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Adoption of the digital marketing among oil palm farmers: A review of methods, successes and challenges in Nigeria

Ayodeji Fisayo Afolayan ^{1,*}, Timothy Tolulope Oke ², Rhoda Ayanfeoluwa Ojo ³, Mustafa Ayobami Raji ⁴ and Hameedat Bukola Olodo ⁵

¹ *Institute for Sustainable Development, First Technical University, Ibadan, Oyo State, Nigeria.*

² *Yannis Marketing, Lagos, Nigeria.*

³ *Department of Agricultural Economics and Extension, Olusegun Agagu University of Science and Technology, Okitipupa, Ondo State, Nigeria.*

⁴ *Independent Researcher, Edinburg, Texas, USA.*

⁵ *Independent Researcher, Ilorin, Nigeria.*

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Abstract

Palm oil is an important commodity in the Nigerian economy concerning its role as a source of farm income and food requirements. This study reviewed the digital marketing techniques adopted by oil palm farmers in Nigeria. This study examined the evolution of the palm oil industry in Nigeria, highlighting its historical background, current challenges, and the potential solutions offered by digital marketing. It discussed the shift in global palm oil production from West Africa to Asia, particularly Indonesia and Malaysia, and the implications for Nigeria's palm oil sector. Despite being a significant contributor to the Nigerian economy, the palm oil industry faces challenges such as slow growth, loss of export share, and competition from imports. Digital marketing emerges as a viable solution to these challenges, offering opportunities for reaching target audiences, improving brand loyalty, and overcoming resource constraints. It also examined the benefits and challenges of digital marketing in Nigeria, highlighting the high cost of advertising, infrastructure limitations, and cultural diversity as key obstacles.

Keywords: Digital Marketing; Palm Oil Industry; Economic Impact; Business Operation; Agriculture

1 Introduction

Oil palm whose fruits are processed into palm oil is a native of the tropical rainforest region of West Africa. Its cultivation spread to Asia and South America in the 16th century (Robins., 2021). In the 1960s, the West Africa sub-region was the global leading producer and exporter of palm oil. However, in the 1970s and till date, Indonesia and Malaysia from the Asian continent became world powers in the production and exportation of palm oil, with both countries producing about 80% of the total world production of palm oil (International Trade Centre (ITC), 2012 and PricewaterhouseCoopers (Robins., 3022). In 2023, the production of palm oil in Nigeria reached 1.4 million metric tons. Between 2009 and 2023, the production quantity generally increased, registering the highest growth in 2010, when it grew by roughly 14 per cent (Anyanwu *et al.*, 2013). From 2014 onwards, the output from palm oil production followed a rising trend (Egwuma *et al.*, 2016).

Palm oil is an important commodity in the Nigerian economy concerning its role as a source of farm income and food requirements. In addition to providing direct and indirect employment for about 4 million people, palm oil and palm kernel oil together contribute around 70% of the country's national consumption requirement of vegetable oils

* Corresponding author: Mustafa Raji Ayobami; Email: rajimustafa100@gmail.com

(Gesteiro *et al.*, 2019). Over the past 40 years, however, the Nigerian palm oil industry has undergone dramatic changes, recording slow growth in domestic production and losing its export share in the world market (Merem *et al.*, 2020). Additionally, there has been growing competition from imports in the face of rising domestic demand. These factors have heightened concerns about the survival of the palm oil industry in Nigeria. The introduction of digital marketing is one means to solving this challenge.

Digital marketing has become an indispensable tool in the era of technology, and Nigeria is no exception. It offers businesses a unique opportunity to reach their target audience, improve customer relationships and build brand loyalty. According to a report by Omoeye (2024), digital marketers must possess some traits which include: Analytical Aptitude (They leverage tools like Google Analytics, CRM systems, and social media analytics to derive actionable insights.); Strategic Vision (They craft comprehensive marketing strategies that encompass various channels and adapt these strategies as needed to meet changing market demands.); Creativity and Innovation (They're adept at storytelling and creating compelling narratives to captivate audiences.); Adaptability and Agility (Exceptional digital marketers embrace change and quickly adapt to new technologies and trends); Multi-Channel Expertise (Mastery across various digital channels (social media, SEO, email marketing, PPC, content marketing, etc.) is fundamental.); Tech-Savviness (They stay updated with the latest marketing automation tools, CRM software, ad platforms, and emerging technologies); and many more.

In Nigeria, the approach and adoption of e-marketing are still in their infancy (Dlodlo and Dhurup., 2013). Despite the rapidly growing digital landscape and the introduction of more sophisticated technological tools, businesses have been slow to adopt e-marketing strategies and analytics (Saheed, 2022). This is mainly due to a lack of understanding of effectively using digital marketing channels and a lack of resources and skills to implement successful campaigns. This study examined the adoption of digital marketing among oil palm farmers in Nigeria.

2 An Overview of the Palm Oil Production Sector in Nigeria

In Nigeria, the majority of the Palm oil produced is attributed to subsistent farmers. Subsistent farmers make up about 80 per cent of the total palm oil production in Nigeria (Bankole *et al.*, 2018). The subsistent nature of the palm oil industry in Nigeria attracts inefficient practices as a result of unskilled labour. The subsistent powered palm oil industry in Nigeria is catered primarily by farmers' immediate family members who are compensated using the sap of the palm tree known locally as palm wine. This decision by subsistent farmers affects the quality and efficiency of their palm oil produced and processed (Omoti., 2001; Doherty., 2006; Edelman *et al.*, 2013; Gordon., 2005; Onoja and Achike., 2015). The processing and marketing of palm oil are economic activities that have to do with the organization of various stages, sorting, storage, processing, grading transportation, and agricultural activities. The study of John (2001) revealed that the production of palm oil is influenced by the movement of goods and services from producer to consumer. Other drawbacks include price fluctuation; the price of palm oil rises and falls seasonally during the dry season purchase of palm oil is relatively cheaper compared to the price. of palm oil during the rainy seasons.

As regards the processing of palm oil, Gordon (Onoja and Achike., 2015) stated that the use of hi-tech mills is a great innovation because it ensures an increase in the efficiency of palm oil extraction and gives high-quality palm oil. Lee *et al.*, (2014) stated that a high extraction rate and integrated capital intensive should be encouraged by oil palm processors to experience transformation in the country. Omoti (2001) investigated the productivity of palm oil processing and factors that influence the net return to processors internationally as a result of numerous uses with plenty of benefits. sector.

3 The Digital Marketing in Nigeria

Technology has now changed the narratives of advertising in Nigeria. Advancements in technology have enabled the use of the Internet in promoting goods, ideas and services. Online advertising uses the virtual environment to promote ideas, goods and services. "E-advertising is a form of promotion that uses the internet to deliver marketing messages to attract customers" (Hamidizadeh *et al.*, 2012). It includes contextual ads, banner ads, blogs, social network advertising, interstitial ads, pop-ups, online classified advertising, advertising networks and e-mail marketing. Online media vehicles help advertisers to build brand identity and image on the Web. It also minimizes high-cost expense costs, enhances easy segmentation and targeting, connects brands with well-defined target audiences, enhances easy dissemination of information; and helps measure campaign outputs (Shareef *et al.*, 2015; Ajina, 2019).

"Digital marketing is the marketing of products or services using digital technologies, mainly on the Internet, but also includes mobile phones, display advertising, and any other digital medium" (Desai, 2019). It uses digital media

technologies to reach and communicate with both existing and potential buyers, to achieve organisational goals and objectives (Sawicki, 2016; Raji et.al. 2024). Today, Digitalisation has modified, shaped and improved internet advertising and advertising media planning.

4 Benefits of Digital Marketing

In sum, the functions of marketing involve the analysis, planning, implementation and control of projects designed to achieve and satisfy demand, whether with products or services, considering the desires and needs of consumers/users, with quality and in a way to bring profit to the company. Marketing is considered to be extremely relevant in the survival, development, and success of small and new ventures (Raji et.al, 2024).

According to Chaffey, Ellis-Chadwick, Mayer and Johnston (2019), associated with digital marketing are several tangible and intangible benefits. The authors consider tangible benefits to increase sales of new sales opportunities resulting in increased revenue from new customers, new markets, and existing customers (repeat sales or cross-selling); cost reduction due to reduced time for customer service, online sales and reduced costs of printing and distribution of marketing communications. Concerning intangible benefits, these are presented as the communication of corporate image; enhancement/improvement of the brand; marketing communications now faster and more responsive (including public relations); improved customer service; improved learning for the future; the meeting of customers' expectations for having a website; identifying of new partners and better support for existing partners; better management of marketing information and information about the customer; more customer feedback on products.

Marketing is very important for the creation of companies, especially as they face environmental challenges, such as the rapid evolution of technology, globalization and increasingly more sophisticated competitors. As such, they need to be able to identify and pursue market opportunities, adapting to a dynamic environment, despite the limited financial and human resources that they possess and the set-back of a limited market and small customer base. The main tool to take advantage of these opportunities, currently, is the Internet – where companies promote their products/services to a global target audience, reaching large masses at a greatly reduced cost. For this reason, it is mandatory to give maximum attention to digital marketing to obtain the maximum competitive advantage that this medium provides to companies. Marketing professionals are required to constantly update their knowledge and to constantly search for information because this sector is always undergoing constant change

5 Digital marketing channels for successful business operation

Internet marketing methods and strategies encompass a wide range of services such as search engine optimization (SEM) and pay-per-click (PPC), websites, banners, sponsorship, interstitials, meta-ads, classified ads, email advertising, display advertising, text-based advertising, behavioural marketing, software-based ad, newsletter, blogs, affiliate marketing, web press releases, interactive advertising, online reputation management (ORM), online marketing research and also Social Media Marketing Methods (Adegbite et al, 2014; Horbal, et al, 2017; Etim, James, Arikpo, and Okeowo, 2021).

The application of digital trends can have greater power on the local self-government and organize this event for successful business. Another characteristic that applies to digital marketing is creativity. The most commonly used channels by (Koushiki 2015) are:

- **Website:** One of the strongest Internet marketing communication tools is a functional web page that clients can easily access. Each web page has its URL, which is a fundamental network identification for any single resource connected to the internet. Websites must be functional, and informative, use simple navigation, make shopping easy for customers, and keep them up to date (Lewes 2010).
- **Social networks:** Social networks on the internet are an area where people who share common connections can interact with each other. Some of the leaders here are Facebook, Twitter, Instagram, Flickr, MySpace, LinkedIn and many others, which together occupy 90% of the total internet activity. Social network visitors are just one way of measuring the impact of social networks. The reviews of the pages, the time spent on them, the attention, as well as the frequency of the visits. Today, social networks are turning into huge, rich businesses.
- **Banners:** Banners come in several forms: static ads, pop-up ads, and floating ads. They are different, and creative, depending on the way companies think the message should be conveyed. Still, their purpose is the same, they exist to attract attention and then take customers to a company website or a specific page for a special offer. A positive feature of banners is that they contain short and clear information about what a company offers.

- **Email Marketing:** Email marketing is a structured, systematic process and one of the most successful channels for transmitting (relevant) marketing messages to your target audience. By sending e-mails, we introduce ourselves to potential clients and try to arouse their interest. Customers can follow our latest announcements, offers and campaigns.
- **Mobile Marketing:** Consumers devote a large portion of their time to smartphones, which is very important for using the benefits of mobile phones. Mobile marketing strategies are Advertising through applications, Advertising based on location, Search engine marketing, QR codes, SMS and MMS messages.
- **Search Engine Optimization (SEO):** SEO is a process of optimizing sites to rank as high as possible on the search engine rankings of an organic search engine. In essence, it is about optimization that the web page becomes more expressive for searchers, which means that it is easier to detect and consequently it may be ranked among the first results in the list.
- **PPC (cost per click) campaigns:** per click campaign is charged after actual clicks on ads. They are visually different from other ads and are located to the right of the search lists.

6 Overview of the Adoption of Digital Marketing in Agriculture

Internet adoption was recently developed for various needs, including the agriculture sector. The involvement of the Internet in the agriculture sector leads to the development of information and communication for users. The growing demand for food, both in terms of quantity and quality, has increased the need for agricultural intensification and industrialization through the Internet (Tzaumis *et al.*, 2012). Specifically, the usage internet creates various benefits for farming activity, namely information about the weather forecast, market prices, purchasing input, and product sales. Moreover, the positive trend of the global population implicates the transition from traditional farming to modern agriculture techniques [3].

Many developing countries in the global world are dependent on the agriculture sector, especially Indonesia. The agriculture sector in Indonesia contributed to the national economy by 13.2% in 2021 (Statistic Indonesia., 2022). Several agricultural products in Indonesia contribute to economic income, namely rice, tea, palm oil, natural rubber, cocoa, and coffee, by exporting them (Oliphant *et al.*, 2019). The higher export contribution of the agriculture sector in Indonesia comes from palm oil, which reached the export share to the global market at 26,6% (UN., 2022). However, agricultural production in many developing countries depends on conventional farming, such as traditional methods, and lacks technological usage, implicating the downgrade of production (Daut *et al.*, 2020; Nageri *et al.*, 2013). Therefore, the agricultural output of developing countries could be utilized more effectively.

On the other hand, internet development currently penetrates almost all countries in the world, including Indonesia. It must be considered for application in agriculture due to the positive effect of internet users and secure internet servers on the agriculture value-added (Suroso *et al.*, 2020). The trend of Internet users also increased in several countries in the last two decades (WDL., 2022). However, the specific information about the adopter of the internet by job classification needs to be more frequently investigated. Most internet access from the mobile phone is the new device to access information, commonly called Mobile Internet (Kim *et al.*, 2007). Based on a few previous studies, the adoption of mobile internet has also been explored in various case studies. Sekabira *et al.* (2021) found that the gender, knowledge of ICT groups, and thought of ICTs benefit agriculture, family size, and land farmed previous season, affecting farmers' adoption of Information, Communication, and Technology (ICT) based market information services in Mayuge Smallholders, Uganda. Thar *et al.* (2021) revealed the determinants of mobile phone application-based internet in Myanmar Farmers, including age, education, number of crops, degree of mechanization, and market distance. Hoang (2020) stated that age, market distance, income, gender, credit participation, and training participation influence the adoption of mobile phones for fruit marketing. Specifically, some studies found the determinant of adopting technology in palm oil in Malaysia, Indonesia, and Thailand (Zulkefi., 2017; Ariyanto *et al.*, 2020; Rodthong *et al.*, 2020). However, a specific study about the determinant of internet adoption in palm oil farmers is rare to be utilized. Therefore, it is interesting to find that internet technology also contributes to the higher palm oil production in Indonesia. Currently, many scholars have already examined the effect of the Internet on agriculture activities, especially in productivity (Hassan *et al.*, 2009; Ali *et al.*, 2016; Yan and Liu., 2022; Twumasi *et al.*, 2021). Therefore, the internet could be the key variable to improving the agricultural productivity for farmers.

7 Challenges of Digital Marketing in Nigeria

Advertising in Nigeria has come a long way but despite the progress over the years, the sector is still faced with significant challenges. The high cost of advertising is the major setback of advertising in Nigeria. Companies usually spend a lot of money to advertise their product in the communication space. The cost of developing and communicating

advertising content to potential customers is relatively high. The high cost of advertising can be traced to the inadequate infrastructure, unstable electricity, and other social amenities that aid the conception, creation, planning and delivery of an advertising message (Akhagba, 2014). Ayuba (2018) avers that the high cost of running an advertising campaign in Nigeria has made some organisations leave the country and explore opportunities in other places. Some other companies who do not want to leave the country can increase the price of their product. “In instances where the firm advertised in Nigeria, they transferred the cost of advertising on the consumers, which usually forced consumers to purchase substitute imported goods at a cheaper rate than the Nigerian-made products” (Ayuba, 2018). The high cost of advertising motivates companies and organisations to explore other less expensive promotional tools. Most companies now do publicity, personal selling, direct marketing, and sales promotion. Advertisers are beginning to adopt other methods to communicate and interact with their prospects. More so, Nigeria is a heterogeneous country with people of diverse cultures, practices, orientations, and beliefs. Advertisers usually need to study the uniqueness of every zone before developing content for them. In turn, the cost of developing unique advertising that respects individual cultures and beliefs is equally expensive (Alozie, 2011).

8 Conclusion

The review concluded that Digital marketing emerges as a potent remedy, offering avenues for audience engagement and resource optimization in the oil palm industry. Digital marketing has the potential to bolster agricultural productivity. Challenges encountered in the adoption of digital marketing among oil palm farmers include high advertising costs and cultural diversity.

Compliance with ethical standards

Disclosure of conflict of interest

There is no conflict of interest.

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