FORENSIC AUDIT SKILLS ON CONTEMPORARY
AUDIT REPORTS AND ORGANIZATIONAL PRODUCTIVITY

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Abstract:
This study sought to determine the forensic audit skills on contemporary audit reports and organizational productivity. Two research questions and two null hypotheses were formulated and tested at 0.05 level of significance. The descriptive survey design was adopted and it was carried out in Akwa Ibom State using two organizations namely; Champion Breweries Plc and Akwa Ibom Water Company. The population consists of 2836 staff while the sample size was 351 staff determined statistically using Taro Yamane formula. The purposive sampling technique was used. The instrument used for data collection was Forensic Audit Skills on Contemporary Audit Report and Organizational Productivity Questionnaire (FASCAROPQ). It was validated by three experts from the University of Uyo. The Cronbach Alpha reliability technique was used in which 0.79 index was obtained. The regression analysis was used in answering the research questions as well as testing of null hypotheses at 0.05 level of significance. The findings reveal that data mining skill and computer assisted audit techniques significantly predict organizational productivity to a high level. Based on the findings of the study, it was concluded that forensic audit skills are very paramount to operators of any organization in order to correct the irregularities of contemporary audit report. Therefore, it is recommended among others that owners and managers of organization should ensure that their auditors adhere to data mining skill for effective audit report that would lead to optimal productivity of the organization.

Keywords: forensic audit skills, contemporary audit reports, organizational productivity, data mining, computer assisted audit techniques

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1. Introduction

Organizations are formed by groups of people with the purpose of achieving effects that one person cannot achieve individually. Better results are created as a consequence of organizational effect which direct organization to achieving some organizational goals (Tran and Tian, 2013). Some organizations are essentially social-technical devices made up of people and physical actors who process inputs and at the same time execute some functions and tasks that lead to the accomplishment of certain goals. Regarding the purpose of the organizations founding, they can be described as failure (nonproductive) or productivity (successful) ones. It is the desire of every organization to attain the apex of its organizational productivity. Productivity is defined as a ratio between the output volume and the volume of inputs. It measures how efficiently production inputs, such as labour and capital, are being used in an organization to produce a given level of output. According to Caliendo, Mion, Opromolla and Rossi-Hansberg (2019), productivity is considered a key source of economic growth and competitiveness for many international comparisons and performance assessments. An organizational productivity according to Tran and Tian (2015), depends on the way it organizes production. The decisions of its owners and managers on how to combine different inputs and factors of production with particular technologies, given demand for their product, determine the efficiency of the organization. Organizations whether public or private are to obey the rule of incorporation according to the company laws of Nigeria and making enough business profits to survive the competitions which is the hallmark of productivity (Fubara, 2010). However, quite a number of these organizations are sick, and some are in the process of becoming so concerned about the poor financial or non-financial performance of majority of organizations in Nigeria. Fubara cited in Kiabel (2012) examined the reasons for the prolonged abysmal organization’s productivity and established that some organizations performed very poor in terms of productivity criteria set. According to Kiabel, the poor productivity could be attributed to inept management, insufficient funds, paucity of technology and incongruent management organization objectives.

The unsatisfactory productivity of organizations in Nigeria had been condemned based on various reasons. According to Abdullahi (2013), the poor productivity is due to bureaucratic red-taptism and lethargy of the organization which is still intact in the management and operations of both private and government entities. The Federal Ministry of Finance Incorporated (2006) had identified high incidence of fraud, employment of staff based on political connections rather than on ability to perform, parliamentary control and financial indiscipline as causes of poor productivity. Dogo (1990) cited in Kiabel (2012) has posited that the accounting systems of many organization in Nigeria do not seem to guarantee proper and up-to-date financial reports thus making auditing cumbersome. This implies that only a negligible percentage of organizations adhere to auditing processes.

Auditing is universally recognized as potent to the productivity of an organization as it acts as a powerful brake on the possible deviations from the predetermined objectives and policies. This accounts that any organization that considers an appropriate
The system of accounting controls like audit is likely to be productive in nature than those that do not. In the words of Okezie (2004), an organization’s audit function can significantly affect the operations of the enterprise and may have an impact on the ability of the organization to remain a going-concern. Auditing as it exists today was established only in the later part of the nineteenth century, borne out of the complexity of modern-day business world. According to Abdullahi (2013), auditing is concerned with the verification of accounting data, in the determination to achieve the accuracy and reliability of accounting statements and reports. Audit function has evolved in response to a perceived need of individuals or groups in society who seek information or reassurance about the conduct or performance of others in which they have acknowledged and legitimate interest. Audit in relation to the wish of an organization is remarked by its report. This assertion upholds that audit report is a sin qua non for organizational productivity.

Audit report is seen as the end product of each audit. Okezie (2004) maintained that audit report is considered as a vital channel through which opinions of an auditor about the financial statements and the findings of the organization audited are expressed. The audit report summarizes the outcome of the audit work done by the auditor. Kiabel (2012) revealed that auditor collects evidences about financial statements or other propositions covered by audit through different methods. Gathered evidences and examined with all amount of care, diligence, skill among others and eventually drew suitable conclusions as well as conveyance through the audit report. In line with the AAS 28, the audit report contains the following pertinent elements such as; title of the report; addressee; opening or introductory paragraph; scope paragraph; opinion paragraph; signature; place of signature; and date of the report (Kiabel, 2012).

1) Title of the report: This should be appropriate. That is, it enables the readers to identity the auditor’s report and also distinguish it from the reports of others such as director’s report, accountant’s report etc.

2) Addressee: The auditor’s report should be addressed to the person to whom it should be forwarded. Generally, it is submitted to the person who appoints the auditor. Hence, the addressee is a person who appoints the auditor and to whom the report is forwarded. In case of the statutory audit of an organization, it is the shareholders who are the addressee.

3) Opening or introductory paragraph: It consists of the identification of the following aspects: (a) Financial statements audited: These are identified by name of the organization and the period covered by the financial statements. (b) Clear marking of responsibility between the management and the auditor: This should state clearly that the financial statements are the responsibility of the organization’s management and that the responsibility of the auditor is to express an opinion thereon.

4) Scope paragraph: This specifies the nature and scope of the work performed by the auditor. It should state that the audit was conducted as per the auditing standards generally accepted and the audit was planned and performed to obtained assurance that the financial statements are free of material misstatement.
5) Opinion paragraph: This section specifies the financial reporting framework such as accounting principles generally accepted used to prepare the financial statements and state the auditor’s opinion as to whether the financial statements give a true and fair view in accordance with the financial reporting framework and whether they comply with the statutory requirements.

6) Signature: The auditor in his personal name should sign the auditor’s report. The report should be signed in the personal name of the auditor and also in the name of the audit firm if it was appointed as the auditor. While signing the report, the membership number of the partner or proprietor, assigned by the professional body should be mentioned.

7) Place of signature: The report should specify the location, where the audit report is signed. That is the town or city where the report is signed should be mentioned specifically here.

8) Date of the report: This indicates the date when the report is signed by the auditor with his views and opinions about the financial statements of the organization he audited. This creates a sound effect that the auditor has considered. On the financial statements and on the audit report of the events and transactions that occurred, and of which the auditor became aware up to that date. The report should not be pre-dated than the date on which the financial statement is signed or approved by the management.

The genuineness of the report in terms of the language and the words used are of great importance since it is on them that the legal responsibility for negligence and fraud rests. The primary goal of contemporary audit report is to generate qualitative information concerning economic entities, majorly financial and non-financial in nature useful for economic organizations to achieve its set goals. IASB (2008) showed that providing qualitative reports is important because it will positively influence capital providers and other stakeholders in making investments credit and similar resource allocation decision thereby enhancing overall productivity of the organization. Institute of Internal Auditors (2018) pointed out that it is a fact of life that busy audit committee members and management dread the prospect of reading long and wordy audit reports. Every extra word means there is more potential for disagreement, and lengthier time to agree and finalise a report. Inspite of this, fraud has continued to rear its ugly head in many organizations.

The existence of fraud in the global organizations is becoming rampant and this can be shown in the large percentage of report of issues of bribery, corruption, embezzlement, money laundering, racketing, fraudulent financial reporting, tax evasion, forgery and other means through which financial and economic dishonesty are being perpetrated (Ofiafoh and Otalor, 2013). In the words of Bassey (2018), the occurrence of fraud and other financial crimes which affect the organizational productivity have today gone sophisticated and even the advent of computerization together with the introduction of ICT have enhanced the problem of financial crimes. The detection and reduction of these fraudulent activities are committing these crimes much easier. Frauds have the inherent power to bring large organizations to their knees, cause huge monetary
loss, prompt lawsuits followed by significant legal expenses, lead to the imprisonment of employees and deteriorate the confidence in the market which remained unethical in organizational productivity. Hence, Onodu, Okafor and Onyali (2015) were of the view that forensic audit skills are required to uphold and established the occurrence of irregularities in contemporary audit report.

Obviously, the priority of forensic audit skills in Nigeria is considered relevant in order to settle the accounting profession with the strengths to deal effectively with the problem of unearthing ingenious fraud schemes arising from audit failures. Centre for Forensic Studies (2010) cited in Bassey (2018) reported that if well applied, forensic audit could be used to reverse the leakages that cause corporate failures. This could be linked to the fact that proactive forensic audit skills seek out errors, operational vagaries and deviant transactions before they crystallize into fraud.

Forensic audit according to Huber (2017) is a multidiscipline that combines accounting, auditing and investigative skills to detect financial irregularities and recommend appropriate guidelines for the relevant parties. According to Onyekwelu, Okoh and Nnaemeka (2016), forensic relates to crime solving. It is the application of science to decide questions arising from crime or litigation and thus introduced in accounting domain to serve as a more reliable and evidential means of enhancing financial investigations and prevention or reduction of financial impropriety in all forms. The Institute of Company Secretaries of India (2019) defined forensic audit skills as diligent set of skills and tools for detecting the fraud through transactions outside the system reflecting fraud, through analyzing the financial statements and other circumstantial evidences making the difference in identifying fraudulent disclosure and finding the real culprit behind the fraud and related loss, providing the evidences in the court.

Forensic audit has developed and gained global acceptance in the efforts of curbing crimes in the organization which reduces the productivity levels. Issa and Al-Azzabi (2018) added that forensic audit has become more important within organizations, especially internal auditors failed in different cases to prevent or detect unethical practices that have been going on for years in the workplace. Therefore, Bassey (2018) revealed the forensic audit skills on contemporary audit report to include; data mining, relative size factor, computer Assisted Audit Techniques (CAATs) and Benford’s lawskills. Based on the context of this paper, data mining and Computer Assisted Audit Techniques (CAATs) would be adopted as the variables for this study.

2. Data Mining Skills and Organizational Productivity

Data mining is the process of finding anomalies, patterns and correlations within large data sets to predict outcomes. Data mining can also be used by organizations to turn raw data into useful information. Bassey (2018) revealed that by using software to look for patterns in large batches of data, organizations can learn more about their customers and develop more effective marketing strategies as well as increase sales and decrease costs. Huber (2017) stated that data mining skills is the extraction of hidden predictive
information from large database, and a powerful new technology with great potential to help Companies focus on the most important information in their warehouses. Data mining skills predict future trends and behaviors allowing Businesses to make proactive knowledge driven decisions. The automated prospective analyses offered by data mining move beyond the analyses of past events provided by retrospective tools typical of decision support systems. Data mining help organizations understand their customer base as well as the billions of transactions at the heart of the financial system. Data mining helps financial services Companies get better view of market risks, detect fraud faster, manage regulatory compliance obligations and get optimal returns on their marketing investments.

2.1 Computer Assisted Audit Techniques (CAATs) and Organizational Productivity

Computer Assisted Audit Techniques (CAATs) are computer programs and data the auditors use as part of the audit procedures to process data of audit significance contained in a client computer information system (CIS). According to Bassey (2018), CAATS is a skill used by Auditors to make search from the irregularities from the given data. With the help of this tool, the internal accounting department of any firm will be able to provide more analytical results. These tools are used throughout every business environment and also in the industrial sectors too. With the help of CAATs, more Forensic Accounting with more analysis can be done. It’s really a helpful tool that helps the firm Auditor to work in an efficient and productive manner (Ofiafor and Otalor, 2013). The Computer Assisted Audit Techniques is made of two types. The first type is Audit software which comprises computer programs used for audit purposes to process data and audit purposes to process data and audit significance from the client accounting system. It is used by the auditor to examine the entity computer file and may be used during both test of control and substantive testing of transactions and balances as the program can scrutinize large volume of data and extract information, leaving skilled manual resources to concentrate upon the investigation of the results. The second type of Computer Assisted Audit Techniques is Test data, which is data submitted by the Auditor for Processing by the client’s computer-based accounting system in order to test the operation of the enterprise’s computer programs.

3. Statement of the Problem

Despite the prominent role of auditing in organizational productivity, today’s organizations could not be proud of its existence as a result of some factors bedeviled its productivity such as fraud, embezzlement, falsifications, alterations, mismanagement, misappropriation among others. It could be observed by the researcher that several efforts of organizations to be adherence to the audit report so as to be free from organizational problems continued to prove abortive. This is evidenced in the sabotage as well as loopholes in the contemporary audit report. Suggestions by researchers revealed that there is greater ignorance of many organizations on how to recurb the organizational productivity using forensic audit skills such as data mining and computer
assisted audit techniques. Therefore, it is on this note that this study determines the forensic audit skills on contemporary audit report and organizational productivity.

3.1 Purpose of the Study
The purpose of the study was to determine how forensic audit skills on contemporary audit report can predict organizational productivity. Specifically, the study sought to:

1) determine how data mining skill can predict organizational productivity.
2) determine how computer assisted audit techniques can predict organizational productivity.

3.2 Research Questions
The study was designed to provide answers to the following research questions:

1) How does data mining skill predict organizational productivity?
2) How does computer assisted audit techniques predict organizational productivity?

3.3 Research Hypotheses
The following null hypotheses were formulated and tested at 0.05 level of significance:

**Ho₁:** Data mining skills does not significantly predict organizational productivity.
**Ho₂:** Computer assisted audit techniques does not significantly predict organizational productivity.

4. Methodology
The descriptive survey design was used in the study, and it was carried out in Akwa Ibom State and therefore restricted to two organizations; namely; Akwa Ibom State Water Company Limited and Champion Breweries Plc all located in Uyo. The rationale in the chosen of these organizations is as a result of serious arguments and debates as well as fall in its expectations which could be attributed to poor productivity which emanated from the researcher’s knowledge of the environment. The population of the study consists of 2,836 staff made up of 1,784 from Champion Breweries Plc and 1,052 from Akwa Ibom Water Company (Akwa Ibom State Ministry of Investment Report, 2018).

The sample size of the study was 351 selected from the two organizations. This was determined statistically using Taro Yamane formula. The purposive sampling technique was adopted for the study.

A questionnaire titled “Forensic Audit Skills on Contemporary Audit Report and Organizational Productivity Questionnaire (FASCAROPQ)” was developed and used for data collection. It was structured on the four-point rating scale response of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The instrument was validated using three experts from the University of Uyo. The Cronbach Alpha reliability technique was used for reliability test in which 0.79 was obtained which showed that the instrument was reliable for the study. Regression analysis was used in answering the research questions as well as testing the null hypotheses at 0.05 level of significance.
decision rule of R-value and the associated nature of prediction as suggested by Joshua (2005) were adopted as guidelines for the research questions. These are: +1.00 – perfect prediction, +0.50 to 0.99 – High (strong) prediction, +0.01 to 0.49 – low (weak) prediction. While, for the hypotheses, the calculated F-value was compared with Table value at 0.05 level of significance.

5. Results

Research Question 1: How does data mining skill predict organizational productivity?

Table 1: Regression analysis showing how data mining skill predict organizational productivity (n = 351)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-square</th>
<th>Adjusted R-square</th>
<th>Std. error of the estimate</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.890</td>
<td>0.793</td>
<td>0.792</td>
<td>.80024</td>
<td>High prediction</td>
</tr>
</tbody>
</table>

Table 1 with R-value of 0.890 indicates that data mining skill prediction on organizational is high. Additionally, the positive value of the adjusted R-square indicates positive prediction. The R-square of 0.793 implies that data mining skill account for 79.3% prediction on organizational productivity.

Research Question 2: How does computer assisted audit techniques predict organizational productivity?

Table 2: Regression analysis showing how computer assisted audit techniques predict organizational productivity (n = 351)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-square</th>
<th>Adjusted R-square</th>
<th>Std. error of the estimate</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.808</td>
<td>0.653</td>
<td>0.625</td>
<td>1.03254</td>
<td>High prediction</td>
</tr>
</tbody>
</table>

Table 2 with R-value of 0.808 indicates that computer assisted audit techniques prediction on organizational productivity is high. Additionally, the positive value of the adjusted R-square indicates positive prediction. The R-square of 0.653 implies that computer assisted audit techniques account for 65.3% prediction on organizational productivity.

Null Hypothesis 1: Data mining skill does not significantly predict organizational productivity.

Table 3: Regression analysis on data mining skill and organizational productivity (n = 351)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 regression</td>
<td>1249.205</td>
<td>1</td>
<td>1249.205</td>
<td>1950.690</td>
<td>Rejected Ho</td>
</tr>
<tr>
<td>Residual</td>
<td>326.600</td>
<td>349</td>
<td>.640</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1575.805</td>
<td>350</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3 reveals that the calculated F-value of 1950.690 is greater than the Table value of 3.84 at 0.05 level of significance. The prediction is significant. Therefore, the null hypothesis which stated that data mining skill does not significantly predict organizational productivity is rejected. This shows that data mining skill significantly predict organizational productivity.

**Null Hypothesis 2:** Computer assisted audit techniques does not significantly predict organizational productivity.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 regression</td>
<td>1024.013</td>
<td>1</td>
<td>1024.013</td>
<td>960.490</td>
<td>Rejected Ho</td>
</tr>
<tr>
<td>Residual</td>
<td>543.729</td>
<td>349</td>
<td>1.066</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1567.742</td>
<td>350</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 reveals that the calculated F-value of 960.490 is greater than the Table value of 3.84 at 0.05 level of significance. The prediction is significant. Therefore, the null hypothesis which stated that computer assisted audit techniques does not significantly predict organizational productivity is rejected. This shows that computer assisted audit techniques significantly predict organizational productivity.

6. Discussion of Findings

The finding regarding research I and null hypothesis I indicated that data mining skill significantly predict organizational productivity. This explains that data mining skills is inevitable in organizational productivity. This finding is in line with the findings of Bassy (2018) who maintained that by using data mining software to look for patterns in large batches of data, organizations can learn more about their customers and develop more effective marketing strategies as well as increase sales and decrease costs. Again, Huber (2017) supported that data mining skills is the extraction of hidden predictive information from large database and a powerful new technology with great potential to organizations focus on the vital points in the warehouses. From this finding, it is deduced that through data mining skill on contemporary audit report, organizations obtained better new of market risks, detect fraud faster, manage regulatory compliance obligations among others.

The findings on research questions 2 and null hypothesis 2 revealed that computer assisted audit techniques (CAATs) significantly predict organizational productivity. This explains that CAATs is a necessity for organizational productivity to be attained. This finding is in agreement with the findings of Bassey (2018) who posited that CAATs are computer program and data for auditors uses as part of the audit procedures to process data of audit significance contained in a client computer information system.
7. Conclusion

Based on the findings of this study, it can be concluded that data mining skill and CAATs are essential for organizational productivity because without these skills contemporary audit report would be handled haphazardly, and its objectives would also be forfeited. Therefore, forensic audit skills are very paramount to operators of any organization in order to seal the loopholes of fraud and other errors that may emanate from irregularities in contemporary audit report.

7.1 Recommendations

Based on the findings of this study, the following recommendations are made:

1) Owners and managers of organization should ensure that their auditors adhere to data mining skill for effective audit report that would lead to optimal productivity of the organization.

2) Owners/managers of organization should ensure that computer assisted audit techniques are properly installed in the operations for auditors to use while preparing their reports. This would be possible through efficient information technology systems.

Conflict of Interest Statement

The authors declare that there is no conflict of interest.

About the Authors

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