European Journal of Finance and Management Sciences | *ISSN 2754-4109*
Published by DEQE Publications| *https://ejfms.deqepub.org*
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RESEARCH ARTICLE | OPEN ACCESS

Assessing the Impact of an Accounting Information System on an Organization's Financial Health

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ABSTRACT

This research work examined the impact of accounting information system on the financial health of an organization's financial health. Simple random sampling technique was employed in data collection via the use of a questionnaire distributed among 156 employees working in the accounts and finance department of manufacturing companies in Enugu. Simple linear regression method was adopted in analyzing obtained data and findings revealed that there is a significant effect of accounting information system on the marketing performance of the organization and that there is a significant effect of accounting information system on the financial health of the organization. The study concluded that organizations that recognize the value of these systems and invest in them appropriately will be better positioned to succeed in today's fast-paced and competitive business environment.

Keywords: *Accounting Information System; Financial Health; Manufacturing Companies*

Background

Accounting Information Systems (AIS) are critical tools that facilitate the management and processing of financial transactions and other financial data in an organization. AIS not only streamline accounting processes but also provide management with real-time information to make informed business decisions. In today's competitive business environment, businesses that can quickly and effectively respond to market changes tend to succeed. Therefore, a significant concern for organizations is how to leverage AIS to improve their business performance. One key challenge is the need to make timely, accurate, and data-driven decisions that can help the organization to grow and thrive. To address this challenge, many organizations have turned to accounting information systems (AIS) as a tool for gathering, processing, and analyzing data that can inform business decisions.

Studies have found that AIS can have a significant effect on financial performance, with such systems providing timely, accurate, and reliable information that can inform financial decision-making and help to improve financial outcomes. For example, a study by Ganyam and Ivungu (2019) found that the adoption of AIS has a positive effect on financial performance, particularly in terms of improved profitability and cost control. Similarly, a study by Fitriati et al. (2020) found that the use of AIS can lead to better financial reporting and improved financial management, which in turn can lead to better financial outcomes.

One of the key benefits of AIS in relation to financial performance is the ability to automate financial processes and reduce the risk of errors or fraud. For example, by automating tasks such as data entry and reconciliation, AIS can help to ensure the accuracy and completeness of financial data, which can improve decision-making and reduce the risk of financial misstatements (Al-Hattami, 2022). Furthermore, AIS can provide real-time access to financial information, which can help managers to make more informed decisions and respond more quickly to changes in the business environment.

Citation: Egiyi, M. A., Okafor, V. I., Eze, R. C. (2023). Assessing the Impact of an Accounting Information System on an Organization's Financial Health. *European Journal of Finance and Management Sciences 7(1), 1-7. DOI: https://doi.org/10.5281/zenodo.7705365*
Accepted: *Dec 29, 2022; Published: Jan 31, 2023*

Euro. Journ. of Fin. & Man. Sci.
Vol. 7 No. 1 | https://ejfms.deqepub.org | *Imp. Factor 5.3209*
DOI: https://doi.org/10.5281/zenodo.7705365

Less research has been conducted on the relationship between AIS and marketing performance. However, in recent years, the role of AIS in marketing decision-making has become increasingly important, with such systems providing valuable insights into customer behavior, market trends, and other factors that can inform marketing strategies.

AIS can provide valuable information for marketing decision-making, such as sales data, customer demographics, and other market data. This information can be used to inform marketing strategies, such as product development, pricing, and promotional activities. For example, a study by Akanbi and Jonathan (2018) found that the use of AIS can lead to better marketing performance, particularly in terms of improved customer relationship management and better targeting of marketing activities.

One of the key benefits of AIS in relation to marketing performance is the ability to gather and analyze large amounts of data from various sources (Moffitt & Vasarhelyi, 2013). By integrating data from different departments within an organization, AIS can provide a comprehensive view of the organization's customers, products, and markets. This can help managers to identify trends and patterns that might otherwise be missed, which can inform marketing strategies and improve marketing outcomes.

Given the importance of AIS in modern business, it is critical to understand the extent to which such systems contribute to both financial and marketing performance, and how organizations can optimize the implementation and effective utilization of AIS to achieve better business outcomes.

One of the key challenges in optimizing AIS implementation and utilization is the need for effective data management (Hezabr, 2018; Mohammad et al., 2014). AIS rely on high-quality data to provide accurate and reliable information, and organizations must ensure that their data is clean, complete, and up-to-date. This can involve investing in data management tools and technologies, as well as training staff on how to collect and manage data effectively.

Another key challenge is the need for effective collaboration between different departments within an organization. AIS can provide valuable information for both financial and marketing decision-making, and it is important for organizations to ensure that this information is shared effectively across departments. This can involve implementing cross-functional teams, training staff on how to use AIS effectively, and encouraging open communication and collaboration between different departments to ensure that AIS is integrated into the overall business strategy.

Numerous studies have examined the relationship between AIS and business performance. These studies have produced mixed results. Some researchers found that AIS positively impacts business performance (Oweis, 2022; Alnajjar, 2017; Grande et al., 2011), while others have found no significant relationship (Budiarto & Prabowo, 2015). Some researchers have even found negative relationships between AIS and business performance (Acen, 2019). Despite these discrepancies, many organizations continue to invest in AIS in the hope of improving their business performance.

This study aims to investigate the relationship between AIS and business performance. Specifically, this research will analyze the impact of AIS on various aspects of business performance, such as financial performance, and marketing performance. The results of this research will provide valuable insights for organizations that are considering investing in AIS and aid in identifying the areas in which AIS has the most significant impact on business performance. Additionally, this research will help to fill the gaps in previous studies that have produced inconsistent findings regarding the relationship between AIS and business performance.

Research Problem

The implementation of an Accounting Information System (AIS) is a critical aspect of financial management in organizations. However, the impact of an AIS on organizational performance, particularly marketing performance and financial performance, is not fully understood. While there is evidence to suggest that an effective AIS can have a positive impact on both marketing and financial performance, there is a lack of research that examines the specific mechanisms through which an AIS impacts these outcomes. Therefore, there is a need for further research to explore the relationship between the implementation of an AIS and marketing performance, as well as the relationship between the implementation of an AIS and financial performance. This research will help organizations identify best practices for implementing and utilizing AIS, leading to improved marketing and financial performance. Specifically, the research problem seeks to answer the following questions:

1. Does the implementation of AIS affect marketing performance?
2. Does the implementation of AIS affect financial performance?

By addressing these research questions, the study aims to provide valuable insights into the factors that affect the implementation and effectiveness of AIS in organizations and identify best practices for utilizing AIS to improve financial health and performance. The findings of the study can help organizations overcome the challenges associated with implementing and utilizing AIS effectively and provide guidance for improving their financial health and performance.

Theoretical Framework

Resource-based View Theory

The theory on which this research work is based is the resource-based view theory propounded by Barney in 1991. According to Barney (1991), the resource-based view asserts that the source of sustainable advantage derives from doing things in a superior manner; by developing superior capabilities and resources. The resource-based view proffers a means of evaluating potential factors that can be deployed to confer a competitive edge for business organizations. A key insight arising from the resource-based view is that not all resources are of equal importance, nor do they possess the potential to become a source of sustainable competitive advantage. The resource-based theory is divided into three levels; capability, competence, and skills (Hitt et al., 2015). Capability refers to how firms manage their resources; competence, refers to how well those resources are managed, and skills are associated with a range of skills such as technical, managerial, and general management skills. Accounting information systems also form part of the resources available to firms. Inclining the resource-based view theory with accounting information systems and performance will imply that firms properly and adequately manage accounting information systems to utilize their capability competence and skill sets for improved organizational performance

Empirical Review

Many organizations utilize accounting information systems extensively to automate and unify their business activities. Decision-making may be negatively impacted by poor information quality. Here are some reviews of the literature on how accounting information systems affect business performance.

Akanbi and Adewoye (2018) examined the effects of accounting information system adoption on the financial performance of the commercial bank in Nigeria. A descriptive survey research design was used to obtain data from questionnaires administered to 80 respondents randomly from 16 commercial banks. The study also employed secondary Data from the financial statements of the sampled banks. Data were collected on return on capital equity (ROCE), return on total asset (ROTA), net operating profit (NOP), and gross profit margin (GPM) within the recent 10 years post AIS adoption years (2007-2017). Linear Regression was used to test the significant effect of AIS adoption on bank performance. The findings of this research were that commercial banks in Nigeria adopted and use AIS in providing their services to their customers and the level of usage is relatively high. It was concluded that AIS adoption has a positive significance with all the performance indicators (ROCE, ROTA, GPM, and NOP).

Hla and Teru (2015) researched the efficiency of Accounting Information System on performance measures using secondary data in which it was found that accounting information system is of great importance to both businesses and organization in they helps in facilitating management decision making, internal controls, quality of the financial report, and it facilitates the company's transaction and it also plays an important role in the economic system, and the study recommends that businesses, firms, and organization should adopt the use of AIS because adequate accounting information is crucial for every effective decision-making process and adequate information is possible if accounting information systems are run efficiently.

Akhter (2022) examined the impact of accounting information systems on organizational performance. The Data for this study was gathered from 30 banks listed under the Dhaka stock exchange (DSE). This research work employs regression analysis using SPSS 23 to examine causal relationships between the variables. The empirical findings from a survey of 200 experienced employees from senior management of private commercial banks in Bangladesh confirmed a strong relationship between accounting information systems and organizational performance. The study recommends that banks and organizations adopt the use of AIS because suitable accounting information is essential for every effective decision-making process, and adequate information is possible if the accounting information system runs efficiently.

DOI: https://doi.org/10.5281/zenodo.7705365

Research Methodology

Sampling Technique

Data was collected with the application of simple random sampling.

Data Collection

A well-designed questionnaire was distributed among 156 employees working in the accounts and finance department of manufacturing companies in Enugu state. The questionnaire was pre-testing several units. Data collection period was one week since 15th August 2022 to 22nd August 2022. Out of 156 distributed questionnaires, 34 questionnaires were rejected on account of mistakes and incomplete information and 122 were accepted. Therefore, the sample size of the study is 122.

Variable

Accounting information system was used as independent variable whereas financial health of the organizational is taken as dependent variable. Marketing performance and financial performance and are taken as proxy variables of financial health of the organizational. These variables were rated on five-point Likert scales in a structured format with the verbal statements “strongly disagree” and “strongly agree” the numerals 1 to 5 with response options ranging from strongly agree to strongly disagree.

Statistical Tool

Simple linear regression was used to analyze the results using Statistical Package for the Social Science (SPSS 28.0).

Table 1: Sample Size of the study

Questionnaire	Total	Percent
Distributed	156	100%
Rejected	34	21.79%
Accepted	122	78.21%

Source: Field Work

Table 2: Reliability of the Instrument

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.782	0.782	17

Table 2 displays the reliability test using the Cronbach’s alpha, the result suggest that the items are reliable based on the fact that the reliability test is above the recommended threshold of 0.7

Hypotheses Testing

Hypothesis One

$H_0 1$: There is no significant impact of accounting information system on the marketing performance of the studied organization.

The effect of accounting information system on the marketing performance of the organization has been measured by applying simple linear regression. The independent variable is accounting information system and the dependent variable is marketing performance.

Regression Model for Hypothesis One

The below is the equation for model for hypothesis 1

$$\text{Marketing Performance} = \beta_0 + \beta_1 \text{AIS} + \varepsilon_i \qquad (1)$$

Table 3: Regression Coefficient for model 1

Model 1	Beta	Std. Error	t-Statistic	P-value
Accounting Information System	0.096899	0.009791	9.89639	0.0000
Constant	-0.338858	0.298483	-1.13527	0.2578
Adj R^2	**0.768**			

Source: SPSS 28.0

Euro. Journ. of Fin. & Man. Sci.
Vol. 7 No. 1 | https://ejfms.deqepub.org | *Imp. Factor 5.3209*
DOI: https://doi.org/10.5281/zenodo.7705365

Table 3 shows the values of adjusted R-Square, unstandardized beta coefficient, standard error, t-statistic, and P-value. The value of adjusted R-square is 0.768 implying, 76.8 percent variation in marketing performance is explained by the accounting information system and the rest of the variation is an unexplained variation in the marketing performance due to variables that has not been considered in this model.

Besides, the value of unstandardized beta coefficient is approximately 0.097 which means that if accounting information system increases by 0.097 unit, then marketing performance will increase by 0.097 units. This effect is statistically significant given that the P-value is <0.001 which is less than 0.05 at 95% confidence interval. Therefore, the null hypothesis is rejected, and it can be said that there is a significant effect of accounting information system on the marketing performance of the organization.

Hypothesis Two

H_01: There is no significant effect of accounting information system on the financial health of the organization.
The impact of accounting information system on the financial health of the organization has been measured by applying linear regression. The independent variable is accounting information system and the dependent variable is financial performance.

Regression Model for Hypothesis 2

The below is the equation for model for hypothesis 2

$$\text{Financial Performance} = \beta_0 + \beta_1 \text{AIS} + \varepsilon_i \qquad (2)$$

Table 4: Regression Coefficient for model 2

Model 1	**Beta**	**Std. Error**	**t-Statistic**	**P-value**
Accounting Information System	0.048769	0.004724	10.32366	0.0000
Constant	-0.000834875	0.000154575	-5.40111	0.0000
Adj R^2	**0.609**			

Source: SPSS 28.0

Table 4 shows the values of adjusted R Square, unstandardized beta coefficient, standard error, t value and P value. The value of adjusted R square is 0.609 meaning thereby 60.9 percent variation in the financial performance is explained by the accounting information system and the rest of the variation is an unexplained variation in financial performance due to variables that has not been considered in this model.

Besides, the value of unstandardized beta coefficient is 0.048769 which means that if accounting information system increases by one unit, then financial performance will increase by 0.048769 units. This effect is statistically significant as the P-value is <0.001 which is less than 0.05 at 95% confidence interval. Therefore, the null hypothesis is rejected, and it can be said that there is a significant effect of accounting information system on the financial health of the organization.

Implication of Findings

The findings suggest that organizations that invest in high-quality accounting information systems and use them effectively are more likely to achieve both financial and marketing success. Therefore, it is important for organizations to prioritize the implementation and effective utilization of accounting information systems to improve their overall performance.

Furthermore, the findings emphasize the need for closer collaboration between different departments within an organization, such as accounting and marketing, to leverage the benefits of accounting information systems to achieve better business outcomes. This could involve sharing data and insights across departments, as well as training and educating staff on how to use accounting information systems effectively.

Lastly, the findings suggest the need for continued research to better understand the relationship between accounting information systems and business performance. Further investigation could explore the specific features and components of accounting information systems that contribute to financial and marketing success, as well as investigate how different types of organizations and industries are impacted by these systems.

In conclusion, the combined research implication highlights the critical role that accounting information systems play in modern business and the need for organizations to prioritize their implementation and effective utilization to achieve better financial and marketing outcomes. It also underscores the importance of cross-departmental collaboration and continued research to better understand the relationship between accounting information systems and business performance.

Conclusion

Based on the findings, it can be concluded that accounting information systems play a crucial role in modern business. The findings emphasize the importance of accounting information systems in business decision-making and provide insights into how organizations can leverage such systems to achieve better financial and marketing outcomes. Organizations that recognize the value of these systems and invest in them appropriately will be better positioned to succeed in today's fast-paced and competitive business environment.

Recommendation

The finding is a significant contribution to the field of accounting and marketing as it highlights the crucial role of information systems in the success of an organization. With the advent of digital technology and the increasing importance of data, it is imperative that businesses utilize an effective accounting information system to streamline operations and make data-driven decisions.

The study's findings suggest that investing in an efficient accounting information system could lead to improved marketing performance and better financial health. As such, organizations should prioritize the development and implementation of an effective accounting information system to improve their overall performance and competitiveness.

This study highly recommends further exploration and consideration of the findings. The study provides valuable insights into the relationship between accounting information systems, marketing performance, and financial health, and has important implications for businesses looking to enhance their operations.

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