketing in Cross River State of Nigeria. Specifically; the study was carried out to:

1. examine the effectiveness of e-mail marketing on the patronage of agricultural products in Cross River State, Nigeria.
2. determine the extent social network marketing influences the patronage of agricultural products in Cross River State, Nigeria.

Research questions

The following research questions serve as a guide for the study.

- 1 What is the effectiveness of e-mail marketing on the patronage of agricultural products in Cross River State?
- 2 How does social network marketing influence the patronage of agricultural products in Cross River State?

Research hypotheses

The following null hypotheses were formulated to direct the study.

- H₀1. E-mail marketing does not significantly influence the patronage of agricultural products.
- H₀2. There is no significant influence of social network on the patronage of agricultural products.

Scope of the study

The study is delimited to the effect of e-marketing on the patronage of agricultural products of selected organizations in Cross River State. The study is also delimited to internet marketing which is a variable under e-marketing. The word e-marketing is therefore used in this study to denote internet marketing. The focus of the study was basically on the selected agricultural organizations hence it was carried out to examine the effect of the application of internet marketing communication tools on the patronage of agricultural products. Internet marketing allows the organization the liberty to communication to the public all the varieties of products/services they offer hence the study did not focus on a particular agricultural product of the selected organizations.

Methodology

The research design for this study is descriptive, where primary data was entirely used for the analysis. The area of the study was Cross River State. The population of the study comprised middle and top-management staff of selected agricultural firms in Cross River State. A total of 26 companies were discovered to have registered their presence on the internet. The population of the study comprised all the 177 top and middle management staff of the accessible companies adjudged to possess the necessary characteristics needed for the study. A sample size of 158 was purposively and accidentally drawn from the target population.

The population of the study comprised of 177 top level management and middle level management staff of the selected agricultural organizations in Cross River State. The survey participants were drawn from the population with the use of stratified and purposive sampling. To gather relevant data for the study, a questionnaire titled "E-marketing Questionnaire" (EQ) and Patronage Questionnaire (PQ) was designed by the researcher to

elicit information from the respondents and was subjected to validation and reliability test. Multiple Regressions and One-Way Analysis of Variance (ANOVA) were used to test each hypotheses at 0.05 level of significance.

Review of Literature

There is no doubt that internet marketing theory is still being developed in both theory and content. However, it shares the basic theories with traditional marketing disciplines. This paper, therefore, hinges on the E-value model as being suitable for the study.

E-Value model

Salwani, Marthandan, Norzaidi and Chong, (2009) proposed the E-value model. The general assumption regarding this model is that the usage of e-commerce is influenced by multiple factors which range from internal factors to external factors. The model combines the pre-adoption issues and post-adoption issues of e-commerce usage and introduces the effect of a moderating variable (experience) on the relationship between the usage of e-commerce and business performance. It also introduces the effect of a mediating variable (back-end integration) on the relationship between e-commerce usage and business performance. The model then further links e-commerce usage to business performance.

This model was pre-tested in the Malaysian tourism sector by Salwani et al. (2009). It was thus found that the main advantage of this model was that it is a multi-dimensional research model which considers the pre-and post-adoption issues of e-commerce usage, its direct and indirect effects and the effect of the moderator and mediating variables. Salwani et al. (2009), argued that experience of implementing e-commerce has a strong contingent effect on the relationship between e-commerce usage and business performance, thus they included e-commerce experience as a moderating variable on the relationship between e-commerce usage and business performance in the model. They also proposed that the nature of the relationship between e-commerce usage and business performance is clarified by e-business capability such as back-end integration and subsequently included back-end integration as a mediating variable in the model. Salwani et al. (2009), formulated the E-value model to examine the relationship between e-commerce and business performance. He discovered that e-commerce experience has a contingent effect on the relationship between e-commerce usage and business performance and back-end integration and e-commerce usage significantly influence business performance. Unfortunately, no previous literature criticizing this model exists, since it is a recent model in the field of e-commerce.

Basically, the rationale behind any organization embarking on internet marketing is to communicate an offer to the public in a way capable of driving them through the four steps identified in the AIDA model (Awareness, Interest, Desire and Action). This is because an organization can only measure internet marketing success based on the responses received from the campaign. Internet marketing also enhances the study and understanding of customers demand, and affords customers the liberty of comparing prices of products/service of other organisations online before taking a buying decision. The simplicity, convenience and transparency in internet marketing, afford the customers the privilege of participating in the decision making process as it concerns the production of goods/services. This is why the 4C theory of (Customer, cost, convenience, and communication) is selected as the most suited for this study. The E-value model is used here to explain the possible impact of internet marketing on patronage. The model also went further to categorize patronage into sub-variables to include sales volume, and return on investment which constitutes the variations of the dependent variable (patronage) under study. In summary, the 4C theory is used to explain the independent variable (internet marketing), while the E-value model is

used to explain the impact of the independent variable (Internet marketing) on the dependent variable (Patronage).

E-value model and relative adjustments

As the internet and its related technologies are increasingly attracting the attention of many researchers and business managers, the literature on making use of the internet for marketing purposes remains unclear, especially from the organizational perspective, particularly on the use of the internet and value creation. In solving this issue, Salwani *et al.*, (2009) as mentioned above developed an interactive, comprehensive and multi-dimensional theoretical model known as the E-value model.

Although, Salwani *et al.*, (2009) analyzed the relationship between e-commerce and business performance, this does not give a clear understanding on whether e-commerce applications such as internet usage can really improve business profitability, since performance is measured by a number of variables. Therefore, some adjustments were made to the E-value model as shown in table 1. This development led to the adjusted E-value model and was used to examine the impact of internet marketing usage on business profitability. Thus, the adjusted model shows the effect of internal and external factors on internet marketing as well as the effect of internet marketing usage on business profitability. The adjustments were made to also consider the influence of internet marketing on one performance measure, which is profitability. Salwani *et al.* (2009) used the E-value model to analyze the impact of e-commerce on business performance, hence the study concentrated on one critical performance measure. Below is an explanation of how the hypotheses for the study were formulated.

Table 1: Proposed adjustments to the E-value model

E-value model	Proposed framework for this investigation
Absence of important variables such as perceived benefits and existence of alliances that could have significant influence on the use of e-commerce (internet marketing).	The inclusion of two new variables: perceived benefits, existence of alliances and substitute firm scope with level of star grading.
Measure effect of e-commerce on business performance.	Measure the effect of internet marketing on business profitability.
Use e-commerce usage as a moderating variable	Use internet marketing experience as moderating variable

Source: Salwani, *et al.*, (2009) E-commerce usage and business performance in the Malaysian tourism sector: Empirical analysis, *Information Management and Computer Security*, 17(2), 166-185.

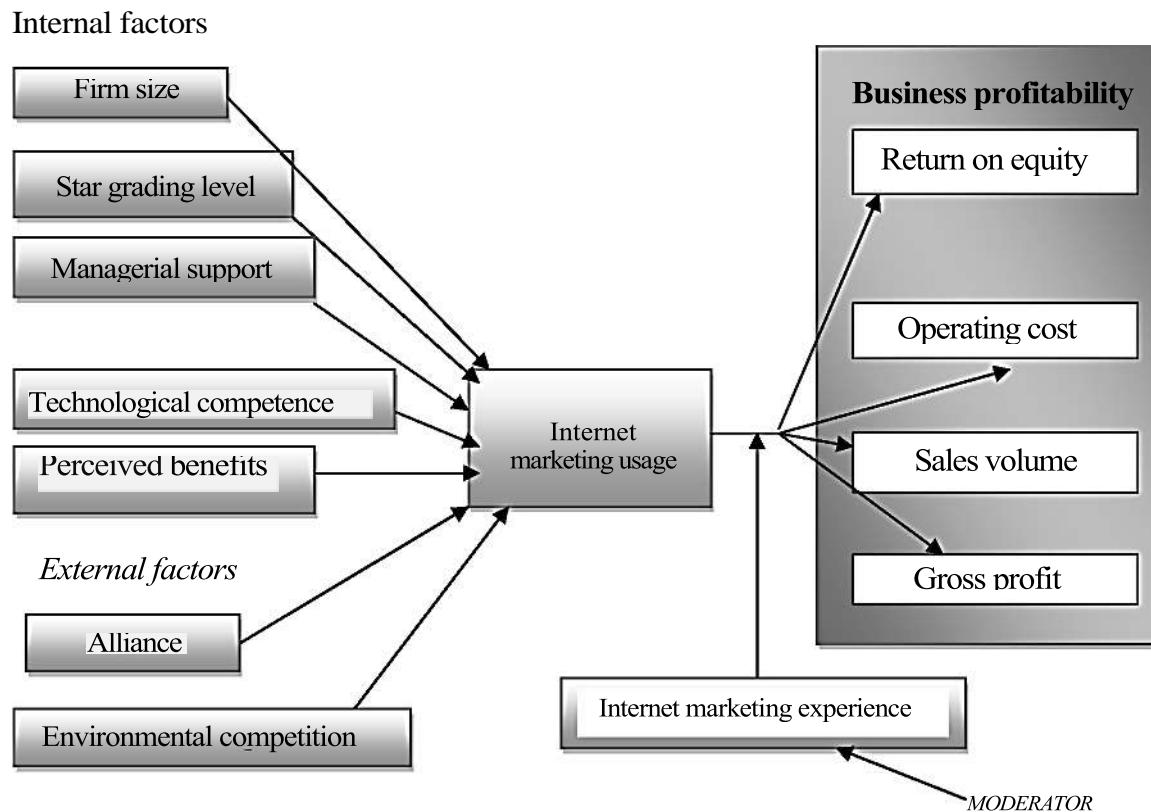


Fig. 1: The adjusted E-value model.

Source: Salwani, *et al.*, (2009) E-commerce usage and business performance in the Malaysian tourism sector: Empirical analysis, *Information Management and Computer Security*, 17(2), 166-185.

Four internal factors as well as two external factors were can be identified in fig 1 and is briefly explained below:

1. Internal factor
 - a. Firm size and internet marketing usage

Firm size is one of the factors that can influence internet marketing spending as well as the sales of a firm (Kan, 2005). This can be clearly understood as firm size represents several important aspects of the organisation, such as resource availability and prior technological experience (Zhu, Kraemar, Xu, & Derick, 2004). Firm size, in the hotel sector, can be measured by a number of aspects such as the number of permanent employees, number of rooms and number of beds (McMaster, Kato & Khan, 2005; Ye, Rob & Gu, 2008). It can therefore be derived that size (as measured by the number of rooms) has a significant influence on internet marketing usage of hotels and guesthouses.

- b. Top management support and internet marketing usage

A number of studies indicate that top management support is the most critical factor in determining the successful use of e-commerce (Del & Padilla, 2006). Top management commitment is one of a small set of organizational factors which constantly re-appear as significantly related to the successful use of information technologies (Wu, Mahajan, & Balasubramaniam 2003). For the purpose of this investigation, managerial support refers to the manner in which top management places emphasis on the use of internet marketing, how top management advises on the use of internet marketing and how they are willing to provide the necessary resources. In general, if top managers are committed to the use of

internet marketing, it will allow other subordinates to follow suit.

c. Technological competence and internet marketing usage

The term competence can be seen as the acquisition of knowledge, skills and abilities at a sufficient level of expertise, enabling properties to perform in an appropriate work setting (Cloete, Courtney, & Dfintz, 2002). On the other hand, many researchers view technological resources as an important factor for successful internet adoption (Kuan & Chau, 2001; Del & Padilla-Melendez, 2006; Salwani *et al.*, 2009), especially as a strong backing of e-commerce usage. In this investigation therefore, technological competence refers to the Information Technology (IT) personnel that enable the development and implementation of internet marketing.

d. Perceived benefits and internet marketing usage

Del. *et al.*, (2000) indicated that one of the factors that can affect the adoption and use of the internet is the perceived benefits of using such technology. Cloete *et al.*, (2002) also mention that adoption of e-commerce is largely based on perceived benefits. Perceived benefits can be direct, such as cost saving, an increase in sales volume and an increase in the number of new customers or indirect aspects such as convenience and the building of customer loyalty. In this investigation, the perceived benefits which were considered are: the ability of the internet to reach global markets and increase in sales volume as well as the aspect of convenience.

2. External Factors

a. Existence of alliances and internet marketing usage

Business alliances can take on a number of forms and thus include personal contact networks, social networks, business networks and marketing networks (McGowan & Durkin, 2002).

b. Environmental competition and internet marketing usage

Competitive pressures and customer pressure make up external drivers that can influence the adoption of internet marketing. In this investigation, environmental competition was assessed using three antecedents namely; discussion of competitors' strength and weakness on internet marketing, responding to competitors' actions and lastly the value placed on tracking competitors' activities.

Conceptual framework

This paper focuses on internet marketing, and considers its major variables: email marketing, social network marketing, and search engine marketing, as the building-blocks of internet marketing. Internet marketing is the wave of the future. Businesses turn to the internet to market themselves in place of billboards and paper advertisements, and find that it is not only more effective, but much less expensive. However, internet marketing plays by an entirely different set of rules than traditional marketing does, and it is important to understand the basic concepts before embarking on any marketing endeavor.

a. Internet Marketing *and Relationship Building*

The first aspect of internet marketing is that your goal isn't to make a sale; it's to build relationships. You can do this through the use of email lists and followers on social media. By building your list, you slowly build up a group of people who look to you and respect your expertise enough to continue coming back for your input. This repeated exposure is the key to making a sale. Individuals do not buy from someone they do not feel they can trust, so by building up trust and a relationship, you increase the chance of your audience purchasing from you.

It is better to have fewer quality leads than to have many leads that will amount to nothing. Offer incentive for visitors to join your list; give out a quality white paper or case study for free that is of relevance to the visitor, but only if they sign up for a weekly newsletter or something similar. Be sure not to spam them with emails, and when you do send out a mass marketing email, make sure the content is helpful if it is all about you and your products, you will quickly lose subscribers.

b. Email Marketing

E-mail marketing as the most cost effective tool in internet marketing has been mentioned in so many studies. In addition, high rate of response from this tool has made this tool and tactics a very interesting criteria for so many studies and researches. In year 2000, 61 percent of United State’s companies used email as a tool in terms of marketing tactics and, estimated this amount gets higher day by day (Jackson & DeCormier, 1999; Rettie, 2002; eMarketer, 2000). Email marketing based on the definition is one kind of direct marketing tactic in terms of using electronic devices to enhance the quality of services. It also increased customers’ attention and awareness which no doubt will bring more returns to the firms and businesses in gaining profit. Email marketing can be considered as an electronic mail which delivers commercial messages to email users and customers. This tactic is one of the oldest and also one of the most effective tactics in internet marketing. Minimizing expenses and maximizing sales is a unique fortune which can exist through this tool.

c. Social Network

Social media and doing marketing activities according to Berthon, Leyland, Kirk and Daniel (2012), is an opportunity that comprises text, images, pictures, video and networks for both customers to customer and firm to customer. Kaplan and Haenlein (2010), defines social media as “a group of internet-based application that build on the ideological and technological foundations of web 2.0, and that allow the creation and exchange of user-generated content”. Interaction between individuals and entities such as firms, organizations and companies are easily disseminated. Social media are very popular and very easy to access the ability of businesses to interact, reach and create relationship with large number of customers (Brogan, 2010).

Conceptual model of the study

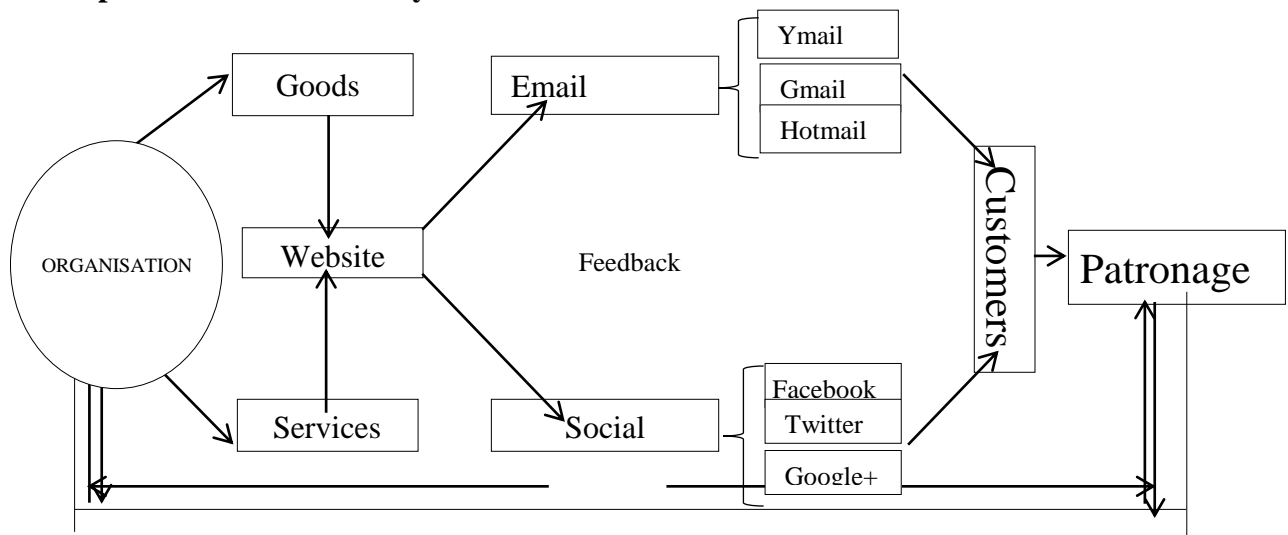


Fig 2: The study’s conceptual model on the use of internet in the marketing of agricultural products.

Figure 2 is a summary of the various concepts that was examined in this study. The applicability of the use of internet in the marketing of agricultural products as it concerns organisations operating in Cross River State can be summarized using the above conceptual model. This is because email, and social network represent the most frequently used internet channels of communication in Cross River State. Note that the variables in the above conceptual model, is sequentially arranged in their order of magnitude. A company has to exist for a product to be produced, after which a website must be developed to register presence on the internet, followed by a deliberate move to direct traffic to the website which will enhance patronage of the company's products/services. To communicate effectively, Kotler (2000), asserts the need for marketers to understand the fundamental elements underlying effective communication.

Kotler (2000), itemizes nine elements, that must be present in the marketing communication process, as the Sender, Encoding, Message, Media (channel), Decoding, Receiver, Noise, Response, and Feedback. Applying this to the above internet marketing communication model, the sender here represents the organization, encoding represents the website, the message represents the product/services, the channel here includes: email, social network, and search engine, the decoding represents (yahoo, google, & hot mail), and (facebook, twitter & google+) the receiver represents the customers, the response represent the patronage and of course feedback. The noise variable in the marketing communication model is eliminated in the internet marketing communication model, through effective communication and understanding the consumers. This is because internet marketing does not necessarily give room for noise, hence, the message is delivered directly to the target audience and there is room for immediate response/feedback in case of any misconception.

Results

Table 2:
Descriptive Statistics of the Variables

	N	Range	Minimum	Maximum	Mean	Std. Deviation
YAHOO MAIL	154	4.00	1.00	5.00	3.5130	1.18275
GOOGLE MAIL	154	4.00	1.00	5.00	3.5022	1.17789
HOT MAIL	154	4.00	1.00	5.00	3.4329	1.22141
FACEBOOK	154	4.00	1.00	5.00	1.4481	0.95610
TWITTER	154	4.00	1.00	5.00	2.1320	0.76736
GOOGLE+	154	4.00	1.00	5.00	2.1429	0.67517
PATRONAGE	154	4.00	1.00	5.00	3.5303	1.13367

Table 2:
Distribution of respondents by zones

	Frequency	Percent	Valid percent	Cumulative percent
Calabar	71	46.1	46.1	46.1
Ikom	51	33.1	33.1	79.2
Ogoja	32	20.8	20.8	100.0
Total	154	100.0	100.0	

Table 2 shows the descriptive statistics of the variables of the study. Yahoo mail yielded a mean of 3.5130 and a standard deviation of 1.1828; Google mail yielded a mean of 3.5022 and a standard deviation of 1.1779; Hot mail yielded a mean of 3.4329 and a standard deviation of 1.2214; Facebook yielded a mean of 1.4481 and a standard deviation of 0.95610; Twitter yielded a mean of 2.1320 and a standard deviation of 0.76736; Google+ yielded a mean of 2.1429 and a standard deviation of 0.67517;

Table 3:
**Distribution of respondents by their responses to item 3:
we advertise our products through yahoo mail**

	Frequency	Percent	Valid percent	Cumulative percent
Strongly agree	35	22.7	22.7	22.7
Agree	63	40.9	40.9	63.6
Undecided	23	14.9	14.9	78.6
Disagree	18	11.7	11.7	90.3
Strongly disagree	15	9.7	9.7	100.0
Total	154	100.0	100.0	

Source: Field survey, 2016

Table 3 shows that out of 154 respondents surveyed, 35 respondents representing 22.7 per cent strongly agreed that they advertise their products through yahoo mail; 63 respondents representing 40.9 per cent agreed that they advertise their products through yahoo mail; 23

respondents representing 14.4 per cent were undecided that they advertise their products through yahoo mail; 18 respondents representing 11.7 per cent disagreed that they advertise their products through yahoo mail; and, 15 respondents representing 9.7 per cent strongly disagreed that they advertise their products through yahoo mail.

Table 4:
Distribution of respondents by their responses to item 6:
we receive orders for products through google mail

	Frequency	Percent	Valid percent	Cumulative percent
Strongly agree	34	22.1	22.1	22.1
Agree	64	41.6	41.6	63.6
Undecided	19	12.3	12.3	76.0
Disagree	19	12.3	12.3	88.3
Strongly disagree	18	11.7	11.7	100.0
Total	154	100.0	100.0	

Table 4 shows that out of 154 respondents surveyed, 34 respondents representing 22.1 per cent strongly agreed that they receive orders for products through Google mail; 64 respondents representing 41.6 per cent agreed that they receive orders for products through Google mail; 19 respondents representing 12.3 per cent were undecided that they receive orders for products through Google mail; 19 respondents representing 12.3 per cent disagreed that they receive orders for products through Google mail; and, 18 respondents representing 11.7 per cent strongly disagreed that they receive orders for products through Google mail.

Table 5:
Distribution of respondents by their responses to item 7:
some of our customers contact us through hotmail

	Frequency	Percent	Valid percent	Cumulative percent
Strongly agree	38	24.7	24.7	24.7
Agree	56	36.4	36.4	61.0
Undecided	21	13.6	13.6	74.7
Disagree	17	11.0	11.0	85.7
Strongly disagree	22	14.3	14.3	100.0
Total	154	100.0	100.0	

Table 5 shows that out of 154 respondents surveyed, 38 respondents representing 24.7 per cent strongly agreed that some of their customers contact them through Hotmail; 56 respondents representing 36.4 per cent agreed that some of their customers contact them through Hotmail; 21 respondents representing 13.6 per cent were undecided that some of their customers contact them through Hotmail; 17 respondents representing 11 per cent disagreed that some of their customers contact them through Hotmail; and, 22 respondents representing 14.3 per cent strongly disagreed that some of their customers contact them through Hotmail.

Table 6:
Distribution of respondents by their responses to item 10:
Facebook enhances the marketing of our products

	Frequency	Percent	Valid percent	Cumulative percent
Strongly agree	3	1.9	1.9	1.9
Agree	9	5.8	5.8	7.8
Undecided	10	6.5	6.5	14.3
Disagree	10	10	6.5	20.8
Strongly disagree	122	79.2	79.2	100.0
Total	154	100.0	100.0	

Table 6 shows that out of 154 respondents surveyed, 3 respondents representing 1.9 per cent strongly agreed that Facebook enhances the marketing of products; 9 respondents representing 5.8 per cent agreed that Facebook enhances the marketing of products; 10 respondents representing 6.5 per cent were undecided that Facebook enhances the marketing of products; 10 respondents representing 6.5 per cent disagreed that Facebook enhances the marketing of products; and, 122 respondents representing 79.2 per cent strongly disagreed that Facebook enhances the marketing of products.

Table 7:
Distribution of respondents by their responses to item 14:
most of our customers are gotten through twitter

	Frequency	Percent	Valid percent	Cumulative percent
Strongly agree	1	0.6	0.6	0.6
Agree	10	6.5	6.5	7.1
Undecided	11	7.1	7.1	14.3
Disagree	13	8.4	8.4	22.7
Strongly disagree	119	77.3	77.3	100.0
Total	154	100.0	100.0	

Source: Field survey, 2016

Table 4.16 shows that out of 154 respondents surveyed, 1 respondent representing 0.6 per cent strongly agreed that most of their customers are gotten through Twitter; 10 respondents representing 6.5 per cent agreed that most of their customers are gotten through Twitter; 11 respondents representing 7.1 per cent were undecided that most of their customers are gotten through Twitter; 133 respondents representing 8.4 per cent disagreed that most of their customers are gotten through Twitter; and, 119 respondents representing 77.3 per cent strongly disagreed that most of their customers are gotten through Twitter.

Table 8:
Distribution of respondents by their responses to item 18:
customers place orders through google+

	Frequency	Percent	Valid percent	Cumulative percent
Strongly Agree	0	0.0	0.0	0.0
Agree	13	8.4	8.4	8.4
Undecided	8	5.2	5.2	13.6
Disagree	9	5.8	5.8	19.5
Strongly disagree	124	80.5	80.5	100.0
Total	154	100.0	100.0	

Table 8 shows that out of 154 respondents surveyed, no respondent strongly agreed that customers place orders through Google+; 13 respondents representing 8.4 per cent agreed that customers place orders through Google+; 8 respondents representing 5.2 per cent were undecided that customers place orders through Google+; 9 respondents representing 5.8 per cent disagreed that customers place orders through Google+; and, 124 respondents representing 80.5 per cent strongly disagreed that customers place orders through Google+.

Test of hypotheses

HO₁: E-mail marketing does not significantly influence the patronage of agricultural products.

Table 10:
ANOVA^a showing the relationship among e-marketing variables and patronage of agricultural products

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5759.441	3	1919.814	218.249	.000 ^b
Residual	1319.468	150	8.796		
1 Total	7078.909	153			

a. Dependent variable: Patronage

b. Predictors: (Constant), hot mail, google mail, yahoo mail

Table 11:
**Coefficients^a showing the relationship among e-marketing variables
 and patronage of agricultural products**

Model	Unstandardized coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.876	.861		1.018	.310
Yahoo mail	.892	.119	.465	7.466	.000
Google mail	.741	.118	.385	6.299	.000
1 Hot mail	.303	.075	.163	4.023	.000

a. Dependent variable: Patronage

Tables 9, 10 and 11 report the multiple regression analysis carried out to test H_{01} . The results show that there is a significant (joint) effect of Yahoo mail, Google mail and Hotmail on the patronage of agricultural products ($B_1 = 0.892$, $p < 0.05$; $B_2 = 0.741$, $p < 0.05$; $B_3 = 0.303$, $p > 0.05$). Yahoo mail makes the greatest contribution to the model as it records the highest Beta of 0.892, followed by Google mail which records a Beta of 0.741, whereas, Hot mail makes the least contribution with a Beta of 0.303. Tables 4.36 and 4.37 further report a significant F statistic, indicating the model's prediction strength ($R^2 = 81.4\%$, $p < 0.05$). The R^2 of 81.4 per cent implies that for every unit change in the patronage of agricultural products, 81.4 per cent of such variation is jointly attributed to or explained by Yahoo mail, Google mail and Hot mail.

H_{02} : There is no significant influence of social network on the patronage of agricultural products.

Table 12:
**Model Summary showing the relationship among
 social network variables and patronage of agricultural
 products**

Model	R	Adjusted R Square	Std. Error of the Estimate
1	.217 ^a	.047	.028

Table 13:
ANOVA^a showing the relationship among social network variables and patronage of agricultural products

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	332.619	3	110.873	2.465	.065 ^b
Residual	6746.290	150	44.975		
Total	7078.909	153			

a. Dependent Variable: Patronage

b. Predictors: (Constant), Google+, Facebook, Twitter

Table 14:
Coefficients^a showing the relationship among social network variables and patronage of agricultural products

Model	Unstandardized coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	18.647	1.370		13.615	.000
Facebook	-.576	.551	.223	-1.045	.298
Twitter	.915	.337	.336	2.717	.070
1 Google+	-.069	.472	-.029	-.145	.885

a. Dependent Variable: Patronage

Tables 12, 13 and 14 report the multiple regression analysis carried out to test H_{02} . The results show that there is no significant (joint) effect of Facebook, Twitter and Google+ on the patronage of agricultural products ($B_1 = -0.576$, $p > 0.05$; $B_2 = 0.915$, $p > 0.05$; $B_3 = -0.069$, $p > 0.05$). Tables 4.39 and 4.40 further report an insignificant F statistic, indicating the model's prediction weakness ($R^2 = 4.7\%$, $p > 0.05$). The R^2 of 4.7 per cent implies that for every unit change in the patronage of agricultural products, only 4.7 per cent of such variation is jointly attributed to or explained by Facebook, Twitter and Google+.

The main concern of this study was to examine e-marketing and the patronage of selected organizations' agricultural products in Cross River State, Nigeria. In doing this, the study tries to ascertain how email marketing, and social network marketing affect the patronage of selected organizations' agricultural products. To achieve the purpose of the study, the effectiveness of e-mail marketing on the patronage of agricultural products, and the social network marketing's influence on the patronage of agricultural products were tested. Hence, a summary of the results reveal that: There is a significant influence of email marketing on the patronage of agricultural products, while social network marketing had no significant influence on the patronage of agricultural products in the study environment.

Conclusion

Internet marketing is the most effective means of marketing agricultural products in this 21st century. It is clearly evident that from the findings of the study on internet marketing and the

patronage of selected organisations agricultural products in Cross River State, most agricultural organisations in Cross River State still adopt the traditional marketing system even in this 21st century. Social network which has become a very powerful internet communication tool is totally neglected by agricultural organizations in Cross River State. Based on the findings of the study, the following conclusions were made: email marketing influences patronage of agricultural products in Cross River State; social network marketing does not influence patronage of agricultural products in Cross River State.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. That, agricultural organisations should employ the use of internet communication tools like email, social network etc. in the marketing of their agricultural products because of the obvious consequences on patronage.
2. Government should create an enabling environment and organize a workshop aimed at developing human resource that will enhance and promote the use of internet marketing in the agricultural sector.
3. Top management/board of directors should endeavour to provide necessary facilities that will facilitate internet marketing activities in the organization and also organize seminars at intervals to enlighten staff on the use of internet marketing tools, hence it as been proven to have a significant influence on patronage.
4. Agricultural organisations should endeavor to register their presence on the internet by either creating a website for the oraginsation, or register with an independent netpreneur. After which a deliberate effort should be made to direct traffic to the website through the use of emails, social networks, etc.

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