ABSTRACT
In the face of the digital economy, Africa is at a crossroads. It has recorded fair benefits from this emerging economy in terms of the growth of local entrepreneurship and the approximation of global distances as physical and cultural. The continent has also been negatively impacted by the digital economy in terms of revenue generation; the ability to be “everywhere and nowhere” is the strength of the digital economy but is also a quality that makes it difficult to be taxed. Data attribution and income characterization have compounded the difficulty. In this essay, the premise taken is that with creative deployment and refashioning of direct and consumer taxes, Africa could generate revenue that is not only proportionate to digital economy growth but also rightful.

INTRODUCTION
For the past decades, technological growth has caused a seismic shift away from what is now fashionable to call "traditional business models". These technology-inspired business models provide a medium through which buyers and sellers can interact at both global and local levels. The effect of the abrasion of technology against business fashions out a class of firms that have systematically accrued to themselves "first-mover advantages", captured market share, and made themselves some of the world’s most valued companies (Aslam & Shah, 2021). It is these firms that form the digital economy. To state that any company that lies outside this class such as has been described is not of the digital economy to make an error. Most companies, even the “traditional” ones are digitalizing. Therefore, they too are part of the digital economy in some way and thus the distinguishing line between the two becomes blurry if not arbitrary.

Relating to tax, the problem the digital economy poses to the policymakers is summed up thus: digital companies make considerable money but nearly lack a physical presence; the lack of a physical presence means only meager tax for governments’ governments whose tax policies are ostensibly for the traditional business model who have physical bases (Adu, n.d). The impact of this problem on revenue would be explored to greater length in the proceeding sections, together with what can be done but also what must not be done to remedy the prevailing state of things.

IMPACTS OF THE DIGITALIZATION ON REVENUE GENERATION
The many benefits that arise from the digital economy have been well documented. These have included growth, development, employment, and general well-being. Simultaneously,
the digital economy is responsible for a series of challenges, especially for policymakers. These challenges threaten to undo any good that arose from the digital economy or would put the sustainability of any such good in question. For many years, companies have had a share in public expenses through a series of taxes. With increasing digitalization, companies now have the means with which to "avoid, remove, or significantly reduce their tax liabilities" (Organisation for Economic Cooperation and Development [OECD], 2014). This avoidance, removal, and reduction of tax liabilities have been responsible for governments earning less revenue than what is proportionately reasonable or applicable. Three broad elements have been identified for this phenomenon where the digital economy earns significantly but remits little, if at all. These elements are the establishment of the digital economy-tax relationship, data and value attribution, and characterization. These elements are examined in turn.

The establishment of the digital economy-tax relationship
Businesses, whether of the digital or traditional kind, have the same fundamental principle for income generation. To generate income, businesses need to in some way source and take possession of inputs, take part in value creation or addition, and ultimately sell to willing consumers. To support these fundamental activities, businesses engage in other activities such as market research, marketing, and advertising. It is at this level of "business-allied" activities that traditional and digital business models start to diverge. Digital business, armed with ever-improving technology, has enhanced the ability for market research, marketing, and advertising that the traditional business cannot compass – neither in speed nor in the vastness. Further, with digital technology obliterating physical distances, it is becoming more and more possible that a consumer base in a country can be increased by a company whose staff have never stepped foot in the said country. Such companies, therefore, have the potential to generate large amounts of sales and thus income without having a "taxable" presence. The connection between retailers and sellers may even be extended where buyers leave comments after making purchases. These comments help to direct other consumers on what to buy or not to buy. This increases the value of goods and services just as marketing and adverts seek to. While the skewed relationship between revenue and digital business is unreasonable, the current tax laws appear to have colluded with digital companies to negatively impact revenue generation. Indeed, this begs the question as to whether the tax laws or at least in their present state are still of use in a digital economy.
Data and attribution of value

Data of consumers can be collected by digital companies and with particular ease that would stretch traditional companies (Aslam and Shah, 2021). Upon collection, these pieces of data can be used by digital companies in a variety of ways. Companies can refine products or develop entirely new products based on the user data that they gather and analyze. Data could be processed to delineate consumer behavior and trends, and marketing preferences; this would then be instrumental in the marketing strategies that such companies would adopt. These are only but ways in which user data can be used by companies to increase profitability. If these pieces of data have commercial uses, as has been shown, it is only conventional that the state too should generate revenue from such data usage. Nothing of such has happened at any scale that is worthy of attention.

Data has been called the "oil" of the twenty-first century (Gupta, et al., 2017); the Economist echoed the same sentiments when it wrote that "the world’s most valuable resource is no longer oil but data." (The Economist, 2017). Given that data has been the driver of economic activity, the oil analogy fits. Where that analogy ceases is the taxability and perishability of oil. Oil, in various forms, is taxed; data in various forms is not taxed. Oil, given its perishability, can only contribute to the revenue earnings of nations for a while. Data on the other hand is not perishable; as long as there are humans, there is data. Were data not to contribute to revenue, other revenue sources may dry up even as it may be having greater gross earnings. (Aslam and Shah, 2021).

Characterization of new income arising from the digital economy

The ways products and services are been provided by the digital business are novel. These ways of product and service provision and thus monetization have raised questions as to how best to organize them given the current income categorization regimes. Cloud computing, for example, is a ubiquitous business model and appears to defy characterization as far a state revenue generation scheme is involved. Some of these models are infrastructure-as-a-service, where computing resources are made available to consumers who do not have ownership or control of the infrastructure but can control the operating system and the deployment of applications. Here, the question arises whether to consider such infrastructure-as-a-service transactions as "services" and thus payments that constitute business profits be taxed. Such questions of characterization arise in connection to other payments that may occur in software-as-a-service or data-as-a-service or platform-as-a-service transactions. Currently, most tax regimes consider business profits as been taxable only if they can be linked to a permanent establishment (OECD, 2014). This
characterization of what can be taxed automatically wipes away any chance of economies generating revenue; given the number of profits amassed in such ways, the revenue that governments lose is significant.

REGULARIZING THE DIGITAL ECONOMY AND REVENUE RELATIONSHIP

Regularizing relations between digitalization and revenue is about governments getting their due revenue from a resource that has become even more valuable than oil (Gupta, et al 2017; the Economist, 2017). Needless to say, the state framework needs this revenue for public expenditure and investment. Public expenditure and investment may in turn be useful in growing the digital economy itself. These revenues can be grown by exploring two tax options based on the peculiarities of the digital economy. These tax options are the direct tax and consumption tax options (OECD, 2014).

Direct tax option

Responding to the shift in consumer relationships that have been brought on by the digital economy, the concept of permanent establishment would not be replaced with the more useful concept of significant presence. For this, it has been suggested that the companies that would be considered to have significant presence would be these: company relationship with customer must be over half a year; sale of goods and services must proceed through a local language website, with local suppliers carrying out deliveries, while using the banking facilities of the country; and good and services that are provided based on "systematic data-gathering or contributions of content from persons in the country" (OECD, 2014).

Another option to explore in connection to direct taxes for revenue mobilization is creating withholding tax on digital transactions. Here, selected payments are made by residents of a country on goods supplied by foreigners. To sidestep the possible issue of withholding baby individuals, these taxes could be instituted on a standalone basis such that those taxed based on significant presence would not again be taxed based on the permanent establishment. A withholding tax approach has been said to be particularly beneficial to developing countries such as the ones found in Africa. This increases revenue collection for governments as it emphasizes their country’s ownership of consumer markets (Ndajiwo, 2020).

Bandwith tax may also be introduced. This would be paid dependent on the number of bytes used by websites. Here, this would begin to apply when a certain agreed-upon threshold. The concept of progressivity may also be considered to make the tax such that
varying tax levels would be chosen based on enterprise size or turnover. This so-called bit tax was first suggested by Cordell and Ide in 1997. They had argued that such tax could be very low per unit and collected by telecom companies via automation. (Cordell and Ide)

Consumption tax
VAT (Value Added Tax) is a common broad-based consumption tax that is imposed at various points along the supply chain; this tax, just as its name, accounts for the value that is added between production and distribution of goods. Conventionally, the charging, collection, and remitting of VAT had been right within the control of suppliers. Insisting on this for digital companies that are non-local would mean the imposition of unreasonable burdens on the suppliers. In response to this encumbrance, intermediaries “that are neither the government nor suppliers” have been used to facilitate the revenue collection process. For example, Nigeria’s Federal Inland Revenue Service had in 2019 announced that all banks within the country were to withhold 5% VAT on goods and services that were purchased online (Egbejule, 2019)

PITFALLS TO AVOID DURING REGULARIZATION
It is perfectly reasonable for any African nation to want a share of the digital economy; it is even a matter of economic right. Be that as it may, governments need to be careful with the measures that they employ in ascertaining these rights; there are pitfalls that they must avoid.
First, tax should not hinder the growth of the global digital economy. The digital economy provides internet services that are cost-saving and essential to the functioning of the day-to-day activities of individuals, firms, and even the government. The digital platforms provided by the internet are crucial in making enterprises of developing countries favorably compete in the international marketplace in terms of greater market access to consumers, supply chains, and lower trade costs (UNCTAD, 2019). Already, internet costs in Africa are the highest in the world “when income is taken into consideration (A4AI, 2019). Tax proposals are likely to drive up internet costs should be avoided because they would directly hinder the growth of the economy.
Second, tax should not unduly burden home-grown digital multinational enterprises or medium and small enterprises. The goal of the debate on revenue generation and the digital economy is “to ensure a fair and equitable system for all companies including the local ones (Rukundo, 2020). Given that local companies are visible and can be easily reached, they are taxed by the government; the international companies because they are
out of reach may not be taxed. The unintentional effect is that the international companies have been given a tax holiday so that they can reign supreme over the local ones. International companies need no such tax holidays. By raising thresholds for which taxation begins to apply, the government would have ensured revenue collection from the international companies which are usually worth more, and the survival of the much smaller local ones.

CONCLUSION
The digital economy presents a major challenge for policymakers in Africa. The impact of this economy “through the nexus, characterization, and data “ on what could have been the revenue generated is distressing. Prevaricating in light of this challenge is to only waste time in obtaining the funds that would play important roles in the growth and development of the continent. The digital economy is not something transient or something that would be washed away by the gusts of time. Through rethinking and creatively managing consumer and direct taxes, Africa could arrive at a point where the digital economy remits its due to the continent. Any effortless than this would be self-betrayal.

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