The Journal of Accounting and Management

A Study of Audit clients' Characteristics and the Determination of Audit Fees in an Automated Accounting System Environment

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Abstract: The aim of this study was to examine various characteristics of clients that should be considered in the determination of audit fees in an automated accounting system (AAS). The study was built on those characteristics that had been examined over the years but in a manual accounting system environment which results may not be realistic until proven otherwise for an AAS environment. The study adopted a survey research design and relied on primary data sourced through questionnaire on four likert's scale and five hundred and fifty one questionnaire were distributed to chartered accountants in private practice in South-West zone, Nigeria, out of which three hundred and eighty nine were filled and returned but three hundred and sixty two were considered valid. The questionnaire were descriptively analysed with percentage, mean and standard deviation and the results suggest that clients' complexity in an automated accounting system environment will influence determination of audit fees. Also, clients' size will affect the determination of audit fees and that clients' profitability will influence the determination of audit fees in an automated accounting system environment. The grand mean secured from the respondents on each of clients' characteristic are 2.58, 2.77 and 3.12 respectively and are all within agreed classification. Study concludes that determination of auditors fees in an automated accounting system will be influenced by these characteristics. The study therefore suggests that audit clients should be prepared to factor these into negotiation for a fee for audit service. Similarly, external auditors should build their fees negotiation around these clients' characteristics.

Keywords: audit fees; automated accounting system; client's complexity; client's profitability; client's size

JEL Classification: M4; M42

1. Introduction

The first stage of technology development in accounting comes with mechanical accounting system which revolutionalized the practice and reporting of accounting considerably and this system relied on the use of typewriters, franking machines, photocopiers, mechanical filing system. In all sense, mechanical accounting systems bring tremendous changes into accounting system, yet the operation still remained cumbersome as it involves procurement of huge/big machines which occupied large space, need to train machines' operators with accounting background and these challenges brought quest to device a better system which eventually led to invention of electronic accounting system as known today. Automation of accounting system is evolving and on this Ohonba (2015, p. 1) asserts that "the corporate world is getting more and more inclined towards the use of information technology

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and computer information system in their daily operations". The arrival of electronic into accounting system brought generational changes into audit practice in that manual audit becomes irrelevant in a complete automated accounting environment. However, auditing process and procedures remain the same but the approach changes with the type of accounting system in place.

Audit fees in manual accounting system had been widely studied both conceptually and empirically especially the determinants of audit fees both from clients and audit firms' perspective. Literatures abound on these factors. Liu (2017) studied the supply side of (auditors') characteristics as it affect audit fees while Obafemi, Yisa & Abdullahi (2020, p78) examined the implication of clients' characteristics on audit fees, and this tantamount to examination of the demand side of the process. Most of extant literatures on the determinants of audit fees focused on manual system of accounting and without due consideration of such determinants within automated accounting system (AAS).

This brings the need to reappraise what are the determinants in an automated accounting system environment with specific attention on the supplier's (audit firm's) perception. It will be incorrect to rely on the findings of the studies conducted for determination of audit fees under manual accounting system in the present information technology age.

The advent of information technology ought to have warranted efforts on the implication(s) of AAS on the determination of audit fees. However and in the developed countries notably in the USA and UK there had been concerted efforts of the academics and big four (audit firms) namely; KPMG, Pricewater Copper PwC, Deillote Touche and Ernst and Young (EY) on automated accounting system on issues such as in relation to the profession (Wilson & Sangster, 1992); benefits of automation such as accuracy, cost savings and reduction in human errors (Kokina & Davenport, 2017) with little or no effort to examine the effects of automation on the determination of audit fees.

Therefore, this study examined client's characteristics and the determination of audit fee in an automated accounting system environment in South-West, Nigeria. Following research questions were raised in other to achieve the objective of the study:

Q1. Does client's complexity affect the determination of audit fee?

Q2: Does client's size effect on audit fee determination?

Q3: Does client's profitability affect the determination of audit fee?

The outcomes of this study are crucial to both academics, accounting professional bodies and auditing firms as the findings should be pivotal to a revisit to the determination of audit fee taken into consideration the demands of the advent of information technology, while accounting professional bodies that provide minimum fees schedule for their members may have to do a review in the light of this finding. More so, the academics should also beam a search light into this area of study for a comprehensive study for concerted findings that will benefit all and sundry.

2. Review of Relevant Literature

Auditing of manual accounting system often referred to as traditional accounting system that is based on paper and pencil in the recording of significant economics and financial transactions is tedious and not only challenging for staff of an organization/entity but also for external auditors.

Automated accounting process started with primary focus on account payable and invoice management but has evolved from compliance to one of insight and strategy (Wilson & Sangster 1992; Ohonba, 2015). Accounting tasks are so many, which includes invoicing, payroll and book-keeping, also the processing of large amounts of numerical data. Such routine transaction processing is at substantial cost burden on the organization and the desire to reduce these costs provided a motivation for the early introduction of computer systems. Ranstad (2018) submitted that some accounting activities have been more affected by computerization than others.

Accounting package is now available to automate inventory system. Sage evolution enterprise resources planning have powerful inventory module that provide unlimited control over stock and the software could generate management reports as well as detailed operational reports as may be demanded by unique need of users.

With accounting automation and advent of technology assisted audit technique, the remuneration for audit efforts by clients require a revisit as the conventional model was largely built on traditional (manual) audit. It was submitted in Saleh (2017, p. 71) that "greater part of audit work are now being carried out without (auditors) leaving office, with less time, labor and costs". This should ordinarily translate to reduction in audit fees, but the level of technical skills and acquisition of other resources by audit firm to conduct audit in IT environment is also additional costs. However, either manual or electronic audit, the concept of audit fees remains the same. Audit fee from supply (audit firm) perspective is income generated for audit service rendered while the auditee (client) from demand perspective will regard audit fees as cost incurred to secure the service of audit firm.

There are series of definition or descriptions of audit fees by different authors and authorities. The following are the example of such efforts: It is regarded as the remuneration payable to an auditor for audit services rendered (Kimeli 2016, p. 23). In another way it is 'the economic remuneration payable to an auditor for audit services which are an agency fee according to certain standards' (Liu 2017, p. 52) while Musah (2017, p. 717) describes it as a 'fee that a company pays an external auditor in exchange for performing an audit

This study however regard audit fee as reward for physical and mental efforts of independent auditors for audit service to clients. In the determination of price in a market-driven economy, there are two major factors that drive the process and this is forces of demand and supply, that is, it is a bargain between buyer and supplier taking into account factors from each perspective. These two factors also come to play in the determination of appropriate audit fees of an engagement.

The early history of audit fees discussed the concept of demand and supply prominently. For instance, it was submitted that 'an audit fee is the product of unit price and the quantity of audit services demanded by the management of the audited company' Onwusu-Ansah *et al* (2019); Sumnic (1980, p.161); Rewezuk & Modzelewski (2019, p. 325). Audit fees when considered from demand and supply process should also follow the pattern of factors that do influence these two.

Audit firms (supply perspective) will naturally consider resources necessary for an engagement, determine unit price for each of the proposed resources, make provision for opportunity cost and provide for a normal profit from the engagement. Resources for each engagement will be determined with considerations such as client size, number of segments, amount of inventory and receivables. Number of segments could be regarded as 'complexity of the auditee's operations. Besides the above factors, Dickins *et al* (2008, p. A10) while citing Corcello et al (1992) asserts that level of client's

profitability is another factor as a determinant to audit fees, so also is the emphasized on client risk by Musah (2017, p. 720)

In Nigeria, the Institute of Chartered Accountants of Nigeria (ICAN, 2015) provided fees-scale for partner to junior which was conceived in line with individual auditor's characteristics (ICAN, 2015). This scale suggested a minimum fee to be charged for member of engagement team. This scale is in line with the claim that 'auditors at the same firm receive different remuneration which means that the firm believes that the value created by each auditor on engagement assignment is different'. This was corroborated in Liu (2017, p. 53) where it was submitted claim that 'the differences between auditors who are direct implementers of audit projects can affect audit quality, which is also recognized by the market'.

2.1. Automated Accounting System and Determinants of Audit Fees: Audit Clients' Attributes

Auditors will measure audit fee chargeable against the attributes of a particular client and this is looking into audit fee from supply perspective. Normally, audit firm will examine what is required for a successful execution of an engagement. These requirements will have far reach implication on the determination of audit fee of a particular assignment. The clients' environment determines its level of activities and those factors that determine these activities are regarded as firm characteristics. Clients' characteristics play major role when audit firms intend to access a client for quotation for audit fees. Such factors as auditee's size, auditee's profitability and complexity of auditee's operations (Ahmed & Abdullahi, 2016; Kimeli, 2016, p. 25) among others are the peculiar attributes or characteristics that should influence the determination of audit fees.

a. Auditee (Client)'s Size

Previous studies had established a strong association between the size of an audit client and audit fees. All the "big four" audit firms pay attention to client's size in determination of appropriate audit fees. Parameters such as receivable, payables and inventory had been used to measure the size of a client. Additionally, number of personnel, total revenue and total assets were used as proxies for the measurement of a client's size (Obafemi, *et al* (2020, p. 78). It is expected that size should have reasonable influence on audit fees because it will determine time needed for an engagement, efforts, skills and other resources needed to conduct an audit. Likewise that auditee's size has a dire and important impact on the efforts taken and the time spent by auditor in the process (Kimel, 2016, p. 25)

b. Auditee's Complexity.

The more complex a client's operations the more efforts that will be required during audit process and of course, this will influence fees quoted by audit firm. Ohidoa and Omokhudu (2018, p. 714) along with Liu (2017, p. 55) suggests that number of subsidiaries and branches of a client are good enough to measure how complex a client's firm is for determination of audit fees. Client's complexity could also be measured by type of organizational structure in place. Whether a company adopts decentralized or centralized structure will have effect on the complexity of operations and processes of such firm, and thus with a direct association with audit work necessary to carry out a high quality audit. It is expected that a more complex operation will require more attention with consequence for a higher audit fees.

Auditee's Profitability

Khasharmeh (2018) claims that "Corporate profitability" is an important variable in pricing of audit services and is regarded as a significant sign of management performance and its effectiveness in allocating variable resources and Chem *et al*, 2002 was cited in Ohidoa and Omokhudu (2018, p. 715) that underperforming firms are more likely to control their overheads and this would result in less audit work)

However, client's profitability has been severally considered a factor influencing the determination of audit fees but it is difficult to understand the rationale behind this. From supply point of view, why must profit of a client serve as basis for price determination? If size, complexity and risk had been factored, then what is the place of profitability? Nevertheless, and for this study, behavioral measurement of implications of profitability in the determination of audit fees will be considered. This is because the higher the level of client's profitability the higher the level of auditor's perceived level of risk and the calibers of audit team needed in the performance of audit engagement. The level of profitability could also be influencing factors on the extents of compliance and substantive tests necessary before an opinion could be formed.

2.2. Agency Theory

This study is anchored on agency theory because the relationship between management (employees) and the shareholders (the owners) is built on principal- agent arrangement. The management is engaged to manage the business' asset to promote owners' interest and objectives. While the management is opened to information about the events of the firm on daily basis, the owners are totally out of know-how of these events. Management determines the type of information and how the information is conveyed to the management. It is therefore possible for management to engage in self interest of any form with no means of owners knowing the events until unfolding. The owners therefore engage the service of an independent auditor to stand in between, look into the management activities whether on finance or otherwise and report their findings to the owners.

It is this need that gives birth to the widely cited work of Watts and Zimmerman (1986) on the appointment of a reputable auditor – an auditor who is perceived will meet the expectations of interest of third parties and that of the owners of a firm. A company is viewed as the result of more or less formal "contracts", in which several groups make some kind of contribution to the company, given a certain "price". Company management tries to get these contributions under optimum conditions that are at: low interest rates from bankers, high share prices for stockholders, and low wages for employees. In these relationships, management is seen as the "agent," trying to obtain contributions from "principals" such as bankers, stockholders and employees. Managing the consequences of agent-principal relationship is not free of cost. Costs of an agency relationship are monitoring costs (the cost of monitoring the agents which of course include audit fee), bonding costs (the costs, incurred by an agent, of insuring that agents will not take adverse actions against the principals), and residual loss (effective loss that results despite the bonding and monitoring costs incurred). (Bouckova, 2015, p. 8)

This is the primary cause of agency theory which the origin has been a source of concern as it has been attributed to different authorities by different researchers. Some modern day researchers ascribe it to Hayes *et al* while Haynes *et al* ascribed the origin to Watts and Zimmerman. (Hayes *et al* 2021, p.

32). However, the fact of this is that the theory was brought to limelight by Ross and Mitnick. Ross was the first to develop economic theory of agency to address problems of contract-compensation (Ross, 1978).

It was proposed that this agency theory will redress issues surrounding agent compensation that will prompt appropriate activities of agents to be in agreement with the expectation of the principals. Mitnick (1973, 2015) also had independently proposed same agency theory but much more of institutional in character. His theory on agency was first presented to the meeting of the American Political Science Association in 1973.

While the widely-cited work of Jensen and Meckling (1976, p. 319) which proposed agency theory of firms was not published until almost years after which Ross and Mitnick had laid foundation for modern day theory of agency. Indeed, Jensen and Meckling (1976) actually originated a variant of an agency theory of firm, not agency theory in general. Their studies only leverage on agency and others cost to enable them develop a theory of firm and not agency theory but extensively and mathematically studied agency cost implication on theory of firm.

In order for the principals (who buy shares in the company, loan the company money, or work for them) to have faith in the information given by management, it must be reliable. This means that there is an incentive for both managers and outside investors to engage reputable auditors. The engagement of reputable auditor necessitates the need for the owners especially to agree to a just reward to the auditor in for assurance service provided which necessitate the need to unravel fair determinants of audit fees.

2.3. Empirical Review

An empirical study was conducted by Liu (2017, p. 52) on auditors' characteristic and audit fees. The study obtained secondary data from 2010 to 2015 from listed companies in China. Data was subjected to regression analysis through which it was found that audit fees at individual auditors' level that age, gender, educational background, industry specialization, position and busyness, all have significant correlations with the audit fees. The study reveals that audit firm should pay attention to disclosure of characteristics of the individual auditors' information will reduce the search costs of audit clients and help clients select appropriate audit services more efficiently.

Musah (2017, p. 716) carried out a study of audit fees as a tool to assist negotiation between auditors and clients. The purpose of the study was to examine the determinants of audit fee with empirical evidence from the Ghana stock exchange. Specifically, the study examined audit fee determinants which included the client size, profitability measured by ROA, LOSS, client risk measured by debt ratio, YEAR (season) and MNC. Using the Simunic (1980) model, this study reveals that client's size of business, international recognition, affiliation of audit firms (Big four audit firms) and profitability are significant determinants of audit fee in Ghana. Results in study indicate that ignorance of risk factor by the auditors may pose serious threat to fame and reputation of audit firm along with indication of feeble legal regime in Ghana. (ulHaq & Leghri, 2015)

The results of the study have significant implications for auditors and firms in negotiating audit fees in Ghana. The result of the study is unique as it is the first study that comprehensively examines determinants of audit fees (among others) on listed firms in Ghana. Auditors and board independence improve audit quality and that abnormal audit fees is as a result of additional effort for auditor to carry

out rigorous audit engagement as a result of wider audit scope. This research provides insight into the impact of IFRS adoption on audit fees.

Santhos and Ganesh (2020, p. 33) conducted a study to establish the important elements which affect the payment of audit remuneration by the Omani companies listed in MSM by The research concentrates on five elements to determine the audit charges such as the size of the firm, profitability, audit risk, type of auditor and audit report lag. Samples were collected from 30 audit firms using secondary data for a period from 2015-2018. Data collected were subjected to correlation tool for analysis and the results show that there is minimum relation among audit remuneration, firm's magnitude, profitability and types of auditor; and other results reveal a negative correlation between audit risk and audit remuneration. The study concludes that the study cannot be considered as strong evidence for the factors which affect the payment of audit remuneration due to its weak correlation.

Obafemi, *et al* (2020) conducted a study on corporate characteristics, audit fees and the Nigerian corporate environment: A panel data approach. Secondary data was extracted from Annual Reports and Accounts of sampled firms and subjected to panel analysis. Audit fee and corporate socio/economic characteristics were proxies by firm size, leverage, firm type, board size, profitability and board independence. The study found a positive significant effect of Firm Size (FS), Audit Firm Type (AUDTYPE), Board Independence (BDIND) and Profitability (PROFIT) (β = 17.2545; 7862.6861; 84246.5114, 0.0005, $\rho > 0.0000$) while Leverage (LEV) and Board Size (BDSIZE) had negative effect on Audit Fees (β = -19.5350, -2333.0214, $\rho > 0.0000$). The study recommended that audit clients should focus on the management of the relationship between Asset and Liability i.e. leverage such that the current profitability tempo could be maintained and offset audit fee without any significant negative effect on audit quality.

One of the pioneers on the study of audit fees (Sumnic, 1980) carried out a research on the pricing of audit services: Theory and Evidence. Sample size of three hundred and ninety seven audit clients were selected for a survey study, out of this, two hundred and eight nine used big 8 while 108 were those that used non big 8 audit firms. The results of regression analysis includes the identification of a number of significant audit fee determinants as well as failure to reject the hypothesis that price competition prevail trough out the market for financial audit services irrespective of the share of a market segment which is serviced by the big 8 firms, namely; Arthur Andersen. (became defunct in 2002) ; Arthur Young- (Now Ernst & Young); Deloitte Haskins & Sells-(Now Deloitte & Touche); Ernst & Whitney-(Now Ernst & Young); Peat Marwick Mitchell-(Now KPMG); PricewaterHouse-(Now PwC); Touche Ross- (Now Deloitte & Touche) and Coopers & Lybrand. (Now PwC). From the empirical review conducted above, it is apparent that there is knowledge (literature) gap in respect of audit fees with no emphasis on its relationship with in automated accounting environment.

The extant literatures revealed extensive efforts to empirically establish various positions of manual accounting system on audit fee with proxies for determinants were largely on secondary data as to measure client's size, client's complexity, and client's profitability (Obafemi, *et al* 2020, p. 88; Santhos and Ganesh 2020, p. 33; Musah 2017, p. 716 and Liu, 2017, p. 63) while this study tends towards behavioral perceptions of auditors on those variables as it influences their decision during fees negotiation with clients. In addition, it is found that the extensive study of audit fees had been given adequate attention both in Europe, North Africa, Asian, and in Nigeria but they generally lack focus on determinants of audit fees when auditing in technology driven accounting system. This study therefore leveraged on the behavioral aspect of the determinants of audit fees.

3. Methodology

Research design for this study is descriptive survey and explanatory in nature while the population is found to be fifty five thousand members of the Institute of Chartered Accountants of Nigeria. This population is into two strata, namely big four and mid-tier accounting firms in Nigeria. Minimum sample size of 397 participants was determined with the assistance of Taro Yamane formula (1967) at 5% margin of error, Additional five percent was added to the minimum to make allowance for possible non response from some of the participants. Two hundred of the questionnaire designed on Google form was distributed to chartered accountants through email and LinkedIn addresses and three hundred and fifty one directly distributed to staff of audit firms which offices are situated within South-West geo-political zone in Nigeria (making a total of 551), using random sampling technique.

Three hundred and eighty nine (389) questionnaire (were filled and returned (70.6%) out of which only forty five (22.5%) emanated through Google form) while the rest were obtained from those physically distributed. Twenty seven (6.94% of completed questionnaire) were regarded as invalid as the respondents are not engaged on external auditing activities. The valid questionnaire (362) were subjected to both internal consistency test vide Cronbach test and composite reliability while discriminant validity (AVE) tests to establish construct validity of the instruments. The results of the tests are as shown in Table 3.1 below.

Table 3.1. Reliability and Validity Result

Variables	Measures	FL	CA	CR	AVE
Independent	**AAS:**				
	Receivables	0.938	0.896	0.936	0.880
	Payables	0.724	0.602	0.771	0.534
	Inventory	0.887	0.873	0.883	0.791
	Payroll	0.908	0.743	0.966	0.826
Dependent	**Clients' Xteristics:**				
	Complexity	0.868	0.915	0.889	0.778
	Size	0.742	0.909	0.953	0.554
	Profitability	0.759	0.941	0.806	0.584

Source: Authors' Computation using STATA (2022)

The result in Table 3.1 above reveals that Cronbach Alpha (CA), Composite Reliability (CR) and Average Variance Extracted (AVE) had value above the 0.6; 0.7 and 0.5 minimum thresholds to establish the internal consistence, data adequacy and contents validity of the instrument (questionnaire). All the constructs had above minimum acceptable threshold of 0.7 hence it is concluded that the instrument is reliable in measurement of variables under consideration

4. Results and Interpretation

Descriptive Analysis

This is conducted to provide answers to the six research questions of this study. The interpretation of results of the analysis will be guided by the following criteria called 'decision rule' and the results are presented below and interpretation is built on the following:

Table 4.1. How does client's complexity effect the determination of audit fee?

		SA	**A**	**D**	**SD**			
S/N	Items	**Freq %**	**Freq %**	**Freq %**	**Freq %**	**Mean**	**Std.D**	**Decision**
1	*Number of receivable should influence fee quotation under AAS regime*	72 19.9%	202 55.8%	64 17.7%	24 6.6%	2.89	0.79	Accept
2	*The spread of receivables have no bearing on fee quotation under AAS regime*	34 9.4%	96 26.5%	89 24.6%	143 39.5%	2.06	1.02	Reject
3	*Number of payables is not a necessary factor for audit fee determination*	85 23.5%	166 45.9%	92 25.4%	19 5.2%	2.88	0.83	Accept
4	*The spread of payables shouldn't warrant consideration when making quotation for audit fee*	38 10.5%	79 21.8%	147 40.6%	98 27.1%	2.16	0.94	Reject
5	*Spread of stores for inventory management is not a factor for consideration in audit fee quotation*	45 12.4%	58 16.0%	151 41.7%	108 29.8%	2.11	0.97	Reject
6	*Items mixed for stock taking should be considered for audit fee determination*	50 13.8%	202 55.8%	80 22.1%	30 8.3%	2.75	0.79	Accept

7	*Number of personnel manning store location is a factor for audit fee quotation*	35 9.7%	242 66.9%	55 15.2%	30 8.3%	2.78	0.73	Accept
8	*Number of personnel engaged on receivable management influences audit fee quotation in AAS environment*	55 15.2%	227 62.7%	64 17.7%	16 4.4%	2.89	0.7	Accept
9	*Number of personnel on payable management does not influences audit fee quotation in an AAS environment*	52 14.4%	172 48.3%	106 29.3%	29 8.0%	2.69	0.81	Accept
	Grand Mean					**2.58**		**Accept**

Source: Authors' Computation (2022)

From table 4.1 sub-questions 2, 4 and 5 rejected negative ideal about factors for the measurement of firm's complexity and that translate to the fact that respondents agreed that the spread of receivables and number of payables will all affect determination of audit fees under AAS environment will in addition other direct questions (1,3,6, 7, 8, 9) attracted means ranging between 2.69 and 2.89 which revealed that the client's complexity has fairly relationship with determination of audit fees in an automated accounting system environment. Responses to all questions attracted favorable disposition of respondents to all measures of client's complexity in relation to the determination of audit fees. The grand mean of 2.58 suggest that majorities of respondents agreed that complexity of client's operation in an automated accounting system has effect on the determination of audit fees.

Table 4.2. How does client's size effect on audit fee determination?

		SA	**A**	**D**	**SD**			
S/N	Items	**Freq %**	**Freq %**	**Freq %**	**Freq %**	**Mean**	**Std.D**	**Decision**
1	*Number of subsidiaries is a factor for audit fee quotation in an AAS environment*	113 31.2%	235 64.9%	11 3.0%	3 0.8%	3.27	0.55	Accept
2	*Sub-national spread of subsidiaries is a factor for audit fee quotation in an AAS environment*	93 25.7%	179 49.4%	661 8.2%	24 6.6%	2.94	0.84	Accept
3	*Global network of subsidiaries is factored into audit fee quotation in an AAS environment*	58 16.0%	274 75.7%	27 7.5%	2 0.8%	3.07	0.51	Accept
4	*Number of branches is a factor for consideration in the determination of audit fee in an AAS environment*	60 16.6%	222 61.3%	71 19.6%	9 2.5%	2.92	0.68	Accept
5	*Sub-national spread of branches is not a factor for audit fee determination in an AAS environment*	37 10.2%	114 31.5%	57 15.7%	154 42.5%	2.09	1.07	Reject

6	*Global netwospread of branches is factored into fees quotation in an AAS environment*	20 5.5%	164 45.3%	100 27.6%	78 21.5%	2.35	0.88	Reject
	Grand Mean					**2.77**		**Agree**

Source: Authors' Computation from Field Survey (2022)

Table 4.2 above revealed means (3.27; 2.94; 3.07 and 2.92) to have supported all issued raised and a closer analysis will reveal further that respondents only disagreed with statement that want to undermine the importance of client's size in relation to determination of audit fees in an automated accounting system environment. A grand mean of 2.77 shows that respondents had an agreement towards the fact that client's size has reasonable influence on the determination of audit fees in an automated accounting environment.

Table 4.3. How does client's profitability affect the determination of audit fee?

		SA	**A**	**D**	**SD**			
S/N	Items	**Freq (%)**	**Freq (%)**	**Freq (%)**	**Freq (%)**	**Mean**	**Std.D**	**Decision**
1	*Level of profitability is a factor in audit fee determination in an AAS environment*	153 42.3%	166 45.9%	37 10.2%	6 1.7%	3.29	0.71	Accept
2	*Profitability is a measure of risk exposure of audit firm hence a determinant of audit fee in an AAS environment*	74 20.4%	251 69.3%	31 8.6%	6 1.7%	3.09	0.59	Accept
3	*Level of profitability is a measure of level of operational demand of audit efforts hence should be factored in the determination of audit fees*	69 19.1%	251 69.3%	35 9.7%	7 1.9%	3.06	0.6	Accept
4	*Level of profitability require commensuration compliance and substantive test hence should be given consideration in quotation of audit fee*	79 21.8%	229 63.3%	38 10.5%	16 4.4%	3.02	0.71	Accept
	Grand Mean					**3.12**		**Accept**

Source: Authors' Computation (2022)

Table 4.3 above presented means of 3.29; 3.09; 3.06 and 3.02 for question, 1, 2, 3 and 4 respectively, showing that respondents agreed on all issue raised while grand mean of 3.12 indicates that respondents were of opinion that in an automated accounting system, client's profitability will influence the determination of audit fees.

5. Conclusion and Recommendation

It is therefore concluded that respondents found all the three elements of clients' characteristics (auditee size, auditee complexity and auditee profitability) to be influential to the determination of audit fees in an automated accounting system. It is therefore recommended that both external auditors and clients should make provision to accommodate these factors when negotiating on audit fees especial when the operations and accounting functions of clients are technologically driven which of course will demand external auditors to embrace computer assisted audit technologies for the conduct of audit assignment.

It is also recommended to conduct further studies to empirically establish the effects of these characteristics and also to conduct similar studies on the audit firms' characteristics that stand to play influence on eventual audit fees payable for a particular audit engagement

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