Analysis of The Influence of Integrated System Development, Accounting Technological Updates and Management Support on Accounting Information System Performance

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Abstract

The purpose of this study is to investigate how the performance of accounting information systems is affected by advancements in technology, support from upper management, education and training, and formalization of system development. This kind of investigation is called a causal study. This study employed primary data for its analysis. A questionnaire is the method used in this study to collect data. Retail companies make up the research's population. In this study, convenience sampling techniques are combined with non-probability sampling to pick the sample. Multiple linear regressions are used in this study's testing. The study's conclusions revealed a number of significant things about the variables affecting how well accounting information systems function in businesses. First, the performance of AIS is negatively impacted by technical advancements. This is a result of the usage of increasingly sophisticated technology, which calls for a higher level of comprehension and expertise to handle. Second, AIS performance is positively impacted by senior management support. Top management may provide strong oversight and support to enable AIS users to work more productively and strategically toward company objectives. Additionally, AIS development can proceed as planned to yield timely and correct information. Third, there is no benefit to AIS performance from user education and training. This is brought on by a dearth of resources and funding for users to engage in training and education. Lastly, the performance of AIS is improved by the formalization of system development. Formalizing system development will make it easier for AIS users to comprehend and operate the system in accordance with accepted standards, enabling them to generate accurate, timely, and trustworthy information that will enhance AIS performance as a whole.

Keywords: Management Support, Accounting Information System, Performance.

1. Introduction

Technological development have changed the business landscape in Indonesia significantly. The jump in internet users reflects a major shift in the way companies operate and interact with consumers. The Internet allows companies to disseminate information quickly and efficiently, access global markets, and communicate with consumers in a more direct and interactive manner [1]. In business processes, technological developments have increased the efficiency and effectiveness of companies. For example, the adoption of information technology such as computerized inventory management systems, digital payments, and data analytics has helped companies improve stock management, increase transaction speed, and make more informed decisions based on data. Additionally, advances in communications technology such as teleconferencing and online collaboration have enabled companies to communicate and collaborate effectively with teams spread across various geographic locations [2]. This change not only presents new challenges but also opens up great opportunities for companies to grow and develop in this digital era [3]. Companies that are able to adapt to technological changes and make good use of them will have a major competitive advantage in this increasingly connected market [4].

Technological advancements have an impact on two crucial concepts in business, effectiveness and efficiency. Effectiveness measures the extent to which specified goals or objectives have been achieved, while efficiency measures the relative amount of input used to achieve a certain level of output [5]. Technological developments have provided information that supports the decision-making process more effectively. Integrated, accurate, timely, and relevant information helps companies achieve their goals more efficiently. Apart from that, the use of automation machines has also increased efficiency in the production process [6]. Automatic machines can speed
up the production process per day, thereby increasing the company's overall production output. In the retail sector, technological developments also have a significant impact. Number of retailers were forced to close a number of physical stores due to losses [7]. This closure is an efficiency measure to overcome the decline in total sales, which reached less than 2 percents. This shows the need to adapt to technological developments in the retail business to remain competitive and overcome existing challenges. This happens because retail companies are unable to compete with online stores [8]. For retail, the influence of technological advances is that people are experiencing changes in purchasing by buying online. The rise of online stores with similar products has automatically hit the retail business. Moreover, ordering goods online can be easier and can be done at any time using a gadget [9].

Technological developments not only bring challenges to retail companies but also provide opportunities to increase competitiveness [10]. Creativity and innovation are the keys for retail entrepreneurs to remain competitive in this digital era. One example of innovation is the use of cashierless counters, which has helped reduce operational and labor costs [11]. Apart from that, the use of big data is also an important innovation for retail entrepreneurs. Big data can help retailers better understand the shopping habits of the various consumer profiles who come to their stores [12]. With this information, retail entrepreneurs can provide discounts that are more targeted and have a greater impact on their consumers. Apart from that, retail entrepreneurs can also communicate with suppliers to provide better discounts based on information from big data [13]. Despite a number of retail establishments being forced to close their physical locations owing to financial difficulties, retail businesses continue to make up the greatest portion of Indonesia's GDP, particularly when it comes to household spending [14]. The growth of the national economy was still mostly being driven by public consumption. Thus, by using the appropriate technical advancements and innovations, retail organizations can still expand and prosper despite the problems they confront [15].

Accounting information systems are one area where technological advancements are evident. Accounting information systems are now a vital tool in the fiercely competitive business sector because to developments in information and communication technologies. Utilizing information technology can help a business become more competitive and avoid being left out of its industry [14]. Accounting systems are crucial to the prosperity of commercial enterprises. Accounting systems offer data that helps organizations work toward their objectives. It is underlined that the Accounting Information System generates valuable data, which management uses as a foundation for strategic decision-making and to oversee organizational operations in order to meet organizational objectives [15]. A coordinated collection of forms, records, and reports that provide the financial data management needs to support business operations is known as an accounting information system. One of the most crucial information systems in a business is an information system that generates high-quality, accurate accounting information for both the people creating and consuming it. Accounting information systems in business are an important means of increasing organizational efficiency and supporting company competitiveness by providing financial and accounting information for management. Companies will have high competitiveness if they can utilize information as the main source for carrying out all business activities [16].

An evaluation of the information system through the accounting information system's performance is required to determine whether the system can assist the business in the most efficient manner. Performance suggests describing the degree of accomplishment of a task over a specific time frame. Performance inside an organization determines whether the established goals of the organization are met or not. accounting information system performance, which is an evaluation of how well an organization uses its accounting information system to fulfill its goals and provide accurate and efficient financial and management accounting information [15]. User satisfaction with the accounting information system and the system's ability to meet user needs are the two metrics used to assess the system's performance. The frequency with which users utilize the accounting information system and their accessibility are examined by the system user side [16]. In addition, user satisfaction with the accounting information system utilized in business is another factor used to gauge the effectiveness of the system. Companies will be able to get information fast, correctly, and consistently with the use of an accounting information system. As a result, AIS performance is critical to meeting information needs and assisting businesses in achieving their objectives [16]. The performance of AIS can be affected by a number of factors, including changes in technology, support from upper management, education and training for users, and formalization of system development [17].

Technological updates are a form of using technology to carry out a task. The more sophisticated a technology is, the greater its capacity to help humans work. This can be seen from the speed of data processing and the resulting output, which gets better if the technology used is more sophisticated. The sophistication of technology today has advanced quickly, to the point that it can now create a wide range of technical systems intended to support human labor in generating the highest caliber of information [12]. The amount of information retrieved increases as a result of technological sophistication because it makes information including internal, external, and historical information more readily available and faster to retrieve. Technological sophistication is a variety of sophisticated technology and computerized systems that assist the activities of company departments. The
increasingly diverse technologies used and the existence of computerized systems such as the internet, databases, software, hardware, decision support systems, and so on can help the work of accounting information system users because of the availability of the technologies needed to facilitate the activities of system users, as well as the existence of systems. More integration makes the information obtained from other departments more complete and accurate, which will help the company in making decisions [14]. In order for the accounting information system to function better. Executives that show a high level of involvement, attention, and expectations for the development process of the accounting information system are exhibiting top management support. Top management will know what resources are needed in developing an accounting information system, such as socialization, system introduction, training, system use, and the availability of facilities that assist in developing the system, with their involvement and attention during the planning, implementation, and monitoring stages of the system's development. so that those who utilize accounting information systems can focus their work more intently on accomplishing business objectives [13]. This will lead to more optimal growth of the accounting information system and the production of timely, accurate, and reliable information, all of which will enhance the system's functionality [16].

The company provides user education and training programs to make sure accounting information system customers utilize AIS effectively [17]. The training and education referred to is the company holding programs, facilitating training and education itself, or sponsoring employees or users to take part in training, courses, and seminars outside the company. With user training and education, AIS users will be able to understand the use of AIS techniques and controls [18]. So that users can use AIS optimally and can produce accurate, timely, and reliable information. Then, it will improve the performance of AIS. Formalization of system development is documentation and socialization in the form of system use (user guide) for employees regarding the introduction and control of accounting information systems [19]. With the existence of standardized documents and socialization, users of accounting information systems already have standards for the use and control of AIS. So that AIS users can understand AIS easily, are able to use AIS in accordance with established standards, and can produce accurate, timely, and reliable information that will improve the performance of AIS.

2. Research Methods

This kind of investigation is called a causal study. In a causal investigation, the goal is to identify the root cause of one or more issues. This study employed primary data for its analysis. The method of gathering data for this study is the use of a questionnaire, which entails posing a number of written inquiries on topics linked to the investigation. Surveys were given out in person. Retail companies make up the research's population. In this study, convenience sampling techniques are combined with non-probability sampling to pick the sample. Using a non-probability sampling technique, not every component or member of the population has the same chance of being chosen as a sample. This is because it facilitates researchers’ efforts to reach every member of the population. Convenience sampling is an information collection technique where sample members are selected based on the convenience of the researcher. Sampling was carried out on AIS users in the accounting and finance divisions of retail companies. Testing in this research uses multiple linear regressions. Regression analysis is carried out to find out how big the relationship is between the independent and dependent variables.

3. Results and Discussion

The findings of statistical tests indicate that the performance of accounting information systems is negatively impacted by technology advancements. The more sophisticated and complex the technology used, the higher the demand for the ability and knowledge to manage technology to produce quality information. This indicates the need for better training and education for users of accounting information systems so they can manage technology more effectively. In a business context, technological updates can also be a factor that influences a company's efficiency and effectiveness. For example, the use of automation machines can increase efficiency in a company's production process. Automatic machines can speed up the production process per day, thereby increasing the company's overall production output. However, companies need to pay attention to the fact that the use of technology must be balanced with sufficient investment in training and education for employees to be able to manage the technology well. In this way, companies can optimize the potential of technology to improve company performance and competitiveness in this digital era.

Results of statistical tests demonstrate that the effectiveness of accounting information systems is significantly improved by top management assistance. Ha2 is accepted with a t-value of 2.8, indicating that a rise in the top management support variable will result in an increase in the accounting information system's performance. This demonstrates the significance of senior management's attention to detail and engagement in the planning and development of accounting information systems. Accounting information system users are able to do their responsibilities with more emphasis on accomplishing corporate goals when they receive support and guidance from upper management. Additionally, there will be more optimal development of accounting information systems, resulting in information that is more precise, timely, and trustworthy. Support from upper management...
is therefore crucial to enhancing the functionality of accounting information systems. This result is in line with earlier studies that demonstrate the beneficial impact of senior management assistance on accounting information system performance. As a result, businesses must consider the support and role that senior management plays in creating a functional and efficient accounting information system.

The outcomes of statistical analyses demonstrate that user education and training for accounting information systems does not significantly improve system performance. The statistical test results indicate that Ha3 is rejected even though the user training and education variables have a regression coefficient of 0.2, which indicates that an increase in these variables will positively affect the accounting information system's performance. This study found that while some respondents did not obtain these resources, others did receive adequate facilities for training and education. In addition, several of the respondents said they infrequently receive funding to attend seminars, training sessions, or courses; a small percentage even said they infrequently receive company sponsorship to engage in these endeavors. This demonstrates that the information generated is not always accurate, timely, and dependable due to subpar knowledge and skills employed to operate the accounting information system. This result is in line with other studies that have demonstrated that training and education have little to no impact on the functionality of accounting information systems. Thus, in order to enhance the functionality of accounting information systems, businesses must focus more on the resources and assistance offered in the areas of training and education.

The formalization of system development significantly improves accounting information systems' performance, according to statistical test results. Ha4 is accepted with a t-value of 2.7, indicating that a rise in the system development formalization variable will result in an increase in the accounting information system's performance. This is because there are documents that have been socialized and standardized, giving users of accounting information systems guidelines for using and managing AIS. Users of accounting information systems can quickly comprehend and utilize AIS in compliance with established standards when there are clear standards in place. As a result, the accounting information system will function better in the long run by producing more accurate, timely, and trustworthy data. This outcome is in line with other research's findings, which demonstrate that formalizing system development improves accounting information systems' functionality. As a result, businesses must recognize how crucial it is to formalize system development in order to enhance the functionality of accounting information systems. Companies can guarantee that AIS is utilized successfully and efficiently, generating high-quality information and assisting in well-informed decision-making, by establishing explicit and written criteria.

The study's findings suggest that formalizing system development and gaining upper management support can enhance the effectiveness of accounting information systems. The involvement and focus of top management is evident in all phases of the creation of the accounting information system, from planning to execution to supervision. The decisions pertaining to the development of the accounting information system, including funding, outreach, training, and the provision of hardware, software, and database facilities to support system development, shall be made by top management. The development of accounting information systems can go more smoothly and successfully with the backing of top management. Additionally, top management may guarantee that the accounting information system is designed in compliance with the needs of the business and can offer users accurate, timely, and relevant information. As a result, in order to enhance the functionality of accounting information systems, businesses must consider how crucial top management support is. The process of developing accounting information systems becomes more efficient and targeted as it becomes more formalized. System users are guaranteed to receive clear instructions for using the system thanks to standardized and shareable documentation. Users are better able to comprehend the system and operate it in compliance with established guidelines because of this uniformity. The result is the production of information that is more precise, timely, and trustworthy. Put another way, formalization in system development is a crucial component that affects how well accounting information systems function since it may guide users toward using the system in an effective and efficient manner, which maximizes benefits for the business.

4. Conclusion

It is possible to draw numerous significant conclusions about the variables that affect how well accounting information systems function in businesses based on the study's findings. First, the performance of technology is negatively impacted by updates. This is a result of the usage of increasingly sophisticated technology, which calls for a higher level of comprehension and expertise to handle. Therefore, in order to enhance AIS users' capacity to use this technology, proper training and instruction are required. Second, AIS performance is positively impacted by senior management support. Top management may provide strong oversight and support to enable AIS users to work more productively and strategically toward company objectives. Additionally, AIS development can proceed as planned to yield timely and correct information. Third, there is no benefit to AIS performance from user education and training. This is brought on by a dearth of resources and funding for users to engage in training and education. As a result, the user's proficiency with AIS is inadequate for producing high-
quality information. Lastly, the performance of AIS is improved by the formalization of system development. Formalizing system development will make it easier for AIS users to comprehend and operate the system in accordance with accepted standards, enabling them to generate accurate, timely, and trustworthy information that will enhance AIS performance as a whole. The study’s findings suggest that formalizing system development and gaining upper management support can enhance the effectiveness of accounting information systems. Top management will support the development of the accounting information system by making the necessary decisions regarding funding, system introduction socialization, system training, and provision of facilities (hardware, software, database) that aid in system development, in order for the accounting information system to develop more optimally and generate accurate, timely, and trustworthy information. Then, as system development becomes more formalized, users of AIS will be able to utilize it in compliance with standards, comprehend it more readily, and generate accurate, timely, and trustworthy information that will enhance AIS's functionality. An adjusted \( R^2 \) value of 45\% was found in the coefficient of determination test, indicating that only 45\% of the dependent variable is explained by the four independent factors; the remaining portion is explained by variables not included in the study model.

References


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