



Full Length Research Paper

Professional Accounting Institute: Disruptive Accounting Technology and Institutional Corporate Social Responsibility

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ABSTRACT

Technology changes in accounting profession among institutions are causing, and will continue to cause, disruption in all types of industries as well as professional accounting institutions in developing countries. Most of these rapid accounting technological changes in 21st century is coming from the development and implementation of artificial intelligence, robotic technology, cloud accounting, block chain technology, and quick book technology. The study examined the effect of disruptive accounting technology on institutional corporate social responsibility of professional accounting institute in Nigeria. The study adopted a survey research design. The total population was 90,950 consisting of the professional members of Institute of Chartered Accountant of Nigeria and the Association of National Accountants of Nigeria. Descriptive and inferential statistics using structural equation model were employed. The disruptive accounting technology had five measures of artificial intelligence (AI), robotic technology (RT), cloud accounting (CA), block chain technology (BCT), and quick book technology (QBT). The study concluded that artificial intelligence and cloud accounting plays have significant positive effect on institutional corporate social responsibility while quick book technology has a significant negative effect on institutional corporate social responsibility. The result further explains that robotic technology and block chain technology have no significant effect on institutional corporate social responsibility. The study recommended that management of institutions and organisations should adopt the use of technology, this should help them to be more productive and creative. More so, accounting technology must take a lead role in every organisation curriculum.

Introduction

Accounting as a profession has a very important role to play in the economic development of any nation. As a measurement and reporting information system, the profession covers both micro and macroeconomic activities and it consists of various subsystems with related economic events and decisions which include major accounting fields like; business accounting, government accounting, social and technology accounting, auditing and taxation, all of which aid in economic planning, project appraisal, capital formation among others (Okolie & Amos, 2014).

Scholars such as (Casino *et. al.* 2019; Dileep *et. al.* 2019; Lui, 2019), the concept of disruptive technology has continued to gain grounds in the research field of accounting due to the fact that it significantly alters the way that financial business activities are recorded and communicated. More so, it is technology which has a characteristic of “radical change”, which requires very different technological capabilities and designed to succeed similar accounting technology that is already in use (Lui, 2019). Singh and Hanafi (2019), advised that disruptive technology enhanced or completely transform new accounting technology that replaces and disrupts an existing accounting technology, rendering it obsolete. Dauda *et al.* (2015) stated that the level of globalization in the field of accounting and level of change management in today’s organisations may render accounting professional institutions irrelevant due to technology shift. Nevertheless, Windel (2007) is of the opinion that poor knowledge and slow adoption of disruptive technology among professional accounting institutions in developing economies may adversely affect their international competition with professional accounting institution in developed economies. In consonance with Dauda *et al.* (2015) submission, Cong *et al.* (2018) advised that disruptive technologies in accounting such as robotic process automation, artificial intelligence, blockchain,

smart contracts, and advanced analytics have reshaped existing business models and facilitated the emergence of new approach to the field of accounting. As a society, experiencing a time of tremendous change and great opportunity due to advances in technology is inevitable. Siegel (2020) concurred that these technology changes in accounting profession among institutions are causing, and will continue to cause, disruption in all types of industries as well as professional accounting institutions in developing countries. Most of these rapid accounting technological changes in 21st century is coming from the development and implementation of artificial intelligence, robotic technology, cloud accounting, block chain technology, and quick book technology.

Among accounting professional institutions in developed countries, Siegel (2020) stated that advance information technology in accounting (artificial intelligence, robotic technology, cloud accounting, block chain technology, and quick book technology) have been recognized, used and depended upon in the developed countries within accounting professional institutes. Unlike, developing economies like Nigeria, Ghana, Kenya among other Africa developing economies; where Siegel (2020) stated that accounting professional institutes and accounting professionals have not adopted and fully recognize accounting technological advancement such as artificial intelligence, robotic technology, cloud accounting, block chain technology, and quick book technology in the day to day accounting functions in their endeavor.

This article would assist the corporate managers to use organizational resources more effectively by understanding the important variables that affect their firms' long-term goal. The findings of this study will be beneficial to regulators in Nigeria by enabling them recognize the importance of corporate behavioural mechanisms that promote financial transparency and the country's economic growth. However, this paper tends to find the effect of disruptive accounting technology using proxies such as artificial intelligence (AI), Blockchain Technology (BCT), Cloud Accounting (CA), Robotic Technology (RT), and Quick Book Technology (QBT) on institutional corporate social responsibility.

Literature Review

Conceptual Review

The concept of institutional corporate social responsibility attracts various definitions due to its subjective nature. As stated by Raji *et. al.* (2017), Institutional corporate social responsibility (ICSR) has four different categories including Enterprise (Supporting and developing initiatives to nurture budding entrepreneurs and boost enterprise), education (Helping to bring new horizons into the lives of young people), arts and culture (aiding a range of artistic activities and bringing communities together) and environment (encouraging efforts to safeguard the environment and improve the quality of life). Onabajo (2004) provided what he calls a partial list of CSR categories which includes being responsible for; product lines, marketing practices, employee service, corporate philanthropy, environmental activities and employee safety and health. According to Nasieku *et. al.* (2014), ICSR is a concept whereby firms commit to improve their environmental and social performance beyond legal obligations. It is a commitment to improve the well-being of a community through discretionary business practices and contributions of corporate resources (Charkraborty, 2010). It is the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve quality of life, in ways that are both good for business and good for development (Korkchi & Rombaut, 2006).

Umoren *et. al.* (2016) defined corporate social responsibility as a form of internal monitoring, management and external communication, which allows organizations of all sizes to meet the growing information needs of internal and external stakeholders. Selcuk and Kiymaz, (2017) also defined ICSR as a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. ICSR is also referred to as the strategies implemented by corporations to conduct their business in a way that is ethical, society friendly and beneficial to community in terms of development (Ismail, 2009). According to Umoren *et. al.* (2016), ICSR conveys information about an organization's economic, environmental, and social operations, the related impacts it has through its everyday activities; and the consequences of those impacts for the company and others.

The thrust of CSR is to bridge the relationship between business and society. It is therefore logical to assume that businesses that are more prone to undertaking CSR initiatives would be compelled to show commitment, through policy and practice, to stakeholder engagement since stakeholders' participation serves as the medium to unearth the real needs and interests of these interest groups (Ansorog, 2017). Ansorog, (2017) viewed ICSR as the responsibility of the corporation to act in the interest of legitimate organizational stakeholders. It describes a firm's obligation to protect and improve social welfare now as well as in the future, by generating sustainable benefits for stakeholders (Lin, 2009). Institutional CSR as "the commitment of business to contribute to sustainable economic development by working with employees, their families, the local community and society at large to improve their lives in ways that are good for business and for development" (Basuony *et. al.* 2014). The corporate responsibility Lin (2009) states that corporate Social responsibility is achieved when a business adapts all of its practices to ensure that it operates in way that meet, or exceeds, the ethical, legal, commercial and public expectations that society has of business. As observed by Simionescu, & Gherghina (2014), ICSR is a driver that makes organisations to be socially responsible not only because of its benefits. Not only that but because of the social, political, and consumer pressures which demand responsible products and services delivered by the companies; pressures come also from NGOs, investors, industry codes of conduct, rankings of

social performance, etc. External pressures and CSR benefits push corporations to become socially responsible. Chaudhary (2009) underlined that companies adopting CSR are motivated by the following financial drivers which are the pillar of a company's sustainable business development: increased reputation, brand, and customers' loyalty, lower risks, increased competitive advantage, reinforced market position, and reduced operation costs (Simionescu, & Gherghina, 2014). Relatively, Russell (2018) highlighted the benefits of institutional CSR and these benefits include: increased employee satisfaction, improved public image, and increased customer patronage.

Empirical Review

Related studies on disruptive accounting technology (DAT) and ICSR have been conducted across the global. The studies have shown either a positive or negative significant relationship between DAT and ICSR or related studies. Onyali and Okafor, (2014) investigated the use of cloud computing and accounting packages for corporate business transactions in Nigeria and provided evidence that effective standards should be put in place, not only to protect stakeholders from exploitation but also to guarantee the quality of the use of these cloud computing packages for corporate business transactions. Ebenezer *et. al.* (2014) identified whether cloud computing could be applied for accounting purposes using a sample consisting Ghanaian accountants.

Vinuesa *et. al.* (2020) examined the role of artificial intelligence in achieving the sustainable development goals and submitted that fast development of artificial intelligence needs to be supported by the necessary regulatory insight and oversight for AI-based technologies to enable sustainable development in order to bridge the gaps in transparency, safety, and ethical standards. Reis *et. al.* (2019) investigated the impacts of artificial intelligence on public administration and indicated through a systematic literature review that artificial intelligence has a significant impact on public employment. Wyslocka, and Jelonek (2015) explored accounting in the cloud computing. In the study of Wyslocka, and Jelonek (2015), it has been noted that the use of cloud computing, also in the area of accounting reduces overall IT management costs, and allows large-scale consolidation and optimization of the use of hardware and software resources. In Malaysia, Tarmidia, (2014) suggested that only one third of 329 respondents claimed that they are familiar with cloud computing. Also, this study has explored that familiarity towards cloud computing is higher among the PhD and Masters holders. The respondents who are not familiar with the phenomenon of cloud computing have claimed unawareness of its benefits, consideration of using or not using cloud computing and being skeptic about the development as reasons for non-adoption. Related study was conducted in Malaysia by Omar, *et. al.*, (2017), where they investigated the diffusion stage of artificial intelligence in the governance of public listed companies and thereby concluded that artificial intelligence raised some behavioral and legal concerns. The study of Omar *et. al.*, (2017) also revealed that employees have negative attitude towards AI adoption. AlMujaini *et. al.* (2019) employed artificial intelligence as a moderator in the relationship between organizational excellence and corporate foresight. The study adopted survey research design and primary data using questionnaire. The hierarchical regression analysis revealed that artificial intelligence moderates the relationship between organizational excellence and corporate foresight. Davenport *et. al.* (2020) demonstrated that artificial intelligence will change the future of marketing strategies. In a study investigating the new important achievements expected in the near future in the field of artificial intelligence in management where new advances are being made in developing neural networks, quantum computation, and simulation techniques. The study of Moudud-Ul-Hug (2014) on artificial intelligence (AI) and development of accounting systems used secondary data analysis to reveal that artificial intelligence is automating the field of accounting where AI techs such as knowledge-based systems, neural networks, data mining and expert systems are found to be effective tools that have been found to be successful in many other areas of business. Atkin and Bildsten (2017) explained that a consequence of AI in facility management was that middle managers could get bypassed. Klotz (2016) reviewed how artificial intelligence is advancing, and how it is likely to impact the workplace and even managerial creativity. Chelliah (2017) concluded the susceptibility of white-collar jobs to AI and that HR practitioners would need to anticipate the impact of AI on their workplace for that reason that AI will gain control over some of the functions previously performed by people in HR systems or via assistance with recruitment and selection. Chukwudi *et. al.* (2018) found a positive significant relationship between artificial intelligence and audit practices. Also, Goodson (2018) concluded that to fully achieve the potential of AI, HR needs to become Human AI Resources (HAIR). Davenport and Kirby (2016) stated that accounting is one of the business fields which is likely to be augmented by technology instead of being fully automated in the next couple of decades. Their claim was based on the fact that AI technologies can replace specific tasks rather than entire jobs. Therefore, the loss of employment in the short term is likely to be comparatively slow, most likely marginal rather than dramatic. Tschakert *et. al.* (2016) also noted that entry-level accountants were relatively structured and because of this, they were at the highest risk of becoming automated by AI technologies. It was further mentioned that the skill required of an accountant can thus be further enhanced from the data entry level to effective communication with clients. Accountants who are equipped with these skills would not be threatened by AI adoption even when it gets aggressive in the accounting domain.

Theoretical Review

The relevant theories to disruptive accounting technology and the institutional corporate social responsibility can be categorized into two: Christensen theory of disruption technology and Resource based view theory. The Christensen theory of disruption technology was propounded by Christensen in 1997 where the theory stated that disruptive technology model focused on new and ground-breaking technologies on a firms' existence and it is a function of firm continuous performance and social responsibility in the midst of global competition. Moreover, the resource-based view

theory emphasizes how disruptive accounting technology (measured using Artificial intelligence (AI); Robotic Technology (RT); Cloud Accounting (CA); Blockchain Technology (BCT), and QuickBook Technology (QBT)) is a key resource for institutional corporate social responsibility. The link between disruptive accounting technology and institutional corporate social responsibility is that a firm may have some superior capabilities while it lags behind in other capabilities. The relevance of the theory is to allow institutes to have options and making use of the option of technology to gain advantage, even though for now the institutes may have limited knowledge of the technology (Almor & Hashai, 2004). Also, business associates and managers on the impact of disruptive technologies and why many firms fail when confronted by such technologies. Failure can be defined as the inability to achieve set goals. This is a cause of many factors but in the case of this study, failure is anticipated by the inability of firms to utilize disruptive technologies.

Materials and methods

Study area.

The study was conducted among the professional members of Institute of Chartered Accountant of Nigeria (ICAN) and the Association of National Accountants of Nigeria (ANAN) of Nigeria in 2021.

Sampling method and Data collection tools

This study used the survey research design as the effect of the predictors on the institutional corporate social responsibility has taken place. Primary data obtained from the Institute of Chartered Accountant of Nigeria (ICAN) and the Association of National Accountants of Nigeria (ANAN) was adopted in the study. The population was all the professional members of ICAN and ANAN given the total population of 90,950 and the sample population of the study is determined using Yamani, (1997) formula. The listed institute was selected because of its relevance and the significance role played in the society. Simple random sampling technique was adopted in the distribution of the questionnaires and the sample size was calculated using Taro Yamani formula of sample size determination (Yamani, 1997). Also, the researcher added 30% non-response to the questionnaire distributed. Proceeding with the analysis, 10% of the sample size was used to determine the reliability of the instrument used. This was conducted using Cronbach's Alpha reliability test of instrument as shown in Table 1 below.

According to Yamani, (1997) who stated the formula of sample size determination as thus:

$$n = \left(\frac{N}{1+N(e)^2} \right)$$

n = the sample size

N = the population size

e = 95% confidence interval.

$$= \frac{90950}{1+90950(0.05)^2}$$

$$n = \frac{90950}{1+227.375}$$

$$n = \frac{90950}{228.375}$$

$$n = 398.248 \approx 398.$$

With a 30% addition to make up for non-respondent of 398 = 199

the sample size becomes 517.

$$\text{ICAN} = \frac{52,250}{90,950} \times \frac{517}{1} \\ = 297.01 \approx 297$$

$$\text{AWAN} = \frac{38,700}{90,950} \times \frac{520}{1} \\ = 219.99 \approx 220$$

$$\text{Total} = 297 + 220 \\ = 517$$

Table 1: Reliability Analysis

Variables	No. of Items	Cronbach's Alpha Coefficient	Decision
Dependent Variable			
1 Institutional Corporate Social Responsibility (ICSR)	8	0.805	Reliable
Independent Variables			
2 Artificial Intelligence (AI)	7	0.773	Reliable
3 Robotic Technology (RT)	6	0.700	Reliable
4 Cloud Accounting (CA)	7	0.714	Reliable
5 Block Chain Technology (BCT)	7	0.707	Reliable
6 Quick Book Technology (QBT)	5	0.711	Reliable

Source: Researcher's Computation from Field Survey Pilot Study (2022)

Data analysis method

The study used structural equation modelling (SEM) to ascertain the extent of the effect of disruptive accounting technology on institutional corporate social responsibility. The study, however, proposed the following null hypothesis in this form:

H_01 : Disruptive accounting technology (AI; RT; CA; BCT, and QBT) does not have significant effect on institutional corporate social responsibility (ICSR) of professional accounting institutes in Nigeria.

$$Y = f(X_i)$$

$$Y = \beta_0 + \beta_1 X_i + \mu_i$$

Y is the dependent variables – institutional corporate social responsibility

$$X_i = (x_1, x_2, x_3, x_4, x_5)$$

Model:

$$ICSR = \beta_0 + \beta_1 AI_i + \beta_2 RT_i + \beta_3 CA_i + \beta_4 BCT_i + \beta_5 QBT_i + \mu_i$$

Description:

ICSR = Institutional Corporate Social Responsibility

AI_i = Artificial Intelligence

RT_i = Robotic Technology

CA_i = Cloud Accounting

BCT_i = Blockchain Technology

QBT_i = Quick Book Technology

$\beta_0 - \beta_5$ = Regression Coefficient

μ_i = error term or random error

The researchers' conceptual framework is shown below

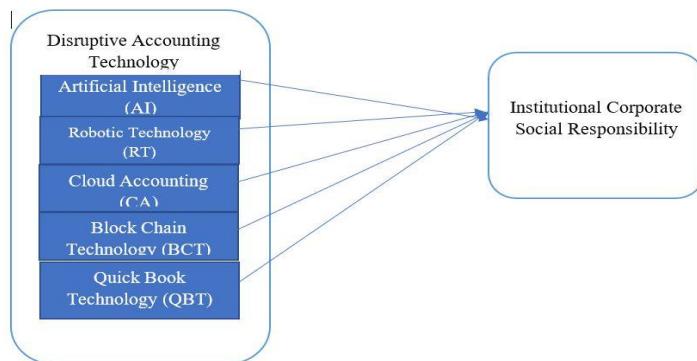


Fig 1: Conceptual Framework

Results and Discussion

The respondents used in this study consist of the professional members of ICAN and ANAN. The questionnaires distributed among the members of ICAN and ANAN amounted to 517 and the total number of questionnaires returned and could be proceeded were 496 (95.9%) of the total distributed while the questionnaires that was not used was 21 (4.1%) as indicated in the table below.

Table 3 summarizes the statistical features of the proxies of disruptive accounting technology (AI; RT; CA; BCT; and QBT) and the institutional corporate social responsibility using the mean, standard deviation, minimum, maximum value, and total number of observations used. The mean depicts the average of the data gathered from individual responses. The mean value for ICSR is (4.010) with the standard deviation of (1.074). Result shows that QBT has the highest mean of the proxies of DAT. This is an initial indication of the significance of the efficient use of QBT by the professional institutes compared with AI, RT, CA, and BCT. BCT has a standard deviation of 1.148 indicating a higher variability compared to other proxies of disruptive accounting technology.

The next part of the study shows the bivariate analysis (Pearson Product Moment Correlation), explaining the level of relationship between DAT and ICSR. In addition, the level of relationship between ICSR and the disruptive technology illustrate both strong and weak positive level of relationship. The correlation coefficient between ICSR and disruptive technology is expressed as follows: ICSR and AI (0.765); ICSR and RT (0.551); ICSR and CA (0.704); ICSR and BCT (0.665), and ICSR and QBT (0.306). Table 4 has shown that only QBT has a weak positive relationship with ICSR, others have a strong positive relationship. This indicates that QBT increases ICSR slowly while other dimension of disruptive technology increases ICSR rapidly.

The findings also shown that there is no problem of multicollinearity between the variables based on the result obtained from the correlation matrix.

Table 2: Response Retrieved

Questionnaire	Total Administered	Total Retrieved
ICAN	297	282
ANAN	220	211
Total	517	496

Source: Researcher's Computation, 2022

Table 3: Summary Statistics of the Variables

Variable	Mean	Std. dev	Minimum	Maximum	Obs. (N)
ICSR	4.010	1.074	1.63	6	496
AI	4.268	0.889	2	6	496
RT	3.329	1.320	1	6	496
CA	3.951	1.104	1	6	496
BCT	3.585	1.148	1	6	496
QBT	4.544	1.055	1	6	496

Where std. dev indicates standard deviation, and Obs. – observation; Source: Researcher's Computation, 2022

Table 4: Correlation Matrix

	ICSR	AI	RT	CA	BCT	QBT
ICSR	1.000					
AI	0.765	1.000				
RT	0.551	0.669	1.000			
CA	0.704	0.806	0.739	1.000		
BCT	0.665	0.793	0.772	0.868	1.000	
QBT	0.306	0.551	0.568	0.721	0.699	1.000

Source: Researcher's Computation, 2022

Structural Equation Modelling (SEM) Analysis

Information in Table 5 and Figure 2 provided results in determining the criteria that best fit the model and also explained how the explanatory variable varies between the variables, AIC and BIC were used for the explanation. The findings indicated that if AIC or BIC has the smallest value, the result shows the best fit of the model. Thus, from the result displayed in Table 5, showed that BIC has the smallest value of -611.7999 when compared with AIC which has the value of -725.3774. This implies that the value of BIC best explains the variability between the explanatory variable (disruptive technology dimensions measured using AI, RT, CA, BCT, and QBT). The R square of 61.2% shows the composition of disruptive technology dimensions in institutional Cooperate Social Responsibility while the remaining 38.8% constitutes factors not considered in this study.

The individual results indicate that AI, CA, and QBT had a significant effect on institutional corporate social responsibility of professional accounting institutes in Nigeria. It is further explained that AI (*coeff* = 0.680; *p* = 0.000) and CA (*coeff* = 0.333; *p* = 0.000) had a significant positive effect on institutional corporate social responsibility, while QBT (*coeff* = -0.328; *p* = 0.000) had a significant but negative effect on institutional corporate social responsibility. These three variables (AI, RT, and QBT) are statistically significant at *p*-value < 0.01 (1% significance level) and 0.05 (5% significance level) respectively. Meanwhile, the result found out that RT with *p*-value (0.692) > 0.01, 0.05 and BCT with *p*-value (0.054) > 0.01, 0.05 were insignificant respectively. This shows that statistically, RT and BCT do not contribute to the effect of institutional corporate social responsibility.

Therefore, based on the summary of the result, the null hypothesis of the model is rejected at *p*-value (0.000) < 0.05 (5% significance level) which proves that disruptive technology dimensions (Artificial Intelligence and cloud accounting) have a positive and significant effect on institutional corporate social responsibility of professional accounting institutes in Nigeria while QuickBooks technology has a negative significant effect on institutional corporate social responsibility of professional accounting institutes in Nigeria, and robotic technology and Blockchain technology have no significant effect on institutional corporate social responsibility of professional accounting institutes in Nigeria.

Decision: At a level of significance 0.05, the chi_bs(5) is 495.599, while the p-value of the chi2 is 0.000 which is lower than 0.05 significance level adopted. Therefore, the study rejected the null hypothesis which means disruptive technology have significant effect on institutional corporate social responsibility of professional accounting institutes in Nigeria.

Discussion

The result of the descriptive statistics ascertained that QBT (QuickBook Technology) contributes to the highest efficiency of ICSR. The hypothesis established that disruptive accounting technology has a positive significant effect on institute corporate social responsibility of professional accounting institute in Nigeria. The result showed that three variables (AI, CA, and QBT) had a significant effect on ICSR though only AI and CA have a positive effect while QBT have a negative effect on institute corporate social responsibility. The decision is consistent with the works of Rinaldi

(2019) and Johnstone (2019). These scholars stressed that while the use of accounting technologies is paramount in accounting institutes, most accounting institutions especially in developing economies are subjected to institutional inefficiency which have deleteriously affected their institutional corporate social responsibility.

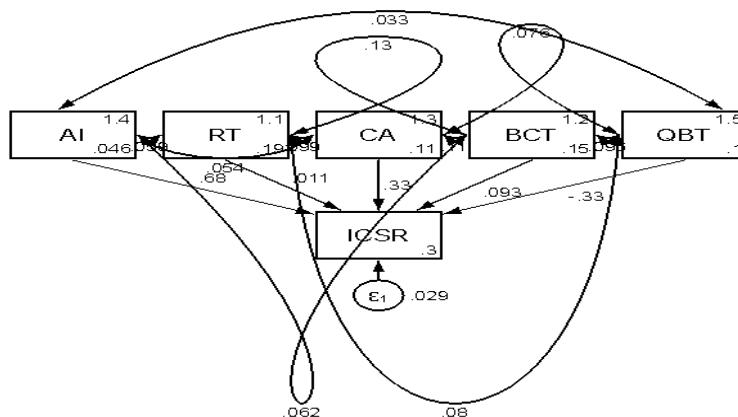


Figure 2: Disruption Accounting Technology and Institutional Corporate Social Responsibility

Table 5. Effect of Disruption Technology on Institutional Corporate Social Responsibility

	Coeff	Std. Error	Z	P > Z
Constant	0.296	0.667	4.44	0.000
AI	0.680	0.058	11.76	0.000
RT	0.011	0.027	0.40	0.692
CA	0.333	0.048	6.91	0.000
BCT	0.193	0.049	1.92	0.054
QBT	-0.328	0.038	-8.61	0.000
Chi2_bs(5)	495.599		P-value	0.000
				R² = 0.612
Goodness of Fit				
AIC	-725.3774		BIC	-611.7999
				Df = 27

Source: Researcher's Field Survey, 2021

Model:

$$\text{ICSR} = \beta_0 + \beta_1 \text{AI}_i + \beta_2 \text{RT}_i + \beta_3 \text{CA}_i + \beta_4 \text{BCT}_i + \beta_5 \text{QBT}_i + \mu_i$$

$$\text{ICSR} = 0.296 + 0.680 \text{AI}_i + 0.333 \text{CA}_i$$

$$\text{ICSR} = 0.296 + 0.680 \text{AI}_i + 0.333 \text{CA}_i - 0.328 \text{QBT}_i$$

$$\text{ICSR} = 0.296 + 0.680 \text{AI}_i + 0.333 \text{CA}_i - 0.328 \text{QBT}_i + 0.011 \text{RT}_i + 0.193 \text{BCT}_i$$

Conceptually, Selcuk and Kiyaz (2017) stated that institutional corporate social responsibility (CSR) is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. The concept is viewed as the responsibility of the corporation to act in the interest of legitimate organizational stakeholders (Ansung, 2017). Thus, earlier, Lin (2009) and Basuony et al. (2014) had described institutional corporate social responsibility as a firm's obligation to protect and improve social welfare now as well as in the future by generating sustainable benefits for stakeholders, economic development by working with employees, their families, the local community and society at large for the benefit of both the business and for development. In light of this, the corporate responsibility. Lin (2009) stated that corporate social responsibility is achieved when a business adapts all of its practices to ensure that it operates in ways that meet, or exceeds, the ethical, legal, commercial and public expectations that society has of business.

Ansung (2017) also emphasized that the thrust of CSR is to bridge the relationship between business and society. It is therefore logical to assume that businesses that are more prone to undertaking CSR initiatives would be compelled to show commitment, through policy and practice, to stakeholder engagement since stakeholders' participation serves as the medium to unearth the real needs and interests of these interest groups.

Therefore, the implementation of technology in accounting practices will further demonstrate the direction of firm policies for CSR as, one of the classifications of institutional CSR by Raji et al. (2017), and Odetayo and Adeyemi (2014) involve enterprise (supporting and developing initiatives to nurture budding entrepreneurs and boost enterprise). Relatively, Russell (2018) highlighted the benefits of institutional CSR and these benefits include: increased employee satisfaction, improved public image, and increased customer patronage.

Russell (2018) findings is collaborated by Vinuesa et al. (2020) who examined the role of artificial intelligence in achieving the sustainable development goals and submitted that, fast development of artificial intelligence needs to be

supported by the necessary regulatory insight and oversight for AI-based technologies to enable sustainable development to bridge the gaps in transparency, safety, and ethical standards. Also, Reis et al. (2019) demonstrated that artificial intelligence has a significant impact on public employment, which is relatively associated with CSR. Hence AlMujaini et al. (2019) employed artificial intelligence as a moderator in the relationship between organizational excellence and corporate foresight and found that artificial intelligence moderates the relationship between organizational excellence and corporate foresight and responsibilities. These findings on artificial intelligence by previous scholars including the works of Goralski and Tan (2020) and Davenport *et al.* (2020) is supported by this study's results.

Chopra (2018) concluded that there are new important achievements expected in the near future in the field of artificial intelligence in management where new advances are being made in developing neural networks, quantum computation, and simulation techniques that suits the environment and its development. More so, Tschakert *et al.* (2016) also noted that entry level accountants were relatively structured and because of this, they were at the highest risk of becoming automated by AI technologies. It was further mentioned that the skill required of an accountant can thus be further enhanced from the data entry level to effective communication with clients and stakeholders. Accountants who are equipped with these skills would not be threatened by AI adoption even when it gets aggressive in the accounting domain. Relatively, Onyali and Okafor (2014) studied the use of cloud computing and accounting packages for corporate business transactions in Nigeria and findings revealed that cloud computing packages by corporate firms is a welcomed development in Nigeria, however, it was observed that the use of these packages by corporate firms has high-cost implications for corporate stakeholders in addition to been affected by unstable internet access and poor network connection among other challenges.

The implication of block chain technology on institute corporate social responsibility is that block chain will be predicted for keeping records of share ownership and it will be used to keep financial records (Yermack, 2017). If block chain is adopted in the professional accounting institute, it would mostly be used for updating accounting information (Bystrom, 2019). Therefore, since disruptive technology dimensions have effect on institute corporate social responsibility, the rapid involvement of AI, CA, and QBT will lead to the proliferation of terms attempting to define the approaches to their governance. Meanwhile, it should be noted that disruptive technology comes with difficulty and opportunities to enhance institute corporate social responsibility. Theoretically, the diffusion of innovations theory propounded by Everett Rogers in 1976 is supported by this study's findings of hypothesis five. Grounded on the adopters-based theory and theory of diffusion of innovation, it explains how, why, and at what rate new ideas and technology spread in the society and its environment. As such, potential adopters of an innovation must learn about the innovation, be persuaded as to the merit of the innovation, decide to adopt, implement the innovation, and confirm (reaffirm or reject) the decision to adopt the innovation (Surry & Farquhar, 1997). Accordingly, all technologies impact the corporate society and environment in which they are used either directly or indirectly.

Asikhia *et al.* (2019), also stated that the core assumptions of the theory are that diffusion research focuses on the conditions which increase or decrease the likelihood that a new idea, product, or practice will be adopted by members of a given culture. In addition, diffusion supports the position that an innovation is communicated through certain channels over a period of time among the members of a social system or corporate society. According to Damerji (2019), the innovation decision process is a process that occurs while individuals participate in a series of actions related to decisions. In the current competitive environment, innovation is generally considered a firm's core value creation capacity and one of the most important competitive weapons (Sandvik & Sandvik, 2003). Therefore, conclusively, based on the combine SEM results for the hypothesis disruptive technology has a positive and significant effect on institutional corporate social responsibility of professional accounting institutes in Nigeria.

Conclusion

The study examined the effect of disruptive accounting technology and the institutional corporate social responsibility of professional accounting institute of Nigeria by using the ICAN and ANAN professional members to respond to the questionnaires distributed. Based on the result, conclusions were drawn on the descriptive and the inferential method of analysis. The result indicated that Quick Book technology is more efficiency than the other proxies of disruptive accounting technology. The study also shows that disruptive accounting technology showed a significant effect on institutional corporate social responsibility of professional accounting institutes in Nigeria.

Recommendation

Based on the result obtained from the study, it is therefore, recommended that management of institutions and organisations should adopt the use of technology, this should help them to be more productive and creative. More so, accounting technology must take a lead role in every school curriculum. The institutes should be based on practical and theoretical classes of newly innovated accounting technologies; this would make institutions more proficient and efficient in their daily activities. By automating parts of the business processes, AI grants accountants more time to serve as a strategic partner to clients and provide data-driven insights to inform business decisions, in the long-term, this emerging technology will empower accountants to provide a higher caliber of services to clients. On the other hand, thanks to technology, traditional tax preparation and audit work is going to start fading away, the profession needs to position itself

as knowledgeable business consultants, and those firms that are doing this would be in a better position to survive, and thrive.

Contributions of the Research

This paper adds to existing literature on disruptive accounting technology and institutional corporate social responsibility. Also, this study is beneficial to the empirical review, investors, and professional accountants or accounting practice. This study also provides awareness in the accounting sector, especially to the community, policy-makers and the regulators.

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