Accounting Software in a Computerized Business Environment and Quality of Corporate Reporting

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Abstract
The advent of Information, communication and globalization has made the preparation of reports using modern software application to minimize stress as a result of voluminous transactions. Quality and proper accounting information is very essential for the growth of an organization and thus development of the economy of any country. Many businesses have failed and a number were as a result of untimely, inaccurate and poor quality accounting information. The objective of the study was to critically examine the relationship between accounting software and quality of corporate reporting. The study adopted a survey research design. The population was 8 food and beverage manufacturing companies and 2 out of them were selected purposively. The findings reveal that software efficiency had a significant impact on reliability of corporate reporting (Adj $R^2 = 0.278$, $F$-Stat = 10.352, $P < 0.05$) and Accounting information also impacted positively on timeliness of reporting (Adj $R^2 = 0.217$, $F$-Stat = 8.805, $P < 0.05$). The study concluded that there exists a significant relationship between software efficiency and reliability of corporate reporting as well as accounting information and timeliness of corporate reporting and it was recommended that manufacturing companies develop and adopt the use of the accounting software as a matter of policy which will improve their corporate reporting and also ensure that the quality of accounting information used for corporate reporting meets the need of the users in terms of timely preparation.

Keywords: Accounting Software, Corporate Reporting, Globalization, Reliability, Software Efficiency, Timeliness

I. Introduction
The accounting unit of every Organization is a key segment because the finance of a firm is a major resource needed to aid operations. Financial reporting and accounting takes an important role in operating a business organization. Financial reporting and Accounting has numerous processes; some simple, others complex and burdensome. As the business grows, acquires new customers, enters new markets and keeps pace with constant changes in information systems, companies need to maintain highly accurate and up-to-date accounting, inventory and statutory records (Deus, 2019).

For the longest time, many enterprises have satisfactorily carried out their accounting manually, keeping records and files in paper and hardcopy formats. However, these have been an extremely stressful, time consuming, cumbersome and expensive method. With the advent and advancement of technology, many of these processes have been shifted and are better done using electronic means in form of accounting software and information system.

Accounting Software are application tools which when incorporated into the field of Information System, were designed to help in the management and control of topics relating to firms’ economic and financial area.

According to Mbobo and Ekpo (2020), it is interesting that the manual and automated accounting methods adopt the same principles and concepts. The major area of difference is in the technicalities involved in the automated process. The merits of using computerized accounting system and software are numerous including speed and accuracy, reliability, large storage capacity occupying limited physical space. However, the benefits are matched by a great cost. Setting up and adopting accounting software to perform tasks and operations is quite expensive.

Accounting information system is very important to both businesses and organization according to Hla and Teru (2015) as it facilitates management decision making, quality of the financial report, internal controls,
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and the company’s transaction besides playing a crucial role in economic system. As information technologies grow more progressively, the manual accounting systems have become gradually inadequate for decision needs. Okafor (2018) opined that a computerized accounting system has many advantages over manual accounting systems for example, a single entry can be made in the system and the system will do all the appropriate entries in corresponding accounts automatically rather than the manual system. It makes it easy for people in other departments’ not just accountants to access or input information into the system.

Unlike manual accounting systems which depend highly on the expertise of professional accountants to process and analyze the entered data, computerized accounting systems uses analytical logarithms to analyze the data, sort it and securely store for future referencing.

Quality and proper accounting information is very essential for the growth of an organization and thus development of the economy of any country. Many businesses have failed and a number were as a result of untimely, inaccurate and poor quality accounting information (Panjaitan, 2018).

Regardless of the size of the organization, an accounting system is designed to collect, analyze and report financial information about an entity. Tools such as annual reports, audits, quarterly reports, financial accounts, performance assessments and independent evaluations can be derived from computerized accounting systems.

Over the past years, there has been wide adoption and advancement in the use of technology and software in business environments and more specifically in the area of accounting. However, despite the pros and merits of using a computerized system, some businesses still encounter same or similar problems or occurrences such as inaccurate figures, untimely reporting and so on. Hence, it has been difficult to ascertain whether the use of accounting software really holds much significance and if the benefits from its use outweigh or match the costs involved (Sekyere, Amoateng & Frimpong, 2017).

The objective of the study is to determine how accounting software in a computerized business environment improves the quality of corporate reporting. The specific objectives of the study are to establish the relationship that exists between software efficiency and reliability of corporate reporting and to assess the relationship that exists between accounting information and timeliness of corporate reporting.

The study will highlight the relationship between accounting software in a computerized business environment and quality of corporate reporting. It will prove the success and growth associated with adopting accounting software and will be relevant to provide solutions to the constraints of computerized accounting in financial reporting. Further, the study will enable management understand the significance of preparing quality and reliable financial reports using software as well as point out weaknesses that will need to be addressed. Students who will be able to access this information will be equipped with knowledge as well as guidance for further research.

II. Literature Review/Theoretical Framework

2.1 Conceptual Framework

Accounting Software

Accounting Software is a type of application software that records and processes accounting transactions within functional modules such as accounts payable, accounts receivable, journal, payroll etc. Professional accountants and bookkeeping teams use these programs to govern accounts and automate systematic operations. It functions as an accounting information system such as Invoicing Software, Payroll System, ERP Systems. Accounting Software are used to simplify accounts, to save cost, for transparency, accurate forecasting, productivity complying with tax laws etc. Examples of Accounting Software are SAGE, Peachtree, QuickBooks, Wave Accounting etc (Sekyere, Amoateng, & Frimpong, 2017).

Business Environment

This indicates the total of people, organizations and other forces, both internal and external factors that are associated or affiliated with the entity or business e.g employees, customers, management, clients, suppliers, government etc. It is broken down into Micro, Macro and Market Environment. All these factors and elements affect the business (Deus, 2019).

Corporate Reporting

This refers to the presentation and disclosure aspects of reporting. It is a form of communication with expressly stated details about the financial health of an entity throughout the preceding year which now affords shareholders and other users of such information the opportunity to make their decisions. Reports must be relevant, understandable, reliable, complete, objective, consistent and timely. They include Statement of Financial Position, Income Statement, cash flow statement, statement of retained earnings etc. Therefore, financial reporting is the communication of an entity’s financial results/information prepared/presented.
2.2 Theoretical Review

This study reviewed two theories namely: Agency theory and Information theory but the study is hinged on the Agency theory.

Agency Theory

Agency theory was developed by Jensen and Meckling in 1976. They formulated the theory based on the conflict of interest which may exist between the shareholders, managers and financiers of debt (Institute of Chartered Accountants of Nigeria, 2014).

In the 1960s/70s, theorists explored how risk is being shared among individuals or group of people. It was described in the literature published from this exploration on risk that the problem of sharing risk ensues when a team or an aligned group of individuals have different appetite and attitude towards risk. To further broaden the scope of this problem, agency theory included the problem that arises as a result of a team or cooperating parties having different goals (Jensen & Meckling, 1976; Ross, 1973).

Agency theory is particular about the relationship that exists between the principal (who delegates the work) and the agent (who performs the work). The theory seeks to expand on this relationship using the metaphor of a contract (Jensen & Meckling, 1976).

Information Theory

The first ever mention of information theory was in 1948 by Claude Shannon. The first half of the 20th century experienced a revolution which brought with it a new knowledge about information, that is, what information is seen as. The revolution was led by Claude Shannon who is regarded as the father of modern information theory. He presented a paper in 1948 on: A Mathematical Theory of Communication and described a communication system in which information plays a vital role. Several concepts were introduced such as the capacity of an information channel, the optimal rate of information in a noisy environment and the uncertainty of an information source. All these concepts shed more light and served as the foundation for the thoughts on information. According to Shannon, "the problem of communication is that of reproducing at one point, either exactly or approximately, a message selected at another point. Frequently the messages have meaning; that is they refer to or are correlated according to some system with certain physical or conceptual entities".

2.3 Empirical Review

Sekyere, Amoateng and Frimpong (2017) carried out a study on the Determinants of Computerized Accounting System on Accurate Financial Report in Listed Banks on the Ghana Stock Exchange. It could be gathered from the findings that the interference by management, inadequate training on the interpretation and preparation of the incessant updates on standards and human errors were the challenges bedeviling the preparation of financial reports.

Tarus and Kawasira (2015) studied the determinants of the accuracy of financial reports accuracy. The study concluded that there exists a significant positive relationship between financial report accuracy and Computerised Accounting.

Deus (2019) analyzed The Role of Computerized Accounting System in Financial Reporting; A Case of Kapchorwa District Local Government. The researcher employed both qualitative and quantitative research designs with a case study and a sample size of 50 respondents. Both primary and secondary data were used and the data collection methods included use of questionnaires and interview guides to collect in depth information; they contained open ended and closed questions and data was analyzed using SPSS. The study established that computerized accounting system has great impact on the quality of financial reports and that many financial statements were generated through the computerized accounting system. The study recommends that in order to achieve the proper use of the technology, there should be training of staff, mandatory regulations to all local governments, appraising of staff, building of relationships, routine maintenance and internal reviews.

Alshebeil (2017) conducted a study and sought to identify the role of accounting information systems in achieving competitive advantage for Jordanian commercial banks, and his findings showed that there is a statistically significant impact on accounting information systems on achieving the dimensions of competitive advantage by improving the pricing process for banking services, reducing costs of banking services, increasing the speed of provided services, and increasing market share.

Amveko (2016) in a related research study aimed to identify the impact of computerized accounting information systems on financial reporting in Kampala, the financial reports generated to conform to some of the quality attributes of good financial information. This showed a positive correlation of response on quality attributes of timeliness and accuracy though it was on a low scale, the research findings revealed that computerized accounting system actually influences the quality of financial reports for publication purposes.
According to McBride (2000), computerized packages can quickly generate all types of reports needed by management, for instance, budget analysis and variance analysis. Data processing and analysis are faster and more accurate and meet the managers' need for accurate and timely information for decision making.

Wood (1999) consented to the speed with which accounting is done and also indicated that a computerized accounting system can retrieve balance sheets, income statement or other accounting reports within seconds and with less effort. He further added that computerized accounting system allows managers to easily identify and solve problems instantly.

Kateeba (2000) his studies sought to establish the relationship between governance and quality of financial reports in NGOs in Kosovo, the research carried out in Kosovo focused on the Financial factor, when a question was asked about their financial resources based on their last financial year, 75% of NGOs answered that foreign donors are the only or main financial sources of their projects and activities. The study findings confirmed a strong relationship between accounting systems and quality of financial reports. It was therefore recommended that NGOs should review their current accounting systems to identify gaps and then put in place the necessary steps to fill in those gaps.

El-Dalabeel (2012) conducted a research into the role of computerized accounting information systems in reducing the costs of medical services at King Abdullah University Hospital, and his findings showed that computerized accounting information systems play an important role in reducing the costs of medical services at King Abdullah University Hospital compared with non-computerized systems, which usually require bigger costs and do not contribute to reducing the costs of medical services.

According to Luther and Boru (2013) investigated the Use of Annual Financial Statements by Loan Officers in Kenya. The result of the study showed that financial statements are rated as a very important source of information by credit risk analyst however commercial banks do not rely on one source of information. The worry though was a lack of concern of social objectives when lending.

Mwaura (2013) examined the relationship between the financial performance of NGOs in Kenya and financial accountability. It was revealed from the study that the NGOs that prepared their reports according to financial standards guidelines and best practices became more attractive to donors and increased their donor support which in turn enhanced their performance.

### III. Methodology

The research design adopted for this study was survey design. The design was used to examine the effect of accounting software in a computerized business environment and quality of corporate reporting. The population of the study was the eight companies in beverage sector of the manufacturing industry in Nigeria. From the survey, Nestle Company Plc, and Coca-Cola Bottling Company were selected as representatives of the manufacturing industry in Nigeria. The purposive sampling technique was employed to arrive at the sample. As at 2020, the estimated number of employees in the Nestle Company was 4,800 while Coca-Cola Bottling Company Plc boasts of 3,500 at the time. To determine the sample size the Yaro Yamani’s formula was used.

\[
n = \frac{N \times (e^2)}{N - n^2}
\]

Where:
- **n** = Desired sample size
- **N** = Size of population
- **e** = limit of error tolerance which was assured to be 5% (0.05) confidence limit

\[
n = \frac{N \times (0.05)^2}{8300}
\]

\[
n = \frac{N \times (0.0025)^2}{8300}
\]

\[
n = \frac{N \times (0.0025)^2}{8300}
\]

\[
n = \frac{N}{8300}
\]

\[
n = \frac{1}{8300} + \frac{20.75}{8300}
\]

\[
n = \frac{21.75}{8300}
\]

\[
n = 382
\]

Primary data was collected through administering of questionnaire to the staff of the companies. The questionnaire was administered to 382 individuals and 277 were retrieved. The questionnaire so designed was administered to the staff of the Nestle Company and Coca-Cola Bottling Company Plc. The percentage of retrieved questionnaire to the administered is 73%.
**Model Specification**

This research attempts a numeric measure of the effect of accounting software in a computerized business environment and quality of corporate reporting. The linear relationship between the dependent and independent variable in this study is functionally expressed thus:

\[ Y = f(X) \]

Where \( Y = \) Corporate Reporting (dependent variable)

\( f = \) functional relationship

\( X = \) Accounting Software (independent variable)

\[ RL = e_1 + \beta_1 SE + \mu_e \] \( \quad \text{H}_0_1 \)

\[ TL = e_1 + \beta_2 AI + \mu_e \] \( \quad \text{H}_0_2 \)

Where \( CR = \) Corporate Reporting

\( RL = \) Reliability

\( TL = \) Timeliness

\( SE = \) Software efficiency

\( AI = \) Accounting Information

\( \mu_e = \) Error term

\( e_1 = \) Constant

\( \beta_1, \beta_2 = \) Model Coefficient

**IV. Results and Analysis**

4.1 Test of Hypotheses

**Hypothesis One**

\( H_0_1: \) There is no significant relationship between software efficiency and reliability of corporate reporting. To test this hypothesis, linear regression method was adopted. The results and conclusions are explained below.

**Table 4.1** Model Summary One

<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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.530</td>
<td>0.280</td>
<td>0.278</td>
<td>0.42477</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Software Efficiency

Table 4.1 shows the result from the analysis that relationship exists between the independent variable and the dependent variable. The model was significant by establishing a relationship between software efficiency and reliability of corporate reporting. The coefficient of determination (R²) is 0.280, which indicates that 28 percent of the variations in corporate reporting were explained by the independent variable which is software efficiency. Therefore, it is concluded that for Hypothesis one that, there is a significant relationship between software efficiency and reliability of corporate reporting.

**Table 4.2** Regression Result for Model One

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.061</td>
<td>0.225</td>
<td>9.156</td>
</tr>
<tr>
<td></td>
<td>Software Efficiency</td>
<td>0.529</td>
<td>0.051</td>
<td>1.350</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Corporate Reporting

\[ RL = 2.061 + 0.529SE + \mu_e \]

**Interpretation of Results**

From table 4.2 above, the constant gave a value 2.061 which is the intercept, hence establishing a positive relationship because of the positive value while the row contains the Independent Variable (software efficiency) which refers to the slope. The table also shows the t statistics which helped to determine the relative importance of each variable in the model and this is known by the independent variable. The value for the independent variable is statistically significant; this also explains the establishment of a relationship between the independent variable and the dependent variable. The independent variable (software efficiency) had a significant value of 0.000 which is lower than the decision rule value of 0.05 (p<0.05) and this explains for the strong relationship that existed among the variables. Therefore, it is concluded that there is significant relationship between software efficiency and reliability of corporate reporting. Based on this, the null hypothesis is rejected and the alternative hypothesis accepted.
Hypothesis Two

H02: There is no significant relationship between accounting information and timeliness of corporate reporting.

This hypothesis was tested using the linear regression model. The results and conclusions are explained below.

### Table 4.3 Model Summary Two

<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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.469</td>
<td>0.220</td>
<td>0.217</td>
<td>0.57006</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Accounting Information

Table 4.3 shows the result from the analysis that relationship exists between the independent variable and the dependent variable. The model was significant by establishing a relationship between accounting information and timeliness of corporate reporting. The coefficient of determination (R^2) is 0.220, which indicates that 22 percent of the variations in accounting information were explained by the independent variable which is timeliness. Therefore, it is concluded that for Hypothesis two that, there is a significant relationship between accounting information and timeliness of corporate reporting.

### Table 4.4 Regression Result for Model Two

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2.294</td>
<td>0.201</td>
<td></td>
<td>11.399</td>
</tr>
<tr>
<td></td>
<td>Accounting Information</td>
<td>0.435</td>
<td>0.049</td>
<td>0.469</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Corporate Reporting

\[ TL = 2.294 + 0.435AI + \mu_e \]

### Interpretation of Results

From table 4.4 above, the constant gave a value 2.294 which is the intercept, hence establishing a positive relationship because of the positive value while the row contains the name of the Independent Variable (Accounting Information) which refers to the slope. The table also shows the t statistics which helped to determine the relative importance of each variable in the model and this is known by the independent variable. The value for the independent variable is statistically significant, this also explain the establishment of a relationship between the independent variable and the dependent variable. The independent variable (Accounting Information) had a significant value of 0.000 which is lower than the decision rule value of 0.05 (p<0.05) and this explains for the strong relationship that existed among the variables. Therefore, it is concluded that there is significant relationship between accounting information and timeliness of corporate reporting. Based on this result, the null hypothesis is rejected and the alternative hypothesis accepted.

### V. Discussion of Findings

The regression result of model one reveals a linear regression result of the independent variable (software efficiency) on the dependent variable (reliability). The result showed that there is a significant relationship between software efficiency and reliability of reporting. This result follows the study of Pantamee, Abubakar and Umar (2008). The findings of their research work led them to conclude that there is a significant relationship between accounting software in a computerized business environment and quality of corporate reporting in the manufacturing industry. The result of this study was also in tandem with the works of Jawabreh and Al-rabei (2012).

The regression result of model two revealed a linear regression result of the independent variable on the dependent variable. The result shows that there is a significant relationship between accounting information and timeliness of corporate reporting. The conclusion of Pekin's field experiment in 1988 was that accounting information obtained from financial reports/statements will aid timely preparation of reports and boost the confidence of managers with regards to its quality. This submission was supported by the findings from this work and the work of Al-raber, et Al., (2015). An essential discuss in this study is about how to use accounting information systems to improve the timing of preparation of financial statements such that it will be communicated to the stakeholders and other interest users on time.

### VI. Conclusion and Recommendations

From the results, it can be concluded that there is a significant positive relationship between software efficiency and the reliability of corporate reporting as well as accounting information and timeliness of corporate reporting. The following recommendations were made:
Manufacturing companies develop and adopt the use of the accounting software as a matter of policy which will improve their corporate reporting and also ensure that the quality of accounting information used for corporate reporting meets the need of the users in terms of timely preparation.

**Contribution to future research**

This study has contributed to the frontiers of knowledge on the effect of software in a computerized business environment and quality of corporate reporting. The contributions are as follows:

To investors and the general public who might want to invest in companies to be conscious of the quality in terms of reliability and timeliness of the reports which would inform economic decisions that would be made.

To standard setters and regulators who are to ensure that the disclosure guidelines are strictly adhered to in terms of the contents of the reports and sanctions melted appropriately to erring offenders.

To scholars and other researchers who can key into the result of this study by conducting similar studied in other industries or geographical jurisdictions to determine whether the results can be obtained in other industries so as to enhance generalization.

**References**


