USE OF E-MARKETING PLATFORMS AMONG POULTRY FARMERS IN OYO STATE, NIGERIA

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ABSTRACT

This study was designed to assess the use of E-marketing platforms among poultry farmers in Oyo State. Simple random sampling was used to select 35% of the 695 registered members of Poultry Association of Nigeria (PAN) to give a sample size of 243 respondents. Data were collected on the respondents' personal characteristics, enterprise characteristics, types of E-marketing platforms available, and the use of E-marketing platforms using a structured questionnaire and analysed using descriptive statistics such as frequency counts, percentages, means and inferential Statistics such as Chi-square and Pearson Product Moment Correlation. The result revealed that 52.3% of poultry farmers were male with a mean age of 43. Sixty four percent had tertiary education, while 90.1% were married and the dominant religion was Christianity (78.2%). Majority of the respondents (79.0%) raised broiler birds. More than half of the respondents (51%) had poultry farming experience of 9years and number of labour was 6 persons. WhatsApp emerged as the most available E-marketing platforms (100%) followed by Facebook (91.4%), YouTube (86.8%), Google (70.0%) and TikTok (66.7%). The result revealed that WhatsApp emerged as the most frequently used platform for advertisements of poultry products with the mean value ($\bar{x}$ = 1.7654, sales of poultry products ($\bar{x}$ = 1.7449, customer feedback ($\bar{x}$ = 1.6831), price information$\bar{x}$ = 1.6708), procurement of inputs for poultry production ($\bar{x}$ = 1.0453). There were correlations between educational qualification, age, poultry farming experience, and E-marketing usage. The result of the research showed that there was low utilisation of E-marketing platforms with a frequency count of 147 and 60.5 percent thus the research concluded that the use of E-marketing platforms was low. As a result of the percentage value and frequency counts of the low utilisation of E-marketing platforms among poultry farmers in Oyo State, it is recommended that the Poultry Association of Nigeria (PAN) should encourage diversification beyond WhatsApp and Facebook to include platforms like Instagram, Google, Websites, YouTube etc. to expand market reach and increase profitability.

Keywords: E-marketing, Poultry farmers, Enterprise, Telecommunications

INTRODUCTION

The Nigerian poultry sector occupies a vital position in the nation's economy, serving as a significant source of employment and contributing to the country's food security. The sector has been able to employ 14 million Nigerians in the agricultural sector (Netherlands Enterprise Agency, 2020). According to Food Business Africa (2022), the Nigerian poultry industry includes 180 million birds categorized by production systems. The farmer's weekly (2022) reported that the African poultry industry is expected to grow at a compound annual rate of approximately 4.7% from a current value of $25 billion and Nigeria as one of the largest poultry markets in Africa, experiences a continuous demand for poultry products across various regions. In Nigeria, the importance of the industry cannot be over-emphasised as it provides raw materials to some industries as well as serve as a take up industry for other industries such as the animal health industries (Omiti, J. M., and Okuthe, S. O. (n.d.) The poultry sector not only provides employment opportunities, it also generates significant income that helps to boost the Gross Domestic product of the country (Bawa *et, al.,* 2023).

E-marketing, also known as internet marketing, refers to the use of digital technologies and online platforms to promote and sell products or services (Chaffey and Ellis-Chadwick, 2019). In the context of agriculture, E-marketing encompasses various digital channels and strategies, including websites, social media platforms, online marketplaces, and mobile applications, and information sharing platforms to connect farmers with consumers, intermediaries, and other stakeholders in the value chain (Aji *et al.*, 2020).

The utilisation of E-marketing in agriculture has gained significant momentum in recent years, driven by the increasing penetration of internet and mobile technologies in rural areas, as well as the growing demand for transparency, traceability, and direct marketing channels (Onyedikachi *et al.,* 2021). Many farmers still lack access to digital tools (FAO, 2019). The poultry sector in Oyo State, the largest producer of day-old chicks in Nigeria, faces similar challenges. While the state has a thriving poultry market, many farmers still do not use E-marketing tools to sell their products, limiting their market reach and profitability. It is against this background that this study seeks to assess the utilisation of E-marketing platforms among poultry farmers in Oyo state and achieve the following objectives; describe the personal characteristics of respondents in the study area, examine the enterprise characteristics of the respondents, identify the types of E- marketing that are available for respondents use, assess the uses of E-marketing platforms.

METHODOLOGY

The study was carried out in Oyo State**,** which is in the South-West geopolitical zone of Nigeria. One of the most prominent actors in the sector is the Poultry Association of Nigeria (PAN), particularly its Oyo State chapter. PAN serves as a central coordinating body that provides critical services such as capacity building, advocacy, and extension services to poultry farmers. The association organises training workshops, farm visits, and information dissemination activities aimed at enhancing best practices in poultry management. A study by Owolade *et al*. (2017) emphasises the role of PAN in bridging knowledge gaps among poultry farmers in the state, with many respondents acknowledging the association as their primary source of technical and operational guidance.

In addition to PAN, the Oyo State Government has played an active role in supporting the poultry industry, particularly in response to rising production costs and feed shortages. In a notable intervention, the government distributed approximately 16,000 bags of maize and 11,000 bags of poultry feed to about 1,691 farmers across the state. This initiative was designed to reduce the burden of feed costs and sustain production levels amidst economic pressures (Voice of Nigeria, 2023; BusinessDay, 2023). These policy responses reflect a growing recognition of the sector's importance in food security and employment generation.

The study population comprised of registered poultry farmers under the poultry Farmers Association of Nigeria (PAN). There were 695 registered members in the association. A simple random sampling technique was used to select 35% out of the 695 registered members to give a sample size of 243 respondents.

The data were collected using a well-structured questionnaire. Data were collected on the respondents' personal characteristics, the enterprise characteristics of respondents', types of E-marketing platforms that are available for respondents' use, and uses of E-marketing platforms. The dependent variable- the use of E-marketing platforms was measured using yes or no and the indication of frequency of use with options of always, occasionally and never with scoring of 0,1 and 3,2,1 respectively. Data was analysed using descriptive statistics such as frequency counts, percentages and means and inferential Statistics such as Chi-square and Pearson Product Moment Correlation.

RESULTS AND DISCUSSION

Personal characteristics

The results in Table 3.1.0 revealed that the mean age of the respondents was 43±9.94 in the study area. The mean age of the respondents was 43± which is quite close to the findings of Bamiro, Torimiro, and Oduntan, (2020) who reported the mean age of commercial poultry farmers in Oyo state as 44.6±. This is an indication that poultry farmers in Oyo State are relatively young and still in their active productive age and they have high tendency of being able to use E-marketing platforms.

The table also shows that more than half of the respondents (52.3%) were male. This implies that the population of poultry farmers of male and female in Oyo state were almost equal that is both genders are involve in poultry production, although the population of male respondents was slightly above that of the female. This is in close alignment with the findings of Akinola, and Essien, (2011) who reported that gender distribution of poultry farmers in Oyo State showed that 51.9% were Males while 48.1% were Females. This is an indication that Poultry production is not dominated heavily with one gender over the other.

Most of the respondents (90.1%) were married, this is in close alignment with the findings of Omonona, Oni, and Ugboh, (2014) that majority of poultry farmers (89%) of the respondents were married while (11%) were single. This is an indication that poultry farming is predominantly an enterprise centered on married family units. Most of the respondents (64.6%) had tertiary education, followed by secondary education (29.6%), primary education (5.8%). This agrees with Adebayo and Adeola (2005) findings on poultry farmers in the state that (62%) had tertiary education, (28%) had secondary education and (10%) had primary education. This implies that the respondents had attained tertiary education.

Majority (78.2%) of the respondents were Christians; this implies that Christianity is the major religion being practiced by respondents in the study area**.** This is in close alignment with the findings of Adejobi, and Kassali, (2013) that majority of Poultry Farmers were (77.5%) were Christians while (22.5%) were Muslims. This implies that Poultry Farmers are predominantly Christians.

Enterprise characteristics

The result in table 3.2.0 reveals that majority (79.0%) of the respondents raised broiler birds, commercial layers (48.6%), Turkey (24.3 %), Breeder Chickens (23.5%), and Cockerel (18.5%).

This finding is in close alignment with Okunola *et.al* (2012) findings that majority of respondents raised broilers and layers while small percentage raised poultry species like guinea fowl, turkeys. The dominance of Broilers and Layers productions suggests that these enterprises are driven by consumer demand for poultry meat and eggs which are staple sources of animal protein in Nigeria.

Table 3.1.0: Distribution of Respondents by Personal Characteristics n=243

Personal Characteristics	Frequency	Percent	Parameter
Age group			
25-34	52	21.4	Mean:43, SD:9.94
35-44	60	24.7	
45-54	104	42.8	
55-64	21	8.6	
65-75	6	2.5	
Sex			
Male	127	52.3	Mode: Male
Female	116	47.7	
Marital Status			
Single	24	9.9	Mode: Married
Married	219	90.1	
Religion			
Christianity	190	78.2	Mode: Christianity
Islam	53	21.8	
Educational Qualification			
Primary Education	14	5.8	Mode: Tertiary Education
Secondary Education	72	29.6	
Tertiary Education	157	64.6	

Source: Field survey, 2024

Table 3.2.0 reveals that more than half (51.0%) of the respondents were within the years of experience range of 1-9 years in poultry production, (28.0%) were within the range of 11-18, (15.6%) of the respondents were within the range of 19-27, (5.3%) were in the range of 28-36.

This finding is contrary to Adeyemo *et al* (n.d) research findings among poultry in the state that 48.6% of the respondents had been involved in poultry farming for less than 10 years. This is an indication that the increase has been because of more people have ventured into poultry production in the past few years.

Table 3.2.0: Distribution of Respondents by Enterprise Characteristics n=243

Types of Poultry Enterprise	Frequency	Percent	Mean	Std. Deviation
Broiler	192	79.0		
Commercial layers	118	48.6		
Turkey	59	24.3		
Breeder Chickens	57	23.5		
Cockerel	45	18.5		
Guinea fowl	11	4.5		
Geese	5	0.8		
Gosling	2	0.8		
Quail	1	0.4		
Years of Poultry Experience				
1-9	124.0	51.0		
10-18	68.0	28.0	11.19	10.00
19-27	38.0	15.60		
28-36	13.0	5.30		
Number of labour				
1-10	219	90.1		
11-20	4	1.6	6.10	8.90
41-above	5	2.1		
No labour	15	6.2		
Flock size				
50-10,000	230	94.7	3114.61	11495.09
20,001-30,000	13	5.3		

Source: Field Survey, 2024

Table 3.2.0 reveals that majority of the respondents (90.1%) had 1-10 workers in their poultry enterprises (1.2%) of the respondents have the range of (11-20) workers, (2.1%) have of the respondents have the range 41-above, (6.2%) of the respondents have no workers. This finding implies that poultry farming in the study is considerable small compared to medium farming operations.

Table 3.2.0 reveals that the flock size of majority (94.7%) the respondents ranges from 4-10,000, 20,001-30,000(5.3%). This finding is contrary to the findings of Okunlola and Bamiro (2016) that majority of farmers (62.5%) operated a flock size of 500-5,000 birds. This finding implies that small to medium scale poultry farming operations are dominant in Oyo State.

Types of E-marketing platforms available

The result in Table 4.3.0 revealed that WhatsApp ranked highest with a percentage of (100%) followed by Facebook, YouTube, Google, TikTok, Twitter, website, Instagram, Telegram, Shopify, Pinterest, MailChimp with percentages (91.4%), (86.8%), (70.0%), (66.7%), (60.1%), (51.9%), (50.2%), (38.3%), (7.0%), (2.1%), (0.4%). This indicates that WhatsApp is the most available E marketing platform available for respondents' usage followed by Facebook, YouTube, Google, TikTok, Twitter, Website, Instagram, Telegram, Shopify, Pinterest, and the least available platform is Mailchimp. This also implies that WhatsApp is the most popular platform available for usage among poultry farmers. This is in close alignment with Aker (2011) findings who highlighted the popularity of mobile messaging applications like WhatsApp among farmers for sharing information and marketing their products.

Table 3.3.0: Distribution of the types of E-marketing platforms available for usage. n=243

E-marketing Platforms	Yes (%)	No (%)
WhatsApp	100	0.0
Twitter	60.1	39.9
Shopify	7.0	93.0
Pinterest	2.1	97.9
Google	70.0	30.0
Facebook	91.4	8.6
Mailchimp	0.4	99.6
TikTok	66.7	33.3
YouTube	86.8	13.2
Website	51.9	48.1
Instagram	50.2	49.8
Telegram	38.3	61.7

Source: Field survey, 2024

The use of e-marketing platforms

Out of the 12 available e-marketing platforms known by the respondents in the study area, from Table 4.1.0 WhatsApp, Facebook and TikTok were the E-marketing platforms mostly used by respondents for the advertisement of poultry products with the average mean values of ($\bar{x}$= 1.7449), ($\bar{x}$= 1.4115), ($\bar{x}$= 0.3374) respectively. WhatsApp, Facebook and TikTok were the top three E-marketing platforms mostly used for sales of poultry products with the average mean values of ($\bar{x}$=1.7449), ($\bar{x}$ = 1.2346), ($\bar{x}$ = 0.2551).In the use of E-marketing platforms for customer feedbacks, WhatsApp, Facebook and Twitter were commonly used by the respondents with the average mean values of ($\bar{x}$=1.6831), ($\bar{x}$ = 1.0494), ($\bar{x}$ = 0.3292).

Furthermore, WhatsApp, Facebook and Google were the mostly used E-marketing platforms for price information with the average mean values of ($\bar{x}$ = 1.6708), ($\bar{x}$ =1.0823), ($\bar{x}$=0.6091) respectively. The Table also indicated that for procurement of inputs for poultry production, WhatsApp, Facebook and Google were commonly used by the respondents with the average mean values of ($\bar{x}$ = 1.6708), ($\bar{x}$ =1.0823), ($\bar{x}$ =0.6091) This implies that the most used E -marketing platform is WhatsApp (Moreno-Cabanillas, *et. al.*, 2024).

Table 3.4.0: Distribution of Respondents on the utilisation of E-marketing platforms (n=243)

Uses	WhatsApp	Twitter	Google	Facebook	TikTok
Customer feedback					
Always	76.1	12.8	1.6	42.8	7.0
Occasionally	16.0	7.4	10.7	19.3	4.5
Never	7.8	79.8	87.7	37.9	88.5
Mean	1.6831	0.3292	0.1399	1.0494	0.1852
Advertisement of poultry products					

Uses	WhatsApp	Twitter	Google	Facebook	TikTok
Always	83.5	12.3	2.5	66.3	14.8
Occasionally	9.5	4.5	11.9	8.6	4.1
Never	7.0	83.1	85.6	25.1	81.1
Mean	1.7654	0.2922	0.2099	1.4115	0.3374
Procurement of inputs for poultry production					
Always	47.3	4.1	2.5	30.0	2.9
Occasionally	9.9	4.9	11.9	16.5	4.1
Never	42.8	90.9	85.6	53.5	93.0
Mean	1.0453	0.1317	0.1687	0.7654	0.0988
Sales of poultry product					
Always	81.1	8.2	2.1	53.5	10.3
Occasionally	12.3	7.4	11.5	16.5	4.9
Never	6.6	84.4	86.4	30.0	84.8
Mean	1.7449	0.2387	0.1564	1.2346	0.2551
Price information					
Always	79.0	9.5	24.7	48.6	2.9
Occasionally	9.1	6.2	11.5	11.1	4.9
Never	11.9	84.4	63.8	40.3	92.2
Mean	1.6708	0.2510	0.6091	1.0823	0.1070

Source: Field Survey, 2024

The respondents were scored on their use of E-marketing platforms with scores ranging from:

Table 3.4.1: Categorisation of respondents on the use of E-Marketing Platforms (n=243)

Utilisation group	Frequency	Percent
Low (4-19.2)	147	60.5
High (19.3-88.0)	96	39.5
Total	243	100

Source: Field survey, 2024 Minimum= 4.00(low usage) Maximum= 88.00(high usage).

Table 3.5.0 shows that at significant level of p=<0.05, there was a significant relationship between respondents' educational qualification (χ^2 =13.397, p=0.001) and the utilisation of E-marketing platforms. This implies that the educational qualification of poultry farmers influences their use of E-marketing platforms.

Table 3.5.0 Result of Chi square analysis showing the relationship between selected personal characteristics of respondents and the utilisation of E-marketing platforms.

Variables	χ^2	df	p-value
Sex	1.608	1	0.205
Marital status	3.950	1	0.047
Religion	1.666	1	0.197
Educational Qualification	13.39	2	0.001

Source: Field survey, 2024

Table 3.5.1 shows that there was significant relationship between the respondents' age (r= -0.224, p=0.000) and their utilisation of E- marketing platforms. This implies that the age of Poultry farmers influenced their utilisation of E -marketing platforms.

Table 3.5.1 Pearson Product Moment Correlation analysis showing the relationship between age of respondents and the utilisation of E marketing platforms.

Variables	r value	p- value
Age	-0,224	0.000

Source: Field survey, 2024

Relationship between selected enterprise characteristics and utilisation of E – marketing platforms

Table 3.6.1 shows that at a significant of p<0.05, there was a significant relationship between respondents' years of poultry farming experience (r=- 0.136, p=0.035) and utilisation of E -marketing platforms. This implies that the poultry farmers' years of poultry farming experience influenced their utilisation of E- marketing platforms.

Table 3.6.1: Pearson Product Moment Correlation analysis showing the relationship between selected enterprise characteristics and the utilisation of E-marketing platforms.

Variables	r value	p-value
Years of poultry farming experience	-0.136	0.035
Number of labour	-0.023	0.727

Source: Field survey, 2024

CONCLUSION AND RECOMMENDATIONS

It can be concluded that there was low level of the utilisation of E marketing platforms. From the results, the E- marketing platforms mostly used by the respondents were WhatsApp, Facebook, TikTok for advertisements of poultry products. WhatsApp, Facebook and TikTok were mostly used for sales of poultry products. WhatsApp, Facebook and Twitter were the platforms mostly used for customer feedback. WhatsApp, Facebook, Google were the platforms mostly used for price information while WhatsApp, Facebook and Google were the platforms mostly used for procurement of inputs for poultry products. Based on the result findings, more than half of the respondents were males within the mean age of 43±, Christians and had tertiary education. The findings also indicated that WhatsApp is the most available E-marketing platform for use.

The study which assessed the uses of E-marketing platforms among poultry farmers in Oyo state is apt and based on the result findings of the low utilisation of E-marketing platforms among poultry farmers in the state and WhatsApp and Facebook being the most used E-marketing platforms among poultry farmers. It is recommended that the Poultry Association of Nigeria (PAN) should encourage diversification beyond WhatsApp and Facebook to include platforms like Instagram, Google, Websites and YouTube etc. to expand market reach and profitability.

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