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EFFECT OF BLOCKCHAIN DISTRIBUTIVE TECHNOLOGY ON THE QUALITY OF FINANCIAL REPORTING IN NIGERIA

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Abstract
The mention of blockchain technology alludes to a picture of cryptocurrency in the minds of most finance professionals and accountants but blockchain technology has preceded cryptocurrency. It has been relied upon to create a financial system that entrenches transparency, reliability, and timeliness in financial reporting which are intrinsic values of quality of financial reporting, yet little is known about its potential. This is why the current study examined blockchain technology distributive elements and the quality of financial reporting in Nigeria, using a survey of professional Accountants in Abia and Enugu State. The population of the study consist of 600 Registered Professional Accountants out of which 105 were conveniently sampled to source data through the issuance of a questionnaire (5 Likert scale). Data collected from the survey are analyzed by way of the Simple Multivariate Regression Method. Findings from the study reveal that blockchain distributive element significantly affects the transparency, reliability, and timeliness of financial reports in Nigeria. As a result, the study concludes that the blockchain distributive element is considered by professional Accountants as a disruptive technology that will change the course of traditional financial reporting. Thus, it is recommended that there is a need to encourage companies to adopt the distributive elements of blockchain technology. Doing so will help companies automate various financial processes, such as payments, compliance checks, and reconciliations. By eliminating manual intervention and reducing human errors, blockchain contributes to financial reports' accuracy and reliability. With blockchain, financial transactions can be recorded and validated in near real-time. This provides stakeholders with up-to-date and accurate information about financial activities, enhancing timeliness by reducing the time lag between transactions and their inclusion in financial reports.

Key Words: Blockchain Distributive Element, Normative Theory, Reliability, Timeliness, Transparency.

Introduction
Over time, accounting practice has been carried out like a cult activity with increasing information asymmetry. In most cases, only firm managers, accountants, and auditors have adequate information about the firm. In contrast, investors and other firm stakeholders have little information about the firm activities, despite the annual reports

presented by the firm. It is either investors and stakeholders are not properly enlightened about the accounting jargon or they are not aware of the creative accounting practices done by managers or the firm accountants, which in most cases elude the auditor. These reoccurring issues in the business world have placed emphatic questions on the reports presented by accountants and accounting practice in general. If investors and stakeholders are presented with more transparent accounting methods other than the orthodox methods used by professionals, investors will more or less prefer a more transparent accounting method that gives room for real-time stamp transaction verification that is visible and understood by all investors and stakeholders. Moreso, Accountants cannot afford to turn a blind eye to the digital revolution ravaging the current accounting practice. Doing so will set Accountants on the path of self-destruction. Luca Pacioli and the early accountants' works have been modified by succeeding Accountants to get these professionals where the current accounting practice is and there is more to be done to set the current accounting practice in tune with future practices. The fact remains that, in the coming years, not too far from now, accounting practice (financial reporting) will require new methods that must take into cognizance blockchain technology because most business transactions are becoming more digital and require real-time stamp accounting ledgers to facilitate financial reporting. Assuch, the only way forward is to embrace financial reporting methods based on blockchain technology.

Accordingly, Blockchain technology is a new paradigm that entrenches the quality of financial reporting and the process. The mention of blockchain technology alludes to a picture of cryptocurrency in the minds of the public, investors, finance professionals, and accountants but blockchain technology has preceded cryptocurrency. Blockchain technology has been relied upon to create the digital currency and a financial system that entrenches transparency, reliability, and timeliness in financial reporting which are intrinsic values of quality of financial reporting (Milosavljevic *et al*, 2019). Blockchain combines existing digital technologies into an innovative modern-day accounting system described by the distributive elements (Dai *et al*. 2019). The blockchain-distribution element enables stakeholders/participants (Firm Stakeholders) on the blockchain to be linked on a network, where everyone is able to operate a full node and holds a whole copy of the firm transaction ledgers. The blockchain-distributive element in contrast to the already existing accounting digital tool updates stakeholders on each transaction as they happen. This is why key players and dealers in blockchain believe in the processes embedded in the technology, despite poor regulation from government and central financial authorities (O'Leary, 2017). Thus, blockchain technology has been alluded to by past scholars like Ortman (2018); Proch_azka (2018); and Rahmawati *et al*, (2021), as a mirror lens of future accounting to curb issues of poor financial reporting as well as improve the confidence of investors and stakeholders in the accounting process of firms given the fact that the global financial world is moving towards a digital paradigm.

Broadly, the study seeks to ascertain the effect of blockchain distributive technology on the quality of financial reporting in Nigeria. The specific objectives of the study are to;

i. assess the effect of blockchain distributive technology on the transparency of financial reporting.
ii. examine the effect of blockchain distributive technology on the reliability of financial reporting.
iii. determine the effect of blockchain distributive technology on the timeliness of financial reporting.

In view of the above objectives, the following hypotheses were formulated:

Ho_1: Blockchain distributive technology has no significant effect on the transparency of financial reporting.
Ho_2: Blockchain distributive technology has no significant effect on the reliability of financial reporting.
Ho_3: Blockchain distributive technology has no significant effect on the timeliness of financial reporting.

Literature Review

Concept of Blockchain Technology

Generally, a blockchain is a digital ledger created to track transactions carried out amongst numerous parties in a network. According to Kwilinski (2019), blockchain technology is a peer-to-peer, internet-based distributed ledger that consists of all transactions in a circle of events. Deloitte (2016) in their report cited that a blockchain captures a shared node or database for all participants, which is linked to the blockchain, and each node maintains an identical duplicate of the entire ledger in a transaction circle. According to Coyne and McMickle (2017); Gietzmann and Grossetti (2019); Bonson and Bednarova (2019); and Garanina *et al*, (2021), each entry into a blockchain ledger is a transaction that represents an exchange of value between participants. These values are in many instances digital assets or records that represent rights, tasks completed, or possession (Clohessy & Acton, 2019; Dai *et al*, 2019). Kokina *et al* (2017) assert that exclusive kinds of blockchains are being developed and tested in practice. However, most blockchains comply with this global framework and approach.

Al-Htaybat *et al* (2018) noted that it was Haber and Stornetta's (1991) discussion on how to stamp a digital record that birthed a technological answer to the problem of time stamping. This digital answer barring challenging modifiable digital assets and tracks the foundation of digital assets records and any strive to alter them (Fullana & Ruiz, 2021). To make clear the character of this digital solution, Moll and Yigitbasioglu (2019) explained that this digital solution endorses a computationally smart method for digital time-stamping of easily modifiable documents, using a cryptographically secured chain of blocks that makes it no longer feasible to back-date or forward-date a document. The notion of a cryptographically secured chain of block orders smarts known as the time stamp digital solution is regarded to be the foundation of blockchain technology (O'Leary, 2017; Wang & Kogan, 2018; Pugna & Dutescu, 2020). But the concept of blockchain technology itself grew to become extensively recognized in 2008 when the anonymous "Satoshi Nakamoto" used it to give an explanation for the workings of the public transaction ledger used for Bitcoin which is the first digital

cryptocurrency (Raiborn, & Sivitanides, 2015; Tan & Low, 2019; Smith *et al*, 2019). Although extensively heralded with skepticism, little is known of what blockchain technology is and its underlying utility (Schmitz & Leoni, 2019). Similar views have been shared on what blockchain technology is by academics and tech experts.

Integrating Blockchain Technology into Financial Reporting

According to Bentley *et al* (2018), blockchain is an essential open-source ledger that serves as a canonical source of fact against the traditional accounting ledger. The traditional accounting exercise that produces the ledger consists of the financial data in private ledgers and relies upon accountants to reconcile them (Alles, 2018). This is in opposition to the blockchain ledger that is open and monitored by all counterparts in a chain of transactions. Darmayasa and Aneswari (2015) assert that the traditional financial reporting process in current practice is tedious and labor-intensive, which brings about extra human resource costs, limiting the efficiency and effectiveness of accountants each time the volume of transactions and workload increase in a given business circle. In opposition to this traditional financial reporting, Kokina *et al*. (2017), argued that integrating blockchain technology for financial reporting purposes will alter the traditional techniques for invoicing, documentation, contracts, and the setting of cash-flow systems. La Torre, *et al*., (2021) mentioned that blockchain technology will provide a new way of handling accounting data which is referred to as a special structure of disbursed ledger architecture, which maintains record transactions in several blocks, which are linked cryptographically. In the future, accounting will have to use digital ledgers, which will consist of account statements and records of transactions carried out with the aid of the blockchain. Some of the company's accounting systems in the future will be programmed in a more decentralized manner with open access and asses (Silalahi *et al*, 2021). This means, that accounting data for a firm can be hoisted on a platform using blockchain technology that enables the firm's stakeholders to monitor data and business transactions of the firms as they occur, also the stakeholders will be able to scrutinize any changes made in the transactions or records as such chances in transactions/records will be reflected in the blockchain ledger of the firm.

Financial Reporting of Companies

Financial reporting consistency is a mindset, not a collection of particular activities. Financial reporting is how the user of accounting information exchanges information on the company's activities. Financial reporting consistency is a feature of the quality of accounting standards and the standards' related regulatory compliance (FRC, 2018). According to FRC (2018), the consistency of financial reporting can be influenced by three factors: the decision of standard setters, the accounting system used by management, and the judgment and estimates of management in applying the chosen substitutes. Regulation is, therefore, an important tool for improving the transparency, reliability, and timeliness of financial reporting, the absence of which would make the best accounting principles incapable of providing different users with accurate and quality accounting information (Tan & Low, 2019).

According to IASB, the essential principle of assessing the financial reporting quality

is related to the faithfulness of the objectives and quality of disclosed information in a company's financial reports. These qualitative characteristics enhance the facilitation of assessing the usefulness of financial reports, which will also lead to a high level of quality. To achieve this level, financial reports must be transparent, reliable, and timely. Thus, the emphasis is on having transparent financial reports, and not having misleading financial reports to users; not to mention the importance of timeliness and predictability as indicators of high financial reporting quality (Pashkevych *et al*., 2020). As it is defined in the Conceptual Framework for Financial Reporting of the FASB and the IASB, these are agreed-upon elements of high-quality financial reporting.

Theoretical Review

This study is anchored on the Normative accounting theory propounded by Schar and Nicklisch in the 1920s and further explained by notable accounting scholars like Paton (1922); and MacNeal (1939). Also, the diffusion of innovation theory propounded by Rogers (1962) is adopted as a supporting theory.

The Normative Theory

The Normative accounting theory was propounded by Schar and Nicklisch in the 1920s and further explained by notable accounting scholars like Paton (1922); and MacNeal (1939). The theory holds that accounting practice can rely on sets of assumptions or theories to deduce policies that can cause changes to orthodox accounting practices. This means, existing realistic thoughts can be relied upon to alter processes and procedures of current financial reporting.

The Diffusion of Innovations Theory

Roger (2003) propounded the diffusion of innovation theory. The theory proposes the use of innovation in technology to cause changes in the social, structural, or ethical practices of an organization or group of professionals. According to Rogers (2003), the tenants of technological innovation involve the use of hardware and software applications to foster a change in the norms of an entity. These hardware and software are particularly blockchain nodes and programs that will be designed to usher in the future phase of accounting practice which will be based on blockchain technology. The process of blockchain technology adoption for accounting practice is what Roger (2003) termed the diffusion of innovation theory.

Empirical Review

In this section, past scholarly works with themes on blockchain technology and accounting and financial reporting are reviewed. The articles reviewed are meant to form a basis for informed knowledge of blockchain technology, accounting, and financial reporting.

Søgaard (2021) constructed new methods for building accounting contracts in the independent collaboration space of e-commerce. They found some techniques (REA state machine mechanics) that need further examination. Using recently conceived ontologies like the Distributive Ledger Technology, they described radical innovation led by blockchain technology as the key to economic development through a process

of creative destruction leading to a revolutionary change in the financial world. They further stated that a breakthrough in product, process, or organization is imminent. Lastly, they opined that some of the early steps in promoting radical innovation through blockchain technology will build better accounting transaction systems.

Saputro *et al* (2021) stated that blockchain is considered an emerging technology that potentially disrupts how the management accountant works and his role. They carried out research to understand the blockchain's capabilities that will disrupt the accounting profession by conducting a systematic literature review (SLR). MAXQDA was used to conduct the SLR protocol. Their study found that blockchain enables the user to do real-time accounting, gather data for supervising and monitoring functions, and streamline the accounting practice process.

Singh *et al* (2021) examined the implications of distributed ledger technology and its implications for the accounting and auditing profession. They proposed a framework for a blockchain model of a simplified triple-entry bookkeeping system using smart contracts to automate self-verification and replication of transactions in a publicly distributed ledger. They found that blockchain technology will significantly reduce barriers and challenges facing organizations' accounting systems.

Mohamed (2021) highlighted the benefits, challenges, and limits expected from applying blockchain technology to the financial accounting system in particular. Using a literature review method, they concluded that despite the many benefits such as the method of a third-party ledger of accounting records through the electronic signature of receipts and giving accounting processes greater transparency and credibility, it is very difficult to apply blockchain technology because of lack of compatibility with current accounting regulations, laws, and applications.

Ribalta *et al* (2021) investigated whether blockchain will impact accounting, as well as the differences in the developers' and accountants' mental models, and to identify goals and high-level requirements for blockchain-based accounting software. They used: semi-structured interviews, concept analysis, and goal-based requirement engineering on the concepts related to transparency, trust, blockchain potential, and challenges. They found that accounting is a socio-technical field, and that blockchain will shift the conception of trust and transparency, but not completely revolutionize the field, but rather make it evolve.

Adelowotan and Coetsee (2021) discussed the possible implications of blockchain for accounting practice and what further developments are needed to create an integrated accounting system on blockchain technology. They followed a structured approach by identifying characteristics of blockchain technology to discuss the implications for accounting practice. Their study found that the instant verification and immutability features of blockchain systems provide for the integrity of data for both accounting and auditing purposes. However, the intensive use of blockchain for accounting information purposes depends on different and cheaper validation processes. The complexity of different accounting transactions with related estimates and uncertainty

needs to be captured correctly on the blockchain through the use of interventions such as smart contracts without limited human invention to be successful. The so-called triple-entry accounting provides for the secure capturing of accounting information for use by different stakeholders but currently does not change the double-entry accounting system to prepare financial statements.

Elwell (2020) explored how technology positively or negatively impacts the accounting profession, and specifically, the impact on work outcomes and relationships with clients, using a survey method by way of software Qualtrics which was distributed to professionals in the accounting field. Their study results revealed that on average, accounting professionals believe that communication software improves their efficiency and effectiveness the most, with accounting and analytics just behind. Also, most accounting and analytics programs had high averages that were offset by some of the lesser-known programs such as Xero and Blockchain, in turn lowering the overall average and skewing the data.

Demirkan *et al* (2020) looked into the current and potential uses of blockchain technology in business, specifically in accounting and in cybersecurity. Using a literature review approach that includes topics such as big data in accounting, blockchain use in financial security and cybersecurity, and its use in financial accounting, they found that, blockchain impacts auditing in different ways that will change the accounting profession drastically.

Pashkevych *et al* (2020) examined the main approaches to the organization of accounting and management in a modern enterprise. Using a structural review approach, they found that blockchain technology supports the invulnerability and independence of the interests of legal entities in relation to the influence of third parties. The introduction of blockchain technology in accounting contributes to the innovative development of the system in the enterprise during the use of cryptocurrency in payments between buyers and customers.

Faccia and Mosteanu (2019) discussed how the risk of error and fraud mechanisms can be definitely reduced by moving to the next level of technology using blockchain, and from double-entry to triple-entry accounting system. In their discussion paper, they asserted that, in order to reduce the issuer's ability to commit fraud, triple-entry accounting through blockchain brings countless advantages in that the three parties involved are guaranteed exactly the same information and no party can enter unauthorized information.

Methodology

The study employed a quantitative research design. The study used the survey method in collecting data from professional Accountants in Abia and Enugu States in Nigeria. The population of the study comprised 600 professional Accountants in Enugu and Abia States. It further employed the use of convenient sampling in determining the sample size of the study. This enabled the study to gather data from 105 professional Accountants that are available and able to answer the questions given to them**.** The

total of 105 respondents constitutes 17.5% of the total population which was deemed appropriate for a sample size of a study given it is above the generally acceptable 10% rule of thumb for a sample size.

The data was collected through 5 Likert Scale questions, offered to the respondent using a questionnaire. The questionnaire contained questions framed around understanding the functions of blockchain distributive technology and questions to understand transparency, reliability, and timeliness of financial reporting quality; also, as well as how the distributive element of blockchain technology affects elements of the financial reporting quality in Nigeria.

The model for data analysis is presented below:

$TRP_i = \alpha + \beta_1 BDT_i + U_{i.}$

$RLB_i = \alpha + \beta_1 BDT_i + U_i$

$TIM_i = \alpha + \beta_1 BDT_i + U_{i.}$

Where;

BDT	=	Blockchain Distributive Technology (Independent variable)
TRP	=	Transparency (dependent variable)
RLB	=	Reliability (dependent variable)
TIM	=	Timeliness (dependent variable)
α	=	Constant
β_1	=	Slope Coefficient
μ	=	Stochastic disturbance
i	=	i^{th} respondent

The data gathered with the aforementioned method was analyzed with descriptive statistics and simple (multivariate) regression, this was because both the independent variable and dependent variables in this study are measured quantitatively. The means of the responses are used to analyze the average responses for each question. Each proxy for both the independent variable and dependent variables is measured by summing the mean response of questions that specifically contain information about the variable. The means are further used as quantitative data to carry out a multivariate regression for further analysis.

Decision Rule

The following decision rules are applicable in this study;

Regression: Do not reject the null hypothesis if the calculated significant probability value is greater than 0.05.

Result and Discussion

The mean response for each question is used to analyze the outcome of the respondents. The questionnaire is distributed to professional accountants in Enugu, Enugu State, and Umuahia, Abia State. Out of the 105 returned questionnaires, only 100 questionnaires were fully filled which constitutes the valid questionnaire used for analysis. This shows a 95.2% rate of returned questionnaires used for the analysis. A tabular breakdown of the questionnaire is given below:

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Table 1. Blockchain Distributive Technology.

S/N	QUESTIONS	SA	A	UD	D	SD	Mean	N
1	Blockchain distributive technology can enhance the security of transactions	82	18	-	-	-	4.74	100
2	Blockchain distributive technology can reduce the risk of fraud and hacking in	77	23	-	-	-	4.68	100
3	Blockchain distributive technology can increase the efficiency of transactions	72	25	-	3	-	4.52	100
4	Blockchain technology that utilizes the distributive element for business operations	71	24	-	5	-	4.45	100
5	Blockchain distributive technology can provide a decentralized and transparent p	79	18	1	1	-	4.66	100
6	Blockchain can enhance the transparency of financial reporting quality	75	23	-	2	-	4.59	100
7	Blockchain distributive technology can enhance the openness of financial data	76	21	-	3	-	4.58	100
8	How likely are you to recommend blockchain technology as a solution to improve financial reporting quality	78	17	3	2	-	4.59	100
9	How much do you agree that blockchain can reduce the risk of fraud in financial system	81	17	1	1	-	4.68	100
10	Blockchain can facilitate the audit process for financial statements	81	15	3	1		4.64	100
11	How much do you agree that blockchain can provide a secure platform for financial reporting	75	22	-	3	-	457	100
12	Blockchain can enhance the efficiency of financial reporting processes	78	22	-	-	-	4.69	100
13	Blockchain can help companies comply with regulatory requirements related to financial reporting	69	23	4	4	-	4.41	100
14	How likely are you to invest in companies that adopt blockchain technology to improve their financial reporting quality	78	20	2	-	-	4.67	100
15	Blockchain can help companies ensure reliability of financial reporting	85	13	1	1		4.72	100

16	How much do you agree that blockchain can improve the accuracy of financial reports	84	15	-	1	-	4.74	100
17	Blockchain can provide a tamper-proof record of financial transactions	79	18	-	3	-	4.65	100
18	How much do you agree that blockchain can improve the timeliness of financial reporting	84	15	1	-	-	4.74	100
19	Blockchain can reduce the cost of financial reporting	70	28	1	1	-	4.51	100
20	How likely are you to adopt blockchain technology to improve your own financial reporting processes	81	15	3	1	-	4.65	100

Source; Field Survey, 2023

The table above shows the responses given on blockchain distributive technology by Professional Accountants in Enugu and Abia States Nigeria. The decision rule mean score of $\bar{x}3.00$ (Approximation) is used to make decisions on all five (5) points Likert scale.

From Table 1 above, the respondent agreed (4.74) that, blockchain distributive technology can enhance the security of transactions. Also, they agreed (4.68) that, blockchain distributive technology can reduce the risk of fraud and hacking in transactions. Furthermore, the respondent agreed (4.52) that, blockchain distributive technology can increase the efficiency of transactions. Again, they agree (4.45) that, blockchain technology utilizes the distributive element for business operations. Accordingly, they agreed (4.66) that, the blockchain distributive technology can provide a decentralized and transparent platform for transactions. Also, the Professional accountants agreed that blockchain can enhance the transparency of financial reporting quality. In all, the respondents agreed (4.59) that, blockchain can enhance the transparency of financial reporting quality as well as (4.58) enhance the openness of financial data.

From Table 1 above, the respondents agreed (4.59) that, they are likely to recommend blockchain technology as a solution to improve financial reporting quality. Also, they agreed (4.68) that, blockchain can reduce the risk of fraud in the financial systems. Furthermore, the respondent agreed (4.64) that, blockchain can facilitate the audit process for financial statements. Again, they agree (4.57) that, blockchain can provide a secure platform for financial reporting and it can enhance the efficiency of financial reporting processes. Also, they agreed that (4.69), blockchain can enhance the efficiency of financial reporting processes. Accordingly, they agreed (4.41) that, blockchain can help companies comply with regulatory requirements related to financial reporting. Also, the Professional accountants agreed (4.67) that, they are likely to invest in companies that adopt blockchain technology to improve their financial reporting quality. Furthermore, the respondent agreed (4.72) that, blockchain can help companies ensure the reliability of financial reporting as well as (4.74) improve the accuracy of financial reports.

Lastly, the accountants agreed (4.65) that, blockchain can provide a tamper-proof record of financial transactions and; (4.74) can improve the timeliness of financial reporting; (4.51) can reduce the cost of financial reporting; and (4.65) is likely to improve your own financial reporting processes.

Regression Analysis

In this section, 5 questions are grouped to form each variable (BDT TRP RLB, TIM), while each respondent's overall mean score for each group of questions is used as a measure for the variable. This then forms the data used in the regression analysis.
The diagnostic test for autocorrelation is not done since this is not time-series data, and neither is the multi-collinearity test conducted as a result of the simple multivariate regression approach adopted for the study.

Table 2 Regression Result

Equation	Obs	Const.	BDT(COE)	"R-sq"	F	Prob
TRP	100	4.286367	.0944939	0.0881	4.8719347	0.0352
RLB	100	3.645636	.2286607	0.0469	4.819747	0.0305
TIM	100	3.437605	.2816783	0.0709	7.48101	0.0074

Source: Stata Output in Appendix ii

Table 2 above shows that the coefficients of financial reporting quality determinants (TRP, RLB, and TIM) that are affected by BDT**.** The number of observations for the study is 100. From the table above, the following information is distilled: For the BDT and TRP models, the coefficient of variation (R^2) is 0.0881. This implies that 8.81% of the variation in transparency of financial reporting can be explained by variations caused by blockchain distributive technology, while the remaining 91.2% is caused by other factors not considered in this model. The coefficient (COE) value of 0.0944939 indicates that BDT can influence about 9.44% change in transparency of financial reporting in view of the responses gotten from professional accountants. While, the constant (Const) value of 4.286367 shows that, the respondents agree that, without consideration to BDT, transparency can still be positively entrenched in the process of financial reporting.

Furthermore, the table shows that the BDT and RLB model coefficient of variation (R^2) is 0.0469. This implies that 4.69% of variation in the reliability of financial reporting can be explained by variations caused by blockchain distributive technology, while the remaining 95.31% is caused by other factors not considered in this model. The coefficient (COE) value of 0.2286607 indicates that BDT can influence about 22.86% change in the reliability of financial reporting in view of the responses gotten from professional accountants. While, the constant (Const) value of 3.645636 shows that, the respondents agree that, without consideration of BDT, reliability can still be positively entrenched in the process of financial reporting.

Lastly, for the BDT and TIM model; the coefficient of variation (R^2) is 0.0709. This implies that 7.09% of the variation in the timeliness of financial reporting can be explained by variations caused by blockchain distributive technology, while the

remaining 92.91% is caused by other factors not considered in this model. The coefficient (COE) value of 0.2816783 indicates that BDT can influence about 28.1% change in the timeliness of financial reporting in view of the responses gotten from professional accountants. While, the constant (Const) value of 3.437605 shows that, the respondents agree that, without consideration of BDT, timeliness can still be positively entrenched in the process of financial reporting.

Test of Hypotheses

The outcome from Table 2 is used to test the study hypothesis with respect to the decision rule stated in section three for the study regression model.

Ho_1: Blockchain distributive technology has no significant effect on the transparency of financial reporting.

The probability (0.0352<0.05) value reveals how significant BDT affects the TRP of financial reporting. As a result, the study rejects the null hypothesis and accepts the alternative hypothesis. Thus, the blockchain distributive technology has a significant effect on the transparency of financial reporting.

Ho_2: Blockchain distributive technology has no significant effect on the reliability of financial reporting.

The probability (0.0305<0.05) value reveals how significant BDT affects the RLB of financial reporting. As a result, the study rejects the null hypothesis and accepts the alternative hypothesis. Thus, the blockchain distributive technology has a significant effect on reliability of financial reporting.

Ho_3: Blockchain distributive technology has no significant effect on the timeliness of financial reporting.

The probability (0.0074<0.05) value reveals how significant BDT affects the TIM of financial reporting. As a result, the study rejects the null hypothesis and accepts the alternative hypothesis. Thus, the blockchain distributive technology has a significant effect on the timeliness of financial reporting.

From the hypotheses tested, it is found that blockchain distributive technology has a significant effect on transparency, reliability, and timeliness of financial reporting. This means that the distributive element of blockchain technology enables stakeholders in need of financial reports to have access and be able to assess the financial activities and reports of the companies, which then facilitates a form of transparency, a reliable reporting system, and the production of timely financial reports. The current study claim is supported by previous authors like Rahmawati *et al.* (2021), Mohamed (2021), Ribalta *et al.* (2021), Adelowotan and Coetsee (2021), and Tyma *et al* (2020). These previous authors also found in their studies that blockchain technology is capable of increasing the level of financial reports in terms of transparency, timeliness, and reliability. This evidence is consistent with the normative accounting theory propounded by Schar and Nicklisch in the 1920s and further explained by Paton (1922), and MacNeal (1939). They proposed that accounting practice can rely on sets of assumptions or theories to deduce policies that can cause changes to orthodox

accounting practices. In this case, it is proven that blockchain technology as a set of practices in modern times can be relied upon to increase the level of transparency, reliability, and timeliness of financial reports.

Conclusion and Recommendations

The study's broad objective is to examine blockchain distributive technology and the quality of financial reporting in Nigeria. In line with the findings above, the study concludes that the blockchain distributive technology affects the transparency, reliability, and timeliness of financial reporting. Also, the blockchain distributive technology is considered by professional accountants as a disruptive technology that will change the course of traditional financial reporting.

The following recommendations are made:

1. This study finding suggests that the decision to adopt blockchain technology should not be undertaken as a stand-alone strategy for accountants. Instead, it should be taken in tandem with other stakeholders and institutional reforms to ensure that, once a transaction is recorded on the blockchain, it cannot be altered or tampered with. This distributive element increases the transparency and trustworthiness of financial reports since all transactions are recorded in an auditable manner.
2. There is a need to encourage companies to adopt the distributive elements of blockchain technology. Doing so can help companies automate various financial processes, such as payments, compliance checks, and reconciliations. By eliminating manual intervention and reducing human errors, blockchain contributes to the accuracy and reliability of financial reports.
3. With blockchain, financial transactions can be recorded and validated in near real-time. This provides stakeholders with up-to-date and accurate information about financial activities, enhancing timeliness by reducing the time lag between transactions and their inclusion in financial reports.

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