

Perception of Extension Agents on Online Marketing of Agricultural Enterprises in Ogun State, Nigeria

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Abstract

Online marketing of agricultural enterprises have potentials to curb the incessant farmers' exploitation occasioned by the activities of the middlemen. Previous studies have explored consumers' inclination to utilize online marketing, and internet functions of agricultural websites for agricultural products, but information on the perspectives of extension agents who are the drivers of this innovation is not documented. The study, therefore, assessed the perception of extension agents on the online marketing of agricultural enterprises in Ogun State, Nigeria. A two-stage sampling procedure was used to select 125 respondents across the four Ogun Agricultural Development Programme (OGADEP) zones. The questionnaire was used to collect data. Data were analyzed using descriptive and inferential statistics. The average age of the respondents was 45.6 years, most of them were male (70.8%) and married (81.7%) with a household size of 4.98 persons. About 33.3% and 28.3% had a Master degree and a Bachelor degree, respectively. The working experience was 16.26 ± 8.21 years with a larger percentage (38.3%) having worked between 17 and 24 years. The majority (75.8%) of the extension agents were senior staff and a larger percentage (52.5%) were trained extension agents. Respondents were mostly aware of social media component ($\bar{x}=0.95$) and online marketing components ($\bar{x}=7.03-9.0$). A large number were favourably disposed ($\bar{x}=99-117.88$) to online marketing for agricultural enterprises.

Keywords: Agricultural enterprise, Awareness, Extension agent, Online marketing, Perception

1.0 Introduction

Information and Communication Technology (ICT), aside from being a channel to collect information of all sorts, has also become a useful business tool in different economic sectors particularly in the agricultural enterprises (Andreopoulou, Koliouska, Tsekouropoulos and Manos, 2011). Policies and projects aimed at improving agricultural production have not yielded corresponding results due to poor marketing, occasioned by the bad road network, poor transportation and reduced pricing. Consequently, farmers faced poor returns due to spoilage and poor pricing presented by inadequate market access and marketing channels. For farmers to overcome these contending factors, it is pertinent for agricultural marketing to be driven by Information and Communication Technology (ICT).

In Nigeria, one of such areas is the Farmers Online Market (FOM) portal, which was launched to connect small and large-scale farmers to the local and international markets (Max, 2016).

Online marketing constitutes an aspect of electronic commerce that encompasses information management, customer service, public relations as well as sales (El-Ansary, Frost and Strauss, 2005). Unlike in conventional marketing system, it eliminates poor marketing channels, poor road network, geographical barrier and reduced pricing (source, year). In order to achieve consistent growth in agricultural production, relevant and timely information is inevitable. Extension agents, being sources of information to rural farmers can encourage online marketing of agricultural produce.

Globally, there is a shift in paradigm in the standard extension activities particularly in marketing functions and orientations at the dawn of the new millennium. Generally, traditional marketing is perceived to be dead (World of DTC Marketing, 2008). Advancements in technologies such as internet, commoditization (Kotler and Armstrong, 2008), communications (Bishop, 2009), internet marketing development (Blythe, 2005) and increasing availability of innovative

marketing technologies (Sutton and Klein, 2003) are potent avenues for marketing agricultural produce. The current trend calls for a re-evaluation of agricultural marketing system through the application of new tools and techniques in order to mitigate the marketing challenges faced by farmers and roles of the extension agents in the marketing of agricultural produce. The threshold of diffusion theory with the assumptions that members of a given culture will adopt a new idea, product, or practice administered by public or private extension organizations irrespective of the scope of coverage holds if perception on the subject matter is fully known. This study is premised on efferent readiness theories, which are based on the idea that covert preparation for action is "an integral part of the perceptual process" and not "merely a *consequence* of the perceptual process that has preceded it" (Coren 1986: 394). This postulation emphasizes extension agents' perception process as an indicator of readiness to use online marketing to change the landscape of marketing, distribution structures and patterns, marketing channels, physical distribution and redistribution patterns. Before this impact can be achieved, it is pertinent to examine extension agents' perception of online marketing for the agricultural enterprise if critical information and knowledge will not be lost in technology transfer processes. Previous studies have explored consumers' inclination to utilize online marketing (Badiru and Afolabi, 2016), e-marketing and internet functions of agricultural websites for agricultural products (Tsekouropoulos et al., 2011), but there is limited information on the perception of extension agents towards online marketing to effectively meet farmers' marketing needs. It is against this backdrop that the study was carried out to ascertain the perception of extension agents' perception on online marketing of agricultural enterprises in Ogun state, Nigeria.

Objectives of the study

The general objective of the study was to ascertain the perception of extension agents toward the online marketing of agricultural enterprises in Ogun State. The specific objectives were to:

- i. Examine socioeconomic characteristics of extension agents;
- ii. Determine the level of awareness of extension agents towards online marketing of agricultural produce; and
- iii. Ascertain the perception of extension agents on the use of online marketing for agricultural enterprise.

The hypotheses were:

1. There is no significant relationship between selected socioeconomic characteristics of the extension agents and their perception of online marketing.

2.0. Methodology

2.1. The study area

The study was carried out in Ogun state, Nigeria. Ogun state covers a land area of approximately 16,406,226 square kilometres and is bounded in the west by the Republic of Benin, on the south by Lagos State and the Atlantic Ocean, and on the east by Ondo State and in the south by Oyo State. It falls between longitudes two ° 40'E - 6° 40'E and latitudes 4° 40'N -9° 15'N. Ogun state has a total of 20 local government areas and four agricultural zones namely; Abeokuta, Ikenne, Ijebu-Ode, and Ilaro. The major food crops grown include rice, maize, cassava, yam and banana. The main cash crops include cocoa, kola nut, rubber, and palm oil and palm kernels. Ogun State is one of the largest producers of kola nut in the country. The estimated population is 3,751,140 (NPC, 2006) and Yoruba is the primary language spoken in the state.

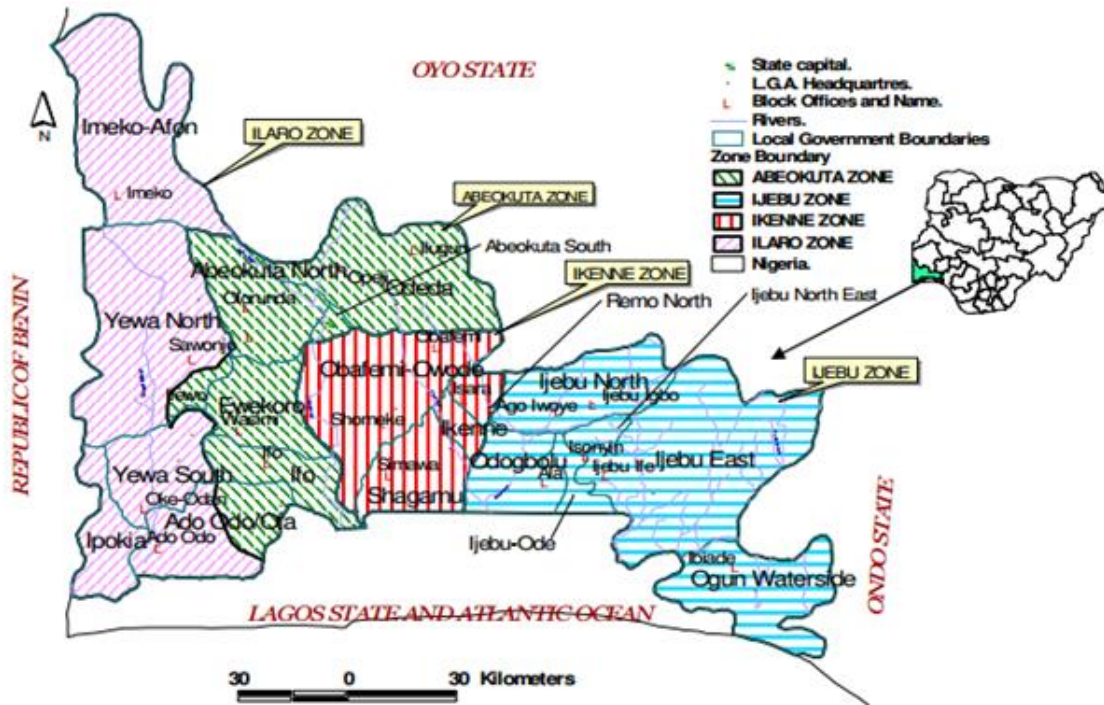


Figure 1: Map of Ogun State showing the Agricultural Development Project (ADP) zones

2.2 Population of study

The population of the study comprised of all extension agents in Ogun Agricultural Development Programme (OGADEP).

2.3 Sampling procedure and sample size

A simple random sampling was used to select the respondents for the study. Ogun Agricultural Development Programme (OGADEP) has 146 extension agents distributed across the four zones. They are Abeokuta (50), Ikenne (36), Ijebu Ode (40) and Ilaro (20). A simple random sampling method was used to select 85% of the respondents from each zone (Abeokuta (43), Ikenne (31), Ijebu Ode (34) and Ilaro (17)). Thus, 125 respondents were selected and interviewed for the study.

3.0 Result and Discussions

3.1 Distribution of respondents according to their socio-economic characteristics

Results in Table 1 shows that 65.8% of the respondents were between 36 and 51 years with the mean age of 45.6years. It implies that most of the respondents are young and expected to be active as agricultural entrepreneurs. A majority (70.8%) of the respondents were male, while only 39.2% were female. This result is

consistent with the findings of Thomas and Laseinde (2015) that male extension agents were more than female extension agents in Oyo state Agricultural Development Projects (ADP). Similarly, Akinsorotan and Oladele (2009) reported that ADP extension agents were male-dominated personnel in Nigeria. It denotes that there is a gender imbalance in the ADP employment sector. It suffices that consideration for gender mainstreaming is essential to drive online marketing and best global extension practices successively in the study area.

Over eighty percent of the respondents were married; this is likely because they have a stable job, which provides the income necessary to keep a family. It also reflects that (Oladele, 2005) is upholding the socio-cultural reasons behind marriage in a similar study. On Religion (Table 1), more than half (58.3%) of the respondents were Christians, while 41.7% were Muslims. This implies that both religions were represented in the Ogun state free extension organisation. The household size was reasonably large, with 65% having a household size of four to six persons, while the average household size was five persons. More than 50% had one form of tertiary education or the other. The high literacy level is expected to provide a stable platform to inculcate online marketing and necessary prerequisite to sharpen extension agents' knowledge, skills and practices for effective technology transfer (Thomas and Laseinde, 2015). Years of working experience (Table 1) reveals that the respondents had long years (16.26 ± 8.21)

of working experience. On the position in the extension organisation (Table 1) majority (75.8%) of the extension agents were senior staff members while 24.2% were junior staff members. This indicates that the personnel distribution was 'top-heavy', invariably, it is suggestive of inconsistency in employment exercise perhaps due to the economic downturn in the nation. This could account for the reduced level of technological advancement experience among the

extension agents. The results further reflected that slightly above half (52.5%) were general extension practitioner, while only a few (18.3%) specialize in were crop science 16.7% were fisheries experts while 12.5% specialize in animal science. . It suggests that the different areas of specialization will facilitate effective unified extension system and online marketing of agricultural produce.

Table 1: Distribution of respondents according to their socioeconomic characteristics

Variable	Frequency(n=120)	Percentage (%)	Mean
Age			45.6±7.89
28-35	14	11.7	
36-43	27	22.5	
44-51	52	43.3	
52-59	22	18.3	
60-62	5	4.2	
Sex			
Male	85	70.8	
Female	35	29.2	
Marital Status			
Single	14	11.7	
Married	98	81.7	
Divorced	5	4.2	
Widowed	3	2.5	
Religion			
Christianity	70	58.3	
Islam	50	41.7	
Household size			4.98±1.77
1-3	23	19.2	
4-6	78	65.0	
7-10	19	15.8	
Level of education			
OND	13	10.8	
HND	32	26.7	
B.Sc.	34	28.3	
M.Sc.	40	33.3	
PhD.	1	0.8	
Years of working experience			16.26±8.21
1-8	26	21.7	
9-16	28	23.3	
17-24	46	38.3	
25-32	18	15.0	
33-35	2	1.7	
Position in the extension organization			
Junior staff	29	24.2	
Senior staff	91	75.8	
Type of extension service			
General	63	52.5	
Crop	22	18.3	
Fishery	20	16.7	
Animal	15	12.5	

3.2 Extension agents' awareness of online marketing components

The result in Table 2 presents the awareness of extension agent on online marketing platforms and components. It reveals that social media ($\bar{x}=0.95$), online advertising ($\bar{x}=0.90$), customer research and feedback ($\bar{x}=0.89$) were ranked first, second and third, respectively. The high level of awareness may be because of the aggressive marketing strategies employed by most of the e-commerce platforms in Nigeria through television adverts, website banner

adverts and email adverts. This in tandem with Badiru and Afolabi (2016). They affirm that consumers' inclination to purchase agricultural products like skimmed milk, yam flour, eggs, and live chickens online was occasioned by familiarisation with online marketing portals used for non-agricultural products. Similarly, popularity and prevalence of social media amongst all and sundry could form the basis for the high level of awareness. It suggests that familiarity with social media platform will foster favourable perception and readiness to use online marketing for agricultural enterprise (Alavion and Allahyari 2012).

Table 2: Distribution of extension agents' awareness of online marketing components

	Components	Aware		Not aware		Mean	Rank
		Frequency	%	Frequency	%		
1	E-commerce website	99	82.5	21	17.5	0.83	4 th
2	Social media	114	95.0	6	5.0	0.95	1 st
3	Online advertising	109	90.8	11	9.2	0.90	2 nd
4	Email marketing	94	78.3	26	21.7	0.78	4 th
5	Search engine optimization	55	45.8	65	54.2	0.45	7 th
6	Online payment processing	89	74.2	31	25.8	0.74	5 th
7	Order processing	84	70.0	36	30.0	0.70	6 th
8	Logistics/ delivery	93	77.5	27	22.5	0.78	4 th
9	Customer research and feedback	107	89.2	13	10.8	0.89	3 rd

Extension agents' perception of online marketing for agricultural enterprise

Table 5 reveals that most of the extension agents perceived that online marketing for agricultural enterprise could be expensive to operate ($\bar{x}=4.09$), but also a potential tool to market agricultural produce ($\bar{x}=3.99$). In their view, age is not a barrier to the use of online marketing ($\bar{x}=3.88$), though it requires technical knowledge for new users ($\bar{x}=3.67$). The respondents opined that online marketing might reduce the activities of intermediaries ($\bar{x}=3.81$), bridge the gap between producers and consumers ($\bar{x}=3.76$), gain good customer feedback mechanism ($\bar{x}=3.90$) and improve the sales of agricultural produce ($\bar{x}=3.78$). It may also provide a broader market for agricultural enterprise ($\bar{x}=3.90$). Furthermore, extension agents were of the opinion that online marketing may help restrict buyers who are not internet savvy ($\bar{x}=3.67$), standardize prices ($\bar{x}=3.77$) and provide effective grading system for agricultural produce ($\bar{x}=3.74$). Overall, the majority were favourably disposed to the use of online marketing for agricultural enterprise (Table 6).

Table 3: Distribution of extension agents' perception of online marketing for agricultural enterprise

S/ N	Statements	SA (%)	A (%)	UD (%)	D (%)	SD (%)	Mean
1	Online marketing for agricultural enterprise could be expensive to operate.	-	20.0	0.8	29.2	50.0	4.09*
2	Online marketing appears to be a potential tool for marketing agricultural products	25.0	60.0	8.3	2.5	4.2	3.99*
3	All agricultural products cannot be marketed with online marketing	7.5	18.3	32.5	30.8	10.8	3.19
4	Online marketing is quite not easy to use	3.3	28.3	22.5	36.7	9.2	3.20
5	Age is not a barrier to the use of online marketing for Agricultural enterprise	32.5	40.8	13.3	9.2	4.2	3.88*
6	Online marketing can be used for the marketing of agricultural enterprise	30.8	33.3	13.3	5.0	7.5	3.85*
7	Online marketing requires technical know-how to use for new users	23.3	40.0	21.7	10.0	5.0	3.67*
8	Online marketing may help reduce the activities of middlemen	25.0	46.7	17.5	5.8	5.0	3.81*
9	Too many components are involved in online agricultural marketing	8.3	16.7	16.7	39.2	19.2	3.44
10	Online marketing may make farmers prone to fraud and scams	6.7	10.0	17.5	52.5	13.3	3.56
11	Online marketing could be the best way to improve the sales of agricultural produce	25.8	39.2	25.0	6.7	3.3	3.78*
12	Online marketing may help provide a wider market for agricultural enterprise	33.3	35.8	21.7	5.8	3.3	3.90*
13	Online marketing has all it takes to bridge the gap between producers and consumers	28.3	35.0	24.2	9.2	3.3	3.76*
14	Online marketing has the potentials to promote faster marketing of Agricultural Produce	18.3	45.0	22.5	11.7	2.5	3.65*
15	Online marketing may not allow farmers to have control over their income	11.7	16.7	34.2	25.0	12.5	3.10
16	Nigerian agricultural enterprises appear to be ready for online marketing	11.7	30.0	29.2	22.5	6.5	3.18
17	Educating farmers to apply online marketing may be very difficult	2.5	18.3	21.7	40.0	17.5	3.52
18	Online marketing could appear to be too complicated to handle	3.3	21.7	23.3	30.0	21.7	3.45
19	Online marketing could help checkmate glut of agricultural produce	15.8	45.8	18.3	12.5	7.5	3.50
20	Online marketing may result in unemployment	7.5	20.0	20.0	40.0	12.5	3.30
21	Online marketing may help control post-harvest losses of agricultural produce	15.0	37.5	24.2	19.2	4.2	3.40
22	Online marketing may help reduce the cost of storage of produce	14.2	46.7	17.5	18.3	3.3	3.50

S/ N	Statements	SA (%)	A (%)	UD (%)	D (%)	SD (%)	Mean
23	Online marketing could result in the alienation of rural consumers	4.2	18.3	21.7	88.3	17.5	3.46
24	Online marketing may restrict buyers who are not internet savvy	12.5	4.2	5.8	29.2	38.3	3.67*
25	Online marketing could help in standardizing prices of agricultural produce	16.7	56.7	15.8	8.3	2.5	3.77*
26	Online marketing may help provide an effective grading system for agricultural produce	20.0	42.5	32.5	1.7	3.3	3.74*
27	E-commerce websites may seem to be difficult to set up for agricultural enterprise	4.2	26.7	25.0	32.5	11.7	3.21
28	Online advertising may be too expensive for agricultural enterprises to adopt in online marketing	7.5	26.7	20.0	30.0	15.8	3.20
29	High costs of transportation may pose a logistic constraint for online marketing	4.2	15.8	24.2	38.3	17.5	3.49
30	Agricultural enterprises may not easily grasp the importance of search engine optimization as an integral component of online marketing	5.8	15.0	20.0	39.2	20.0	3.53
31	Email marketing has the potential to give an unprecedented broad reach to agricultural enterprises	19.2	46.7	25.0	5.8	3.3	3.72*
32	Online marketing may help agricultural enterprises to gain good customer feedback to help improve outputs	25.2	49.2	17.5	7.5	0.8	3.90*
33	Customer research may be expensive for agricultural enterprises to carry out in online marketing	0.8	16.7	26.7	45.0	10.8	3.48

Grand mean= 3.57 *Perception statements with means higher than the grand mean

SA: Strongly agree, A: Agree, U: Undecided, D: disagree, SD: strongly disagree

Table 4: Respondents' distribution based on the level of perception of online marketing for agricultural enterprise

Level	Frequency	Percentage
Low	57	47.5
High	63	52.5

3.4 Relationship between respondents' socioeconomic characteristics and their perception of online marketing of agricultural produce

The result in Table 7 reveals that there was a significant relationship between the extension agents' level of education and perception of online marketing ($\chi^2=0.314$, $p \leq 0.05$). This implies that, the higher the extension agents' education level, the more favourable their perception of online marketing, which consequently could influence the

level of job performance. This agrees with Ekumankama and Anyanwu (2007) who found that level of formal education was a strong predictor of job performance by extension agents in Abia State, Nigeria. However, age ($r=0.039$, $p \geq 0.05$), position in extension organisation ($\chi^2=0.069$, $p \geq 0.05$), type of extension service ($\chi^2=0.212$, $p \geq 0.05$) and years of working experience ($\chi^2=0.069$, $p \geq 0.05$) were not significant to the perception of online marketing of agricultural produce.

Table 5: Relationship between respondents' characteristics and Perception of online marketing

Variables	Chi-Square (χ^2)	df	p-value
Sex	0.096	1	0.291
Marital status	0.156	3	0.394
Religion	0.159	1	0.078
Level of education	0.314	4	0.011*
Position in the extension organization	0.069	1	0.448
Type of extension service	0.212	3	0.131
r-value			
Age	0.039		0.674
Years of working experience	0.053		0.564

*Significant @ $p \leq 0.05$

Conclusion and recommendations

Extension agents had favourable disposition to online marketing for agricultural enterprise in the study area. The extension agents' level of education was significantly related to perception of online marketing. Notably, the

awareness and education level were high, which could be responsible for the positive perception exhibited toward online marketing. The study recommends extension agents' training on various online marketing platforms to boost marketing of agricultural produce.

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