EFFECT OF DIGITAL CHANNEL AND REVENUE GENERATION IN NIGERIA

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Abstract
The importance of revenue in a country cannot be exaggerated as the growth and survival of the nation is relying on tax revenue. Therefore, the need for a new source of internal revenue is not farfetched as Nigeria's internally generated revenue is not enough to sustain the nation hence the borrowing from external sources. Tax revenue however has proven to be the most consistent and certain internal source of revenue. With the increasing growth of the digital economy, which was accelerated by the pandemic, the taxation of this economy has been considered with evidence in the finance act of 2020 which speaks on significant economic presence instead of permanent establishment. This research attempts to investigate the effect of imposing a digital tax on digital channels on revenue generation in Nigeria using data collected from tax experts in Lagos state, Nigeria, via Google form. An exploratory research design is used, and data is analyzed using Structural Equation Model (SEM) via the STATA software for statistical analysis. The study administered 200 questionnaires to respondents in FIRS and selected BIG4 auditing firms in Nigeria. The findings of the research show that there is a positive and insignificant relationship between revenue generation and tax e-commerce as well as between revenue generation and content providers. On the other hand, there is a positive and significant relationship between digital advertisers and revenue generation. This study concludes that the imposition of digital tax on digital channels is strongly linked to revenue generation and will lead to an increase in revenue generation in Nigeria. The study thereby recommends that more focus and strategies should be put in place when collecting digital tax from digital channels.

Introduction

Revenue plays a significant role in the proper administration of an economy and the maintenance of the citizens' standard of living. It is used to finance the country's operations ranging from payment of expenditures to payment of services rendered by external forces to implementation of development plans or public projects. Revenue is a prime player in the economic growth, development, sustainability, and stability of a country (Onalapo, Aworemi & Ajala, 2013). Therefore, revenue generation is treated as a necessity in every country due to the importance of revenue in a country. Means of generating revenue have evolved over the years, the methods improved, and the systems and structures created have been updated to move with the trend and evolution of the world today.

Taxation is one of the most essential and reliable means of generating revenue in Nigeria as it is internally generated from the citizens, corporations, firms, and companies in Nigeria. One of the major differences between taxation and other revenue sources is that they are being imposed, i.e., no matter what happens, revenue generated from taxes is a constant source of revenue in Nigeria. Revenue from taxation contributes a reasonable percentage of revenue for Nigeria and reliability

because if people work, corporations exist, and goods are being sold, taxes will be collected (Ibam, Boyinbode & Afolabi, 2018). According to Samuel (2021) value added tax (VAT) contributed 1.53 trillion naira in 2020 to revenue generated and VAT is just one of the various types of tax which revenue is generated from. Taxation may not be the major source of revenue for Nigeria, but it is a vital source as it is a consistent and certain source, and it generates a lot of revenue in Nigeria.

The world economy as we know it has evolved and the digital economy is being explored more and more by various companies and businesses, rendering services via the internet. This exploration has positively changed the world in terms of convenience, speed, and profit as companies have reduced costs and increased revenue. Still, this exploration has also made it difficult for the tax authorities of various countries to measure the level of income being generated from their country by digital businesses, thereby making the imposing of taxes on these businesses nonexistent (Yahaya, 2021).

The debate on imposing digital tax in the form of VAT that is on each product or in the form of company income tax (CIT) that is on the general revenue generated by digital channels in a country is still ongoing which makes the taxation of digital businesses difficult for Nigeria as there are no generally accepted procedure or means of taxing these businesses. In addition, there are some troubles with the interchange between the double taxation treaties (DTT) and the order of the minister of finance and because of international practices, the DTT supersedes the order i.e., countries with whom Nigeria have this treaty might not be included in the imposition of the digital tax (Yahaya, 2021).

Despite all these challenges of imposing digital tax as discussed above, the need for a new source of revenue in Nigeria's economy cannot be ignored. The majority of the tax revenue generated in Nigeria is from the oil sector. According to the National Bureau of Statistics (2020), the oil sector generates 65 per cent of total tax revenue in the country and the over-reliance on this sector as a source of revenue for the country has played a role in the deliberation of a new source of revenue. Even with all the tax revenue from the oil sector, the Nigerian economy is barely afloat, and the government result to borrow from various countries and internal sources. Debt is a source of finance for nations but consistent borrowing by a country is a negative pointer to mismanagement of funds as well as the need for a new source of finance which is relevant in the case of Nigeria.

The digital economy is growing exceedingly and at a fast pace and with the dependence of individuals and companies on the product of digital channels, these companies are making a lot of revenue from various countries and Nigeria is not an exception. The global pandemic contributes to companies reliant on the digital channels' products for their survival as these products could be accessed without direct contact with the company but via the internet (examples of these products are online delivery, online sales (e-commerce), digital advertising, etc) therefore boosting the growth of the digital economy in Nigeria (Yahaya, 2021).

Adeyemo (2020); Yahaya (2021); Ogiden (2021) researched digital taxation and the digital economy in Nigeria. Their study focused on the methods to be used as well means of measuring the income of these digital platforms. These platforms have not been categorized and examined to know how much of an effect they have on revenue generation. Companies make use of digital advertising platforms like Instagram, Facebook, Google, and others to promote their products as it reduces cost, and is the best way to access their market. Individuals use content-providing platforms like Udemy, YouTube, etc. to obtain knowledge and as a means of entertainment. Both companies and individuals make use of e-commerce platforms to purchase and sell goods and services while being in the comfort of their homes and workplace. Therefore, these platforms generate revenue but how do the taxing of these platforms and individuals affect the revenue generated in Nigeria? This study is aiming at examining the effect of digital tax on digital channels on the revenue generated in Nigeria. The study will specifically ascertain how taxation on content providers will affect revenue generation in Nigeria; determine the impact of digital advertisers on revenue generation in Nigeria; and assess the effect of e-commerce on revenue generation in Nigeria.

Literature Review and Hypotheses Development

Tax Revenue

From the standpoint of certainty, stability, and reliability, taxes is the most essential source of government revenue (Ibam, et al., 2018). Tax income is a fundamental source of revenue for the government. Taxes indicate how much activity a government may engage in without going into debt (Audu & Ishola, 2021). Taxes are used to fund development programs, and it is the responsibility of every tax resident to meet his or her tax obligations to the state, which are not optional. It is a sovereign right that responsible authority exercises over people or activities within its jurisdiction. This definition of taxation stresses the basic objective of taxes, which is to create income to pay for government services. The tax collected is used for the general welfare of all residents within the nation in the delivery of amenities. Moreover, it requires lowering wealth distribution disparities, restricting some forms of consumption, safeguarding domestic companies, and exercising control over particular facets of the national economy.

The entire amount received by the tax authorities on behalf of the government from all taxable individuals and enterprises is known as tax revenue. Four key issues need to be understood in order for tax revenue to function as desired in society. To start, a tax is a required payment made by citizens to the government, which is put to use for the public good.

Afuberoh and Okoye (2014) assert that taxes are the government's most important source of income in terms of the regularity and certainty of taxation, even though they do not yield the greatest amount of money. The majority of the revenue that the government receives comes from taxes. The government is always assured tax money because of its inherent ability to impose taxes, no matter the circumstances. Taxation

is seen as an obligation that citizens must endure in order to support the government, which is in charge of ensuring their welfare. Personal income such as wages, business earnings, interest, dividends, and royalties are subject to taxation. Corporate income from petroleum, capital gains, and capital transfers are also subject to taxation.

Digital Tax

International initiatives on digital taxation were launched in 2013 by the Base Erosion and Profit Shifting (BEPS) project of the Organisation for Economic Co-operation and Development (OECD). Base erosion and profit shifting (BEPS) are tax planning techniques used by multinational corporations (MNES) to intentionally move income to low- or no-tax jurisdictions that have little or no business activity or to undermine taxation by taxable payments like interest or royalties in order to reduce or eliminate tax obligations. Because of their heavy reliance on corporate income tax, developing countries will pay for the majority of the BEPS strategies' estimated $240 billion annual cost to nations in lost revenue. (Ogiden, 2021). In accordance with the order, a non-resident company (NRC) is deemed to have a substantial financial operation in Nigeria if it earns total revenue from one or more of the following in a given year that exceeds twenty-five million naira (₦25,000,000) or it is equivalent in other currencies: downloading or streaming digital content, sending information on Nigerian users gathered from their online activities, offering goods and services via a digital platform in Nigeria, or offering intermediation services in Nigeria via a digital platform that links buyers and sellers are all examples of how data is transmitted (Ogiden, 2021).

Those in favour of digital tax believe that there is a clear need to take steps to ensure that the taxes paid by digital businesses are in line with the value produced in their respective jurisdictions. While nations opposed to the measure see a number of dangers and unfavourable effects, including a detrimental effect on invested capital, technology, growth, and welfare; the levy being transferred to consumers and companies; the potential of excessive taxation; barriers to implementation; and regulatory and administrative costs (Latif, 2019). The outbreak of the covid-19 pandemic and its ensuing side effects, including increased inflation, unemployment, public debt, as well as other negative economic indicators, resulted in various importunate monetary policy interventions and fiscal policy measures targeted at cushioning the severity of the economic decline. These birthed the finance act, 2020 and other fiscal policies intended to facilitate economic recovery and boost economic growth (Ogiden, 2021).

The OECD has identified three major roadblocks to taxing digital businesses: the ease with which items can be sold in foreign marketplaces where physical presence is either minimal or nonexistent; reliance on intangible assets such as brand names and trade secrets; and deriving significant value from user participation via user value and network effects. The variables combine to produce a system in which highly digitalized enterprises generate value through activities that are intimately related to a jurisdiction without having to maintain a physical presence (Okesola, 2021). The

enactment of the Nigerian finance act of 2021 is a massive leap toward the taxation of digital transactions, however, there remains a considerable distance from establishing an efficient fiscal system of online operations due to the absence of an international agreement on the subject, there aren't any regulatory procedures due to a lack of physical presence, which allows efficient monitoring difficult, there is a lurking dread of double taxation, as well as a widespread lack of trust among the general population. (Yahaya, 2021).

Surprisingly, the Finance Act of 2019 fails to adequately define what constitutes a major commercial presence in Nigeria. This gap was bridged following the issuance of the significant economic presence order in accordance with section 13 (4) CITA (as amended). Under the significant economic presence principle established in section 13(2) (c) and (e) of the Companies and income tax act, foreign entities that generate ₦25 million (or the equivalent in another currency) in yearly gross revenue through digital content streaming or downloading services, data transfer, and goods or services delivered through a digital platform are included in the tax net (as amended) (Adebanjo, 2021).

Digital Economy

Also, the need for digital services has grown as a result of fluctuating energy prices and the Covid-19 outbreak, as physical transactions have been restricted in order to maintain social distance (Yahaya, 2021). Online transactions will enable e-government and e-commerce in the digital age and span a broad range of administrative and commercial tasks. It places a focus on online transactions rather than those that happen in person. Since the turn of the century, the Internet has dominated how businesses are conducted locally and globally. The phrase "digital economy" describes the commercial activities that result from regular online contact between people, companies, devices, data, and processes. The foundation of the digital economy is interconnectivity, which enables collaboration between individuals, businesses, and computers to fully utilise the Internet, mobile devices, and the Internet of Things. It is often referred to as the web business or the internet business. The convergence of communication, computation, and information is known as the digital economy. It entails a transaction that is delivered digitally, a service that is ordered digitally, platform-enabled services, or faster delivery of goods and services via networks, platforms, or channels (Adebanjo, 2021). The digital economy's rise should be viewed in the context of the fourth industrial revolution. Physical cyber systems are now being used in the fourth industrial revolution, which is focusing on end-to-end digitization of all physical assets, integrating technologies, and blurring the borders between the physical, digital, and biological domains. Digitalization and technical innovation have profoundly altered the way firms conduct their global operations (Latiff, 2019). The massive development of digitalization and the COVID-19 pandemic, both of which have led to a rise in desire for online services, are mostly to blame for the dramatic changes that have occurred in the global economy. Investors are utilising this dramatic transformation by substantially investing in digital services like cryptocurrencies, social media

platforms, online shopping, and online gaming, among others. The world market is currently undergoing this transformation from a traditional economy model to a digital economy one (Yahaya, 2021).

It was also revealed that over 18 billion individuals bought items online in 2018 and a total of 4.95 billion people used online platforms for shopping in 2022. Currently, 51 per cent of Nigeria's total population as of 2022 have access to the internet. In Africa, 13% of internet users make purchases online (United Nations Conference on Trade and Development (UNCTAD), 2021). There are 13 million online users in Nigeria, which has a population of over 200 million. Nigeria's estimated e-platform spend is $12 billion, with a potential of $75 billion by 2025. In order for consumers, businesses, and governments to connect to local and international digital services and engage in the global digital economy, the digital economy requires digital infrastructure. Additionally, it offers opportunities for selling products and services across the board through digital channels including computers, smartphones, and the internet. By interacting with one another on digital platforms, producers and users can generate value. Digital platforms are used by governments to provide citizen-facing government services and to share Commercial businesses are using internet technologies to provide a growing range of goods and services (Adeyemo, 2020). Digital financial services, which include electronic transaction capabilities in addition to digital payments, give people and companies access to a range of digital financial services, including credit, savings, and insurance. To take part in the digital economy, people and businesses need to have access to reasonable and reliable digital financial services. By starting new, growth-oriented enterprises and reforming existing ones, technological entrepreneurs and innovators establish an environment that supports the development of the digital economy, resulting in net employment growth and boosting the efficiency and profitability of the economy (Adeyemo, 2020).

Digital Advertising

These innovations have fundamentally altered how businesses run, especially in terms of how they promote their goods and services. The advertising paradigm is shifting away from traditional ad forms (TV, outdoor, direct mail, etc.) and towards a strategy that is more focused on digital, with firms investing more money in digital than in conventional formats. The most recent estimates indicate that this shift is progressing quicker than anticipated, with digital ad spending in the United States being $154 billion in 2022This increase can be attributed to the fact that online streaming platforms are more adaptable and convenient to use, which makes viewing television less likely. But what is the root of this profound fundamental transition? Online ads enable accurate location-based marketing, information on customer profiles, and diversification of the target market according to preferences, interests, and hobbies. It also enables remarketing, easy interpretation of the results, and more economical pricing models (Aslam & Karjaluoto, 2017).

These are distinct qualities that earlier traditional media did not offer. Businesses that historically spent a lot of money on costly marketing channels like TV or outdoor signage may now do it for less money. The bulk of paid digital advertising elements are found in digital advertising spaces (IAPS), which are scattered throughout different areas of websites, according to research done by the writers on this topic. Search engine marketing, social media marketing, and display marketing are just a few examples of digital advertising that appears on websites under the umbrella of Internet ad placement systems (IAPS) (Aslam & Karjaluoto, 2017). From a business standpoint, it's critical because paid digital advertising accounts for the majority of the market. Facebook, for example, derives the majority of its revenue from digital display adverts. Facebook's display ad revenues would total $113 billion in 2022.

The initial area (search engine advertising), also referred to as search engine marketing (SEM) or sponsored search advertising (SSA), is concerned with the advertising spaces that appear next to specific phrases on any search service. In SEM, advertisers place bids on particular keywords by participating in auctions, submitting bids and ad content, and modifying bids and ad copy based on a variety of factors. Given that display advertising is where internet advertising began, this is a traditional category. The distinction between sponsored search ads and display ads is crucial in this case. The latter is present on websites that customers visit and are not dependent on external links. Yet, search engine advertising appears on the results page when a user enters a keyword query. Several quality factors, including expected click-through rates (CTR), the relevancy of the landing page and the ad, and the estimated effect of ad formats, are taken into account by Google when determining a score or ranking for each ad. Search engines also evaluate the quality of an advertisement against each keyword for sequential ranking, which is determined by the second price auction model (Aslam & Karjaluoto, 2017).

Social media study, especially on social networking sites (SNS), is still in its development stage in the second industry (social media advertising). With 2.91 billion active users per month, Facebook has gained so much popularity that it now accounts for more than 80% of social media advertising, along with other major networks like Myspace. Although various research has noted the negative implications of sponsored social media marketing, branding attributes—rather than sales or lead generation—are what management should focus on when managing this segment. Social media advertising is a relatively new idea. Companies of all sizes can use social media to meet marketing and branding objectives at a cheaper cost. In organizations, social media is used for a variety of objectives, including advertising and marketing, branding, information search, and, most notably, customer relationship building and other customer service operations. Twitter, Linkedin, Instagram, and Facebook are the major players in social media advertising. Users utilize these platforms for a variety of reasons, such as having fun, sharing difficulties, and gaining social knowledge, whereas Instagram users enjoy following fashion and have the highest brand community engagement. The highest levels of brand community identification and membership were seen among Twitter users (Aslam & Karjaluoto, 2017).

Display advertising or banner ads are regarded as classics in internet marketing because they have been around since the beginning. An advertisement (advertised spot on a web page) is frequently sold by the publisher to the advertiser based on impressions or clicks in this category. With an increase in the number of players, the display advertising ecology has grown more complicated. Participants with a significant impact include ad networks, demand-side platforms, supply-side platforms, and ad exchanges. The purchasing and selling of advertising space have advanced over time, and so too have these network participants. Real-time (sometimes referred to as programmatic) purchase is one of the most recent developments in this area (Aslam & Karjaluoto, 2017).

Content Providers

As the internet and data innovation have developed, online content, also known as information products or digital products, has become a crucial part of people's daily lives. Giving away online content for free has always been a frequent practice due to viewers' historical resistance to paying for it. More people are gradually getting used to paying for the information they need as a result of the increase in high-quality premium content and the ease of electronic payments in recent years. An online content provider is a platform that links viewers and advertising (Xu & Duan, 2018). Viewers pay membership fees, while advertisers pay advertising costs to the provider. Higher users mean that advertisers are more willing to cooperate with the provider, but more advertising space means that users will have a worse viewing experience. Nowadays, a lot of websites are adopting a business model that mixes subscription payments with advertising revenue. To increase the click rate, the content provider could provide some viewers with free content in order to attract more advertisers. Meanwhile, increasing the amount of space available for advertising improves advertising revenue while decreasing subscriber demand. However, the supplier could lose significant advertising revenue if they restrict the number of free ad space, but viewer desire for subscriptions may increase. As a result, the content provider and the advertiser must agree on a subscription price and advertising space (Xu & Duan, 2018).

Global Digital Tax

Global initiatives on digital taxation were started in 2013 by the Base Erosion and Profit Shifting (BEPS) programme of the OECD. The March 2018 interim report on "Tax difficulties stemming from digitalization" is one of the BEPS initiatives that explicitly addresses the digital sector (Latiff, 2019). The report indicates that while a new global agreement is intended to be reached by 2020, there is currently no evidence of a global consensus on how to permanently modify the international tax structure for the digital era.

Based on the anticipated revenue and expenses to their respective tax regions, measure turnover taxes have polarized countries. Those in favour believe that there is a compelling reason to take action to ensure that the tax paid by digital enterprises reflects the value produced in their respective jurisdictions. These nations believe that

the current situation threatens the equity, viability, and public support for the system. Considering the time required to attain a global. They agree that taxes should be imposed on the internet economy but feel that more immediate action is required (Latiff, 2019).

Latiff (2019) claims that countries opposed to the proposal see many risks and disadvantages, including a negative impact on invested capital, technology, economic expansion, and welfare; the tax being passed on to end users and organisations; the potential for excessive taxation; implementation difficulties; and compliance and administrative costs. A revenue-based tax on revenues from digital activities like running an online tax service, like the all-female online taxi service "An Nisa" in Kenya, is not now present in African Union legislation covering the digital aspects of corporate taxation.

Table 1: Countries that Implemented Digital Tax

Country	Tax Rate	Scope	Global Revenue Threshold	Domestic Revenue Threshold	Status
Austria (AT)	5%	Online advertising	$840 million	$28 million	Implemented (Effective from January 2020)
France (FR)	3%	Provision of a digital interface · Advertising services based on users' data	$840 million	$28 million	Implemented (Retroactively applicable as of January 1, 2019)
Hungary (HU)	7.5 %	Advertising revenue	$344,000	N/A	Implemented (As a temporary measure, the advertisement tax rate has been reduced to 0%, effective from July 1, 2019, through December 31, 2022)
Poland (PL)	1.5 %	Audiovisual media service and audiovisual commercial communication	–	–	Implemented (Effective from July 2020; there is a separate proposal to tax advertisement revenues of broadcasters, tech

					companies, and publishers)
Spain (ES)	3%	Online advertising services · Sale of online advertising · Sale of user data	$840 million	$3 million	Implemented (Effected from January 2021
Italy (IT)	3%	Advertising on a digital interface · Multilateral digital interface that allows users to buy/sell goods and services · Transmission of user data generated from using a digital interface	$840 million	$6 million	Implemented (Effective from January 2020)
Turkey (TR)	7.5 %	Online services including advertisements, sales of content, and paid services on social media websites	$840 million	$4 million	Implemented (Effective from March 2020; the president can reduce the DST rate as low as 1% or increase it as much as 15%)
United Kingdom (GB)	2%	Social media platforms · Internet search engine · Online marketplace	$638 million	$32 million	Implemented (Retroactively applicable as of April 1, 2020)

Source: KPMG (2021)

Empirical Framework

Onaolapo, Aworemi, and Ajala (2013) examined how the value-added tax affected Nigeria's ability to generate revenue and found that in order for Nigeria to experience growth in its economy, the country needs to be able to generate enough revenue to cover its expenses for social amenities and government operations. Also, the country's tax base will expand if additional goods and services are taxed. To combat potential tax evasion, the value-added tax bases should be expanded to include the unorganised sector. Okafor (2012) carried out a study on income tax revenue and economic growth in Nigeria. The study adopted the ordinary least square method of data analysis. The study found that there was a significant positive between income

tax revenue and economic growth. The study, therefore, suggested that effective tax administration will lead to a favourable impact on economic growth.

Audu and Ishola (2021) conducted a study on the impact of a digitalized economy on tax administration in Nigeria over eight years, from 2010 - 2017. The findings show that the digitalization of the economy has no substantial impact on tax administration in Nigeria. It recommended that laws, regulations, and procedures be put in place to make sure that tax revenue authorities at all levels in Nigeria do not fall behind in the digital economy shift. Latif (2019) examined the issues of digital taxation in developing economies in Africa. An *ex-post* factor research design was used as well as a quantitative research method. It was suggested that African countries should think about enforcing a digital tax. Bilateral and multilateral agreements between the state where a foreign firm is incorporated and the state where it pays taxes should regulate this tax.

Ogiden (2021) assessed whether taxing the digital economy is desirable, as well as performing a comparative examination of digital economy taxation in various countries. The significant economic presence order and other aspects of Nigerian law lack a formula for calculating the profit of NRCs in Nigeria that are subject to corporate taxes. Unilateral techniques can only be effective if a working system for assigning taxation rights is in place. Okesola (2021) researched to examine the recent trends in taxation of the digital economy in Nigeria. It was suggested that given the constant changes in corporate arrangements, the income potential from taxing digital services is enormous. To fully realize this potential, however, necessary measures to ensure the smooth implementation of relevant laws must be put in place.

The taxation of Nigeria's emerging digital economy as a means of improving our economy was investigated by Adebanjo (2021). It was advised that Nigeria should make investments in science and technology, align its laws and regulations with global best practices, encourage cashless transactions, benefit from tax information exchange agreements, and make the most of its human resources. Yahaya (2021) conducted a study to evaluate how the digital industry is taxed in Nigeria Post Covid. The study suggests that the government should develop a guideline for the taxation of online transactions. It also recommends that the government should collaborate with local and international organizations in the development of a framework for digital tax.

Okeke (2018) investigated the analysis of taxes jurisdiction on digital business from the perspective of Nigeria in order to comprehend the nature of permanent establishment in a digital economy. The idea of a permanent establishment is crucial for assessing a multinational company's global tax burden, and it was determined that it is crucial to estimate the tax liability concerning any cross-border transactions. As a result, multinational corporations are investing more time and resources into figuring out their global tax obligations. Adeyemo (2020) investigated the effect of digital firms on tax income in Nigeria, as well as the issues tax authorities face in tracking and bringing these businesses into the tax net. The survey research method

was adopted. The data was analyzed using ordinary least squares. The study discovered that internet enterprises have little or no impact on tax revenue creation in Nigeria. In a digitalized economy, this has had little impact on tax evasion and revenue loss for the government. The study suggested that Nigeria should continue to interact with other jurisdictions, particularly OECD and the United Nations (UN), on BEPS measures and new laws for taxes of the digitalized economy.

Xu and Duan (2018) looked at how subscription price and advertising space are decided together, taking into account the reference effect. The study suggested that for the sake of simplicity, the provider should provide a model where subscribers and nonsubscribers share the same advertising area. Aslam and Karjaluoto, (2017) conducted a study on digital advertising around paid spaces, the e-advertising industry's revenue engine. The study discovered from the standpoint of the advertising sector; the sales and buying of advertising slots account for the majority of internet advertising revenue. Sponsored search advertising, social media advertising, and display advertising are the three pertinent IAPS domains that were discovered by the study.

Ibam et al., (2018) investigated the state of e-commerce development and its economic impact. This study revealed that Africa has a lot of potential for e-commerce growth. Investing in critical ICT infrastructure will continue to provide the critical base for e-commerce expansion and rapid economic development. On the continent's development also, there's the question of mistrust. This is a worldwide issue but appears to have been domesticated in Africa, owing to a lack of ICT skills, particularly in electronic devices. Ayo, Adewoye and Oni (2011) examined the issues with consumers' adoption of b2c e-commerce and helped Nigeria implement it. This study discovered the usefulness, task fit, and trust of the internet for b2c e-commerce are all factors. Web retailers must create sites that are comprehensive enough for customers to feel confident in their decisions.

Eneche (2021) investigated the impact of tax revenue on economic growth in Nigeria. This study ascertained that petroleum profit tax (PPT) has no substantial association with economic growth. This could be due to Nigeria's economy's excessive reliance on the oil sector. The study also revealed that value-added tax (VAT) and companies' income tax (CIT) exhibited a positive association with economic growth.

Hypotheses Development

These studies have gaps in scope that is how taxation of digital businesses affects revenue generation. These studies emphasized developing a method and means of taxing digital channels, they also spoke about the challenges of taxing the digital economy (Latif (2019), Ogiden (2021), Okesola (2021) and others) but none examined the implication that the taxation of these digital channels will have on the revenue generated in Nigeria. As this implication could be negative in terms of these channels leaving the economy as taxes can be a repellant and it could be positive as Nigeria could have a new source of revenue which could help in reducing the debt of

the nation. This study aims to close the gap as it examines the effect of imposing a digital tax on digital channels on revenue generation.

Adeyemo (2020) conducted a study on digital businesses and tax revenue generation in Nigeria. The study adopted a survey research design. The study employed a primary source of data collection with the aid of a questionnaire. The questionnaire was administered to respondents in federal and state inland revenue services. Ordinary least square was utilized in analysing the data. The findings revealed that there is no significant effect between digital business and tax revenue generation in Nigeria. The research focused on only the tax policies and tax legislation rather than the effect of imposing a tax on the digital economy.
In furtherance of the above literature, this study assumed that;

H_{01}: Content providers have no effect on revenue generation in Nigeria.
H_{02}: E-commerce has no effect on revenue generation in Nigeria.
H_{03}: Digital advertiser does not affect revenue generation in Nigeria.

Methodology
Research design states the process and approaches to obtain the information required for this research. The exploratory research design will be adopted for this study as this is a new phenomenon with no in-depth information. This study seeks to provide that in-depth information on the effect of the imposition of digital tax on digital channels on revenue generation in Nigeria.
This study's target population comprises the tax authorities, both Federal Inland Revenue Services (FIRS) and the tax experts in one of the Big 4 (Ernst and Young, PWC, Deloitte and KPMG) KPMG. The target population was selected based on the tax authorities and tax experts in Nigeria, specifically in Lagos, as most are situated in Lagos state. Lagos State was selected because it is the most industrial state in Nigeria and has the highest population in the country. Hence, it has the largest number of users of the digital products of digital channels that is both individuals and companies. Therefore, Lagos is a better representation of Nigeria.

The sampling size consisted of 200 copies of questionnaire. The selected respondents are a combination of the FIRS and the tax experts in KPMG. The questionnaire was administered to the respondents using Google form as this is more convenient for both the researcher and the respondents.

Model Specification
In this study, a Structural Equation Model (SEM) was employed. This technique was used to elucidate fluctuations in the values that represent the dependent variables based on changes in the dependent variable. The assumption is that there is a linear correlation between the dependent and independent variables. The model below shows the relationship between the dependent and independent variables:

$RG = f(DC)$…… (1)
$RG_t = \beta_{0t} + \beta_1 E\text{-}COMM_t + \beta_2 DIGAD_t + \beta_3 CONTP_t + \varepsilon_t$…… (2)

Where: RG= Revenue generation; E-COMM= E-commerce; DIGAD= Digital advertisers; CONT= content providers; β= coefficient; ε= error term; t= time

Table 2: Operationalization of Variable

S/N	Variables	Symbol	Measurement	Apropri sign
1	Revenue generation	RG	Questions 7-12	+ve
2	E-commerce	E-COMM	Questions 13-19	+ve relationship in revenue generation
3	Digital advertiser	DIGAD	Questions 20-26	+ve relationship in revenue generation
4	Content provider	CONTP	Questions 27-33	+ve relationship in revenue generation

Researcher compilation (2023)

The data analysis technique employed in this study is the structural model analysis. A Structural Equation Model (SEM) will be used to analyze and estimate data. The analysis will be done using STATA, to ensure the results are robust and appropriate.

Results and Discussion

Structural Equation Model (SEM)

SEM is a multivariate, hypothesis-driven data analysis program used for statistical analysis of replies with 200 or more. Using a structured model or diagram to describe the relationship between the variables, demonstrates the causal relationship between variables.

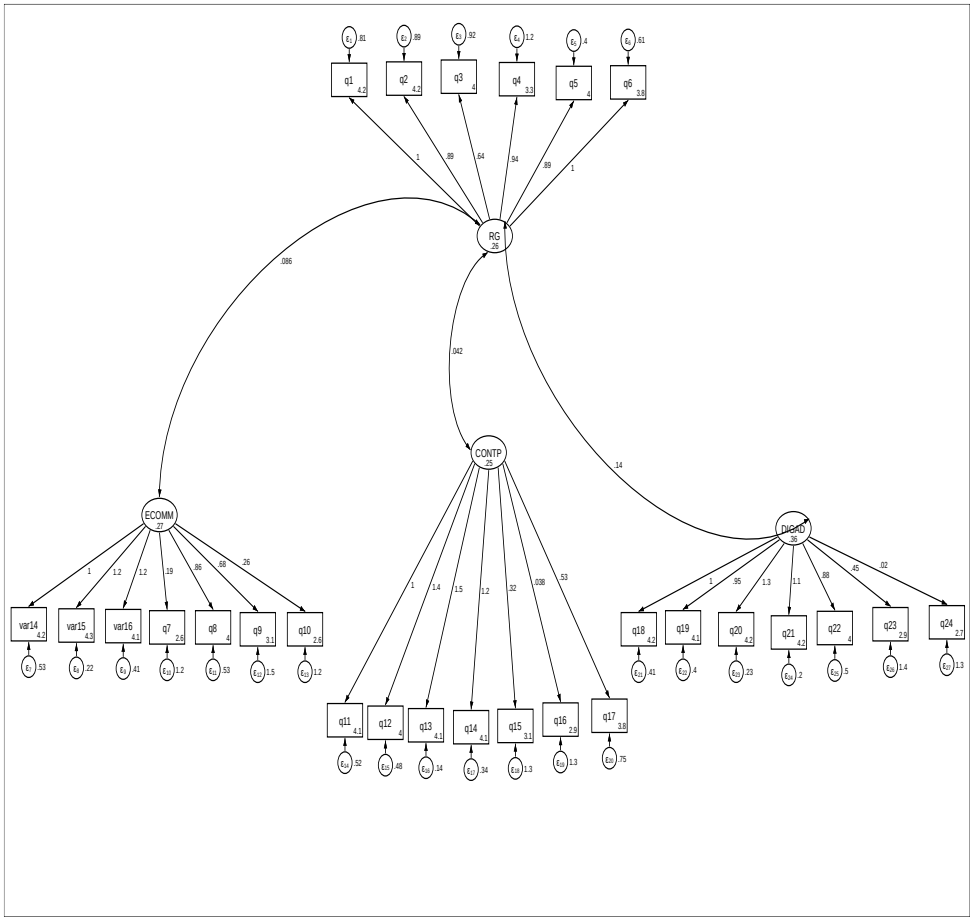


Figure 1: Structural Model

The figure above depicts the structural relationship between the independent variables E-commerce (ECOMM), Content Provider (CONTP), and Digital Advertiser and the dependent variable, Revenue Generation (RG) (DIGAD). According to the graph, the correlation between RG and ECOMM is 0.066, the correlation between RG and CONTP is 0.042, and the correlation between RG and DIGAD is 0.14. This suggests that revenue generation and E-commerce, revenue generation and content providers, and revenue generation and digital advertisers, respectively, have a positive and direct relationship. Other findings are further explained in the table below.

Table 3: Structural Equation Model

```
Structural equation model                       Number of obs     =        200
Estimation method  = ml
Log likelihood     = -6950.3934

 ( 1)  [q1]RG = 1
 ( 2)  [var14]ECOMM = 1
 ( 3)  [q11]CONTP = 1
 ( 4)  [q18]DIGAD = 1
```

	Coef.	OIM Std. Err.	z	P>|z|	[95% Conf.	Interval]
Measurement						
q1						
RG	1	(constrained)				
_cons	4.215	.0732154	57.57	0.000	4.0715	4.3585
q2						
RG	.8882817	.1703436	5.21	0.000	.5544144	1.222149
_cons	4.21	.074078	56.83	0.000	4.06481	4.35519
q3						
RG	.6443353	.163288	3.95	0.000	.3242967	.964374
_cons	3.955	.0716586	55.19	0.000	3.814552	4.095448
q4						
RG	.9430286	.2097176	4.50	0.000	.5319898	1.354067
_cons	3.295	.0845841	38.96	0.000	3.129218	3.460782
q5						
RG	.886558	.1655966	5.35	0.000	.5619946	1.211121
_cons	4.015	.0550749	72.90	0.000	3.907055	4.122945
q6						
RG	1.003646	.1813129	5.54	0.000	.6482793	1.359013
_cons	3.795	.066169	57.35	0.000	3.665311	3.924689
var14						
ECOMM	1	(constrained)				
_cons	4.18	.0631506	66.19	0.000	4.056227	4.303773
var15						
ECOMM	1.248743	.1903702	6.56	0.000	.8756246	1.621862
_cons	4.295	.0564789	76.05	0.000	4.184303	4.405697
var16						
ECOMM	1.172046	.1866799	6.28	0.000	.8061599	1.537932
_cons	4.125	.0624249	66.08	0.000	4.002649	4.247351
q7						
ECOMM	.1856782	.1807614	1.03	0.304	-.1686075	.539964
_cons	2.555	.0792772	32.23	0.000	2.39962	2.71038
q8						
ECOMM	.860362	.1475083	5.83	0.000	.5712511	1.149473
_cons	3.98	.0603987	65.90	0.000	3.861621	4.098379
q9						
ECOMM	.6751901	.2059411	3.28	0.001	.2715529	1.078827
_cons	3.13	.0892496	35.07	0.000	2.955074	3.304926
q10						
ECOMM	.260915	.1793838	1.45	0.146	-.0906708	.6125008
_cons	2.63	.0794701	33.09	0.000	2.474241	2.785759
q11						
CONTP	1	(constrained)				
_cons	4.095	.0622886	65.74	0.000	3.972916	4.217084
q12						
CONTP	1.426602	.1876513	7.60	0.000	1.058812	1.794392
_cons	3.995	.0705328	56.64	0.000	3.856758	4.133242
q13						
CONTP	1.512938	.1878315	8.05	0.000	1.144795	1.881081
_cons	4.09	.0600791	68.08	0.000	3.972247	4.207753
q14						
CONTP	1.205883	.1620127	7.44	0.000	.8883441	1.523422
_cons	4.06	.0594306	68.31	0.000	3.943518	4.176482
q15						
CONTP	.3197487	.1776341	1.80	0.072	-.0284078	.6679051
cons	3.11	.0820945	37.88	0.000	2.949098	3.270902

q16						
CONTP	.0383396	.1729787	0.22	0.825	-.3006924	.3773716
_cons	2.89	.0808672	35.74	0.000	2.731503	3.048497
q17						
CONTP	.5280355	.1429716	3.69	0.000	.2478164	.8082546
_cons	3.835	.0639443	59.97	0.000	3.709671	3.960329
q18						
DIGAD	1	(constrained)				
_cons	4.165	.0619587	67.22	0.000	4.043563	4.286437
q19						
DIGAD	.9482141	.1153893	8.22	0.000	.7220551	1.174373
_cons	4.125	.059974	68.78	0.000	4.007453	4.242547
q20						
DIGAD	1.297194	.1304152	9.95	0.000	1.041585	1.552803
_cons	4.155	.0644583	64.46	0.000	4.028664	4.281336
q21						
DIGAD	1.100435	.1089153	10.10	0.000	.8869649	1.313905
_cons	4.22	.0561961	75.09	0.000	4.109858	4.330142
q22						
DIGAD	.8761811	.1151799	7.61	0.000	.6504326	1.10193
_cons	4.005	.0622485	64.34	0.000	3.882995	4.127005
q23						
DIGAD	.4478332	.1541924	2.90	0.004	.1456217	.7500447
_cons	2.925	.0851286	34.36	0.000	2.758151	3.091849
q24						
DIGAD	.0203022	.1451244	0.14	0.889	-.2641365	.3047408
_cons	2.7	.0803119	33.62	0.000	2.542592	2.857408
var(e.q1)	.8130756	.0966539			.6440874	1.026401
var(e.q2)	.8931284	.1016495			.7145558	1.116327
var(e.q3)	.9194519	.0971356			.7474871	1.130978
var(e.q4)	1.200544	.1332589			.9658192	1.492315
var(e.q5)	.403061	.0552518			.3080971	.5272953
var(e.q6)	.6147508	.0768489			.4811627	.7854277
var(e.var14)	.5292083	.0643671			.4169614	.6716723
var(e.var15)	.2194563	.0487422			.1420014	.3391591
var(e.var16)	.4106876	.0547119			.3163109	.533223
var(e.q7)	1.247722	.1251002			1.025118	1.518664
var(e.q8)	.5309312	.0624395			.4216322	.6685636
var(e.q9)	1.470746	.1511471			1.202432	1.798932
var(e.q10)	1.244829	.1251821			1.022142	1.51603
var(e.q11)	.5224769	.0568004			.4222113	.6465533
var(e.q12)	.4790574	.0607713			.3736006	.6142818
var(e.q13)	.1416475	.0387922			.0828123	.242283
var(e.q14)	.3377746	.0411217			.2660719	.4288002
var(e.q15)	1.321983	.1326133			1.086021	1.609212
var(e.q16)	1.307527	.1307587			1.074798	1.590651
var(e.q17)	.7470943	.0758741			.6122492	.9116384
var(e.q18)	.4109951	.047602			.3275288	.5157317
var(e.q19)	.3985907	.0452608			.3190593	.4979467
var(e.q20)	.2306173	.0381539			.1667504	.3189457
var(e.q21)	.1995549	.0296051			.1492044	.2668966
var(e.q22)	.5010774	.0545033			.404872	.6201432
var(e.q23)	1.377821	.1389508			1.130709	1.678939
var(e.q24)	1.289853	.1289877			1.060275	1.569141
var(RG)	.2590234	.0732818			.1487718	.45098
var(ECOMM)	.2683903	.0700247			.160947	.4475595
var(CONTP)	.2534982	.0615469			.1575112	.4079794
var(DIGAD)	.3567799	.0691549			.2440121	.5216621
cov(RG,ECOMM)	.0856781	.0449412	1.91	0.057	-.002405	.1737611
cov(RG,CONTP)	.0415837	.0393657	1.06	0.291	-.0355717	.1187391
cov(RG,DIGAD)	.144819	.0506017	2.86	0.004	.0456415	.2439965

LR test of model vs. saturated: chi2(321) = 2184.97, Prob > chi2 = 0.0000

The studies' significance and the applicability of each question to the dependent variable are displayed in the table above. Additionally, it demonstrates the causal link between revenue production and the free-floating factors of e-commerce, content suppliers, and online marketers. By dividing the coefficients by the standard error value, the Z value is obtained. The probability value, which is used to calculate significance, is computed using these numbers. The p-value is the corresponding probability for the z-value. The question is deemed relevant in explaining the variable it represents if the p-value (probability value) is less than 5% (0.05). In this case, q1

to q6 relate to revenue generation, and from the analysis above all questions are significant in explaining the dependent variable, revenue generation.

For e-commerce, which is represented by q7 to q10, all questions are significant in explaining the dependent variable which is revenue generation. The covariance of revenue generation and e-commerce has a positive coefficient of 0.066, this means that revenue generation and e-commerce are directly related, meaning that they move in the same direction. However, this direct relationship is not significant because the p-value is 0.057 which is greater than 5% or 0.05. This means that e-commerce has a negative and insignificant relationship with revenue generation. A unit increase in tax compliance will lead to a 0.0856781 increase in revenue generation.

All questions are significant in describing the dependent variable, revenue generation, for content providers, which is represented by q11 through q17. The correlation between content providers and income generation has a positive coefficient of 0.042, indicating that the two variables move in the same direction and are therefore intimately associated. An increase in content providers will lead to a corresponding increase in revenue generation. The p-value of 0.291, which is higher than 5% or 0.05, indicates that the direct correlation between these two variables is not significant. This suggests content provider does not directly influence revenue generation.

For digital advertisers, on the other hand, it is represented by q18 to q24, and from the analysis above, all the probability values are 0.000, meaning that all the questions are significant in explaining the dependent variable which is revenue generation. The covariance of revenue generation and digital advertisers has a positive coefficient of 0.14, this means that revenue generation and digital advertisers are directly related, meaning that they move in the same direction. An increase in digital advertisers will lead to a corresponding increase in revenue generation. The direct relationship between these two variables is significant because the p-value is 0.004. This indicates that digital advertisers have a positive and significant relationship with revenue generation. A unit increase in digital advertisers will lead to a 0.144819 increase in revenue generation.

Goodness of Fit
Table 4: Goodness of fit

Fit statistic	Value	Description
Likelihood ratio		
chi2_ms(321)	2184.971	model vs. saturated
p > chi2	0.000	
chi2_bs(351)	3327.855	baseline vs. saturated
p > chi2	0.000	
Population error		
RMSEA	0.170	Root mean squared error of approximation
90% CI, lower bound	0.164	
upper bound	0.177	
pclose	0.000	Probability RMSEA <= 0.05
Information criteria		
AIC	14068.787	Akaike's information criterion
BIC	14345.846	Bayesian information criterion
Baseline comparison		
CFI	0.374	Comparative fit index
TLI	0.315	Tucker-Lewis index
Size of residuals		
SRMR	0.247	Standardized root mean squared residual
CD	0.999	Coefficient of determination

Using the Structural equation model, there are several indices for testing the goodness of fit, some of which include the chi-square test, Root means square error of approximation (RMSEA) and its probability, Akaike's information criterion (AIC), Bayesian information criterion (BIC), Comparative fit index (CFI), Tucker-Lewis's index (TLI), Standardized root mean squared residual (SRMR), and Coefficient of determination (CD). According to Kline (2015), once one of these criteria is met, then the model is a good fit. For this model, the Coefficient of Determination (CD) is close to 1 which is one of the criteria for a good fit.

Conclusion and Recommendations.

This research was carried out to examine the effect of the imposition of digital tax on digital channels and its effect on revenue generation in Nigeria. According to the empirical analysis conducted, it is observed that digital tax and tax channels affect revenue generation in Nigeria. The study revealed that content providers and e-commerce had a positive and insignificant relationship with revenue generation in Nigeria. However, digital advertisers had a significant influence on revenue generation in Nigeria. Based on prevailing norms in this economy, and the findings thereof, this paper recommends that more focus and strategies should be placed when collecting digital tax from digital advertisers as this digital channel has been discovered to be the most promising type in terms of its effect on the revenue generation according to this study. Also, to boost the country's revenue, the federal government should set a temporary digital tax rate to have a uniform tax rate for digital channels operating in Nigeria.

The major limitation of this study is in relation to the source of data collection, the study only relies on primary data from the responses of tax experts as there is no secondary data, but this makes the data subjective which might lead to some bias from the respondents.

References

Adebanjo, A. (2021). Taxing Nigeria's emerging digital economy: A vital buffer to an ailing economy. *Journal of Business Diversity*, *21*(3). *Retrieved from: SSRN 3720284*.

Adeyemo, M. O. (2020). Digital businesses and tax revenue generation in Nigeria. *Proceedings of the 2nd International Conference*, 622-628

Afuberoh, D., & Okoye, E. (2014). The impact of taxation on revenue generation in Nigeria: A study of federal capital territory and selected states. *International Journal of Public Administration and Management Research*, *2*(2), 22-47.

Aslam, B., & Karjaluoto, H. (2017). Digital advertising around paid spaces, e-advertising industry's revenue engine: A review and research agenda. *Telematics and Informatics*, *34*(8), 1650-1662.

Audu, S. I., & Ishola, K. (2021). Digital economy and tax administration in Nigeria. *GSJ*, *9*(9), 1251-1262

Ayo, C. K., Adewoye, J. O., & Oni, A. A. (2011). Business-to-consumer e-commerce in Nigeria: Prospects and challenges. *African Journal of Business Management*, *5*(13), 5109-5117.

Eneche, E. O. (2021). Tax revenue and Nigeria economic growth. *European Journal of Economics and Business Studies*,*7*, 102-124.

Ibam, E. O., Boyinbode, O. K., & Afolabi, M. O. (2018). E-commerce in Africa: The case of Nigeria. *EAI Endorsed Transactions on Game-Based Learning*, *4*(15), e3.

Kline, R. B. (2012). Assumptions in structural equation modeling. *Handbook of structural equation modeling*, *111*, 125.

KPMG (2021, January 15). *Digitalized economy taxation developments summary*-KPMG. Retrieved June 15, 2022, from https://tax.kpmg.us/content/dam/tax/en/pdfs/2020/digitalized-economy-taxation-developments-summary.

Latif, L. (2019). The challenges in imposing the digital tax in developing African countries. *Journal of Legal Studies and Research*, *5*(3), 102 – 134.

National Bureau of Statistics. (2020). Nigerian Gross Domestic Product. NBS. Abuja.

Ogiden, R. (2021). Taxation of the digital economy in Nigeria–analysis of the policy, legal & administrative dimensions. *Legal & Administrative Dimensions (September 7, 2021)*.

Okafor, R. G. (2012). Tax revenue generation and Nigerian economic development. *European Journal of Business and Management*, *4*(19), 49-56

Okeke, O. S. (2018). Taxation jurisdiction on digital business in Nigeria (unpublished master's thesis). 1-34

Okesola, A. (2020). An examination of recent trends in taxation of the digital economy in Nigeria. *Retrieved from: SSRN 3720284*.

Onaolapo, A. A., Aworemi, R. J., & Ajala, O. A. (2013). Assessment of value added tax and its effects on revenue generation in Nigeria. *International Journal of Business and Social Science*, *4*(1), 220-225.

Samuel. (2021, January 27). *Nigeria generates N1.53 trillion VAT in 2020, grows by 29%*. Nairametrics.Retrieved January 15, 2022, from https://nairametrics.com/2021/01/27/nigeria-generates-n1-53-trillion-vat-in-2020-grows-by-29/

United Nations Conference on Trade and Development (UNCTAD) (2021). Digital Economy Report: Cross-border data flows and development: For whom the data flow.

Xu, J., & Duan, Y. (2018). Subscription price and advertising space decisions for online content firms with reference effect. *Electronic Commerce Research and Applications*, *30*, 8-24.

Yahaya, M. (2021). Taxation of the digital economy in Nigeria: The post- covid world. Cambridge Open Engage. doi:10.33774/coe-2021-pqdbd