Literature Study: The Effectiveness of Accounting Information Systems From Organizational Perspective

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ABSTRACT

This article aims to fill the research gap by providing a systematic literature review on the factors that influence the effectiveness of accounting information systems from an organizational perspective. This research method uses a literature review process or the results of a literature review obtained through reading sources in the field of accounting information systems. The results of the literature review are research found in journals published from 2013 to 2021. The components used in measuring the Effectiveness of Accounting Information Systems are based on the DeLone and McLean Information System Success Model Theory, including Information Quality, System Quality and Service Quality.

INTRODUCTION

The development of information technology is progressing very rapidly and causing the business environment to become increasingly unpredictable. The rapid advancement of information technology, encourages companies to switch to computer-based information systems because it will facilitate and speed up management to obtain information that will be processed in such a way as to produce information output that supports reliable decisions. Companies that use accounting information systems always develop technology resources to support information technology users so that companies can survive in a competitive world.

Currently, the Accounting Information System (AIS) is widely used in organizations. This system has the utility of providing more consistent, and precise financial information to different stakeholders to make efficient financial decisions regarding their business entities. In simple terms, an accounting information system (AIS) is a system that collects, stores and processes financial and accounting data used by decision makers (Maulida et al. 2020). Accounting information is a generally computer-based system and method for tracking accounting activities in relation to information technology resources. The results of financial reports can be used internally by management or externally with other interested
parties such as investors, creditors and tax authorities. Accounting information systems are designed to support all accounting functions and various activities including auditing, financial accounting and reporting, managerial or management accounting and taxes. The application of a computerized accounting information system is more profitable for the organization compared to the costs that must be incurred by the company in running an accounting information system manually (Widyatmini and Faradila 2014; Maulida et al, 2020).

This system is recognized as an efficient tool for dealing with interior and exterior changes through data processing and transactions to generate valuable information for controlling, planning and facilitating organizational activities, thereby improving organizational performance (Ibrahim et al, 2020).

The development of information technology around the world is accelerating, where investment in information technology has increased, especially in private and public sector organizations. However, most of the projects were unsuccessful and experienced a high failure rate leading to unfavorable consequences for the business organization such as financial loss and other risks. Undoubtedly, organizations today need to measure and evaluate the benefits and costs of information systems to justify their expenditures and contributions to the competitiveness, quality and productivity of organizations (Petter et al, 2012). This is due to unprecedented organizational challenges and demands, such as economic conditions and intense competition, globalization, and a rapidly changing environment that creates pressure to cut costs (DeLone and McLean, 2016). Therefore, evaluating the effectiveness of an Accounting Information System (AIS) is very important to understand the efficacy, quality and productivity of the organization (Petter et al, 2008).

Research on the effectiveness of accounting information systems has been done frequently. The amount of research will cause inconsistencies in the research results. Therefore, the author wants to conduct a literature review on the effectiveness of accounting information systems from an organizational perspective. This research was made using the literature study method and provides information by reviewing previous research, which aims to fill the research gap by providing an analysis of the effectiveness of accounting information systems from a broad organizational perspective.

MATERIALS AND METHODS

Systematic Literature Review (SLR)

Systematic literature review is a method used to determine, evaluate, and interpret all research problem findings in answering predetermined questions. The systematic literature review (SLR) approach is carried out in a structured manner and follows the stages, rules, and is able to avoid subjective understanding from researchers (Kitchenham et al, 2007; Rachmawati et al, 2021).

Model Kesuksesan Sistem Informasi DeLone dan McLean (DeLone and McLean IS Success Model)

The DeLone and McLean Information System Success Model is a model used to measure the success rate of implementing an information system developed by DeLone and McLean. McGill et al, (2003), Seddon (1997) state that this model or theory provides two important contributions to the understanding of the success of information systems. First, it provides a scheme for categorizing the many measures of information system success that have been used in the research literature. Second, this model suggests a model that is temporal and causal between categories.

![Model DeLone and McLean IS Success Model (2003)](image_url)
The success of DeLone and McLean's (2003) consists of components including, information quality, system quality, service quality, use / intention to use, and net benefits. DeLone and McLean (2003) proposed an information system success update model by adding a “service quality” component as a new dimension of the information system success model, and by grouping all individual and organizational impacts into a single impact or category. In addition, DeLone and McLean (2003) in measuring the success of Internet-based systems, where system use is voluntary, "use" and it's alternative "intention to use" are still considered important measures for Information Systems success in the updated DeLone and McLean model.

### Accounting Information Systems

The Accounting Information System is a combination of the unification of related physical and non-physical subsystems in order to be able to organize evidence related to financial problems into financial information (Susanto, 2017). A method that exists in agencies that collects daily transaction processing needs to contribute to managing the operational benefits of corporate bodies and strategic activities of the organization, so that it can provide reports to certain external parties, is an explanation of accounting information systems (Tata, 2012; Rachmawati et al, 2021). The explanation can be concluded if the accounting information system is an organizational element and is useful when classifying, directing, organizing, and securing evidence for all actions that take place, it is used to take significant and useful steps for companies to obtain information.

### Accounting Information Systems Effectiveness

The effectiveness of the accounting information system is a measure that provides an overview of the extent to which the target can be achieved from a set of resources that are arranged to collect, process, and store electronic data, then turn it into useful information and provide the required formal reports both in quality and quantity (Sevianai, 2017; Agustina and Sari 2020). Damayanthi (2012) explains that the effectiveness of accounting information systems is a benchmark that describes the extent to which goals can be obtained from a series of capabilities that are structured to collect, operate and store electronic data, which in turn becomes a useful explanation and presents the required formal reports properly.

### Accounting Information Systems Effectiveness Indicators

Based on the DeLone and McLean Information System Success Model Theory, Information System Success in this case is the effectiveness of accounting information systems consisting of components including Information Quality, System Quality and Service Quality

#### RESULTS AND DISCUSSION

<table>
<thead>
<tr>
<th>No</th>
<th>Authors</th>
<th>Variables</th>
<th>Results</th>
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<tbody>
<tr>
<td>1</td>
<td>Reza Putra Dewangga, Tantri Baroroh, dan Sarah Yuliarini (2021)</td>
<td>Independent: Information Quality, System Quality, and Service Quality; Dependent: effectiveness of Accounting Information System (AIS)</td>
<td>Information quality, system quality, and service quality have a significant positive effect on the effectiveness of accounting information systems (AIS)</td>
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<tr>
<td>2</td>
<td>Nabilla Utmary dan Henri Agustin (2020)</td>
<td>Independent: Information Quality, System Quality, Service Quality, and User Satisfaction Dependent: Effectiveness/Satisfaction of Financial System users</td>
<td>Information quality has a positive effect on effectiveness/user satisfaction in the context of the financial system. The variables of system quality, service quality, and user satisfaction have no effect on user satisfaction in the context of the financial system.</td>
</tr>
<tr>
<td>3</td>
<td>Aws Al-Okaily, Manaf Al-Okaily</td>
<td>Independent: Information Quality, Service Quality, Training Quality</td>
<td>Information Quality, Service Quality, Training Quality have a positive effect on the Effectiveness of Accounting</td>
</tr>
</tbody>
</table>
Fadi Shiyyab dan Walid Masadah (2020) | Information Quality, System Quality, Service Quality, Training Quality Dependent: Effectiveness of Accounting Information Systems | Information Systems in an organizational perspective. The quality of the system has no effect on the effectiveness of the accounting information system.

Azizul Kholis, Dedy Husrizalsyah, dan Anjas Pramana (2020) | Independent: System quality, Information quality, Service quality Dependent: effectiveness of user satisfaction of accounting information systems | System quality and information quality have no effect on user satisfaction with accounting information systems, while service quality affects user satisfaction with accounting information systems.

Ika Prayantha dan Ricky Devito Langkedeng (2020) | Independent: System quality, information quality and perceived usefulness Dependent: user satisfaction accounting information system | System quality has a significant effect on user satisfaction with accounting information systems, while information quality and perceived usefulness do not have a significant effect on user satisfaction with accounting information systems.

Muhammad Farhan dan Sri Rahayu (2019) | Independent: System quality, service quality, and report quality Dependent: the success of the regional financial management accounting information system | Report quality affects the success of the Regional Financial Management Information System, while the quality of the system and service quality have no effect on the Regional Financial Management Information System.


Susi Mistiyowati (2019) | Independent: Top Management Support, Manager Knowledge, Quality of Accounting Information Systems and Organizational Culture Dependent: effectiveness of Accounting Information System (AIS) | The quality of the Accounting Information System has a positive effect on the effectiveness of the Accounting Information System.

Dharmawan dan Pratomo (2018) | Independent: System quality, Information quality, Service quality Dependent: effectiveness of user satisfaction of accounting information systems | System quality and service quality have a significant effect on user satisfaction, while information quality does not significantly affect user satisfaction.

Asrina Waty Hasibuan (2018) | Independent: Information System Quality, Information Quality and Perceived Usefulness | The quality of information systems has a positive and significant effect on user satisfaction with accounting information systems, while information quality and perceived usefulness do not have a
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<th>ID</th>
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<th>Year</th>
<th>Dependent</th>
<th>Independent</th>
<th>Effect</th>
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<tbody>
<tr>
<td>11</td>
<td>Ida Bagus Gede Mawang Mangun Buana dan Ni Gusti Putu Wirawati</td>
<td>2018</td>
<td>Accounting Information System User Satisfaction</td>
<td>Information System Quality, Information Quality, and Perceived Usefulness</td>
<td>The quality of accounting information systems, information quality and perceived usefulness have a positive and significant effect on user satisfaction with accounting information systems.</td>
</tr>
<tr>
<td>13</td>
<td>Azwar Iskandar, Tenry Nur Amriani, dan Achmat Subekan</td>
<td>2017</td>
<td>Accounting Information System Effectiveness</td>
<td>Information system quality, system quality, user satisfaction, system quality, service quality, and perceived usefulness</td>
<td>The quality of the system has an effect on user satisfaction, while the quality of information and the use of the system has no effect on user satisfaction.</td>
</tr>
<tr>
<td>16</td>
<td>Meti Herliyanti</td>
<td>2016</td>
<td>Accounting Information System User Satisfaction</td>
<td>Information system quality, information quality, and perceived usefulness</td>
<td>Information system quality, information quality, and perceived usefulness affect the satisfaction of users of accounting information systems.</td>
</tr>
<tr>
<td>17</td>
<td>Jamal Maulana Hudin dan Dwiza Riana</td>
<td>2016</td>
<td>User Satisfaction</td>
<td>Information Quality, Information System Quality, Service Quality, and Perceived Usefulness</td>
<td>Information quality has a significant effect on user satisfaction, system quality has a significant effect on user satisfaction, service quality has a significant effect on user satisfaction.</td>
</tr>
</tbody>
</table>
User Satisfaction, Net Benefits

Independent: Service Quality, System Quality, and Information Quality

Dependent: Accounting Information System User Satisfaction

user satisfaction, service quality has a significant effect on user satisfaction. Service quality, system quality, and information quality have a positive and significant influence on the level of satisfaction of users of accounting information systems.

Source: Processed Data 2021

**Information Quality on the effectiveness of Accounting Information Systems (AIS)**

Based on the previous research table, research conducted by Dewangga et al. (2021), Utmary and Agustin (2020), and Al-Okaily et al. (2020), Sinaga (2019), Hasibuan (2018), Surya (2017), Hudin and Riana (2016), and Samiaji (2013) stated that the quality of information has an effect on the effectiveness of accounting information systems. Which means that the better the quality of information produced in a system in providing more accurate information, and better service support, the better the AIS effectiveness.

The quality of high-quality accounting information such as timeliness, completeness, and accuracy can affect organizational benefits. That is because the quality of information leads to reduced operational and organizational costs, which makes it possible for organizations to anticipate client and market needs as well as improve decision-making processes leading to higher organizational benefits (Al-Okaily et al. 2020).

Based on the theory of Delone and Mclean (1992), the quality of information can be seen from the output or results of an information system. Information quality focuses on the output of information systems in accordance with the desired characteristics. The higher the quality of the information, the user satisfaction will also increase. Completely available information, according to needs, accurate, easy to understand, up to date, and the presentation of information in accordance with the existing format will increase user satisfaction. Users will be satisfied with the information generated if the information can meet the predetermined indicators. Quality information can represent its meaning clearly, so that users can easily understand the information. The availability of quality information can improve the performance of users, thereby increasing their satisfaction with the information system used.

So it can be concluded that the quality of information can determine success in the effectiveness of Accounting Information Systems in an organization so that the better the quality of information produced by AIS, it will bring benefits to the organization such as timeliness, completeness, and accuracy, as well as improving the decision-making process leads to higher organizational benefits.

**System Quality on the effectiveness of Accounting Information Systems (AIS)**

Based on the previous research table, research conducted by Dewangga et al. (2021), Prayanthi and Langkedeng (2020), Sinaga (2019), Hasibuan (2018), Buana and Mirawati (2018), Dharmawan and Pratomo (2018), Abdullah (2017), Iskandar et al. (2017), Surya (2017), Hudin and Riana (2016), MetiHerliyanti (2016) and Samiaji (2013), state that System Quality on the effectiveness of Accounting Information Systems, this indicates that the better the quality of the system used can support the effectiveness of Accounting Information Systems, this indicates that the better the quality of the system used can support the effectiveness of the AIS for the better.

Information system quality is the performance of the system related to how well the hardware, software, policies and procedures of information systems can produce useful information. Service quality is the quality of support received by system users from organizations and information technology personnel (DeLone & McLean, 1992). A quality information system can increase user satisfaction. An information system that is reliable, has a fast response rate, easy to use the system, is available in all work units, is flexible, and has specific uses is an indicator of the quality of an information system that can affect the effectiveness of an accounting information system.

Other things that are also success factors for the quality of information is the security of a system, ease of use, and efficiency (Chang et al. 2012). So it can be concluded that the quality of the system can determine the success in the effectiveness of the Accounting Information System in an organization so that the better the quality of the information produced by the AIS, it will bring benefits to the organization such as ease of use, namely measuring the extent to which system users consider...
the system user friendly. Security refers to the system's ability to provide services that prevent unauthorized access and virus attacks on the system. Meanwhile, efficiency relates to the extent to which users perceive the system to help and facilitate efficiency.

### Service Quality on the effectiveness of Accounting Information Systems (AIS)

Based on the results of research conducted by Dewangga et al. (2021) and Al-Okaily et al. (2020), Dharmawan and Pratomo (2018), Hudin and Riana (2016) and Samiaji (2013), service quality is shown to have an influence on the effectiveness of the Accounting Information System. This indicates that the quality of services provided by a system can support the effectiveness of the AIS for the better and benefit the organization.

Service quality is the quality of support received by system users from organizations and information technology personnel. Service quality focuses on the needs and desires of users which results in an increase in the effectiveness of the Accounting Information System. Because when users of Accounting Information Systems provide high-level services, the perceived organizational benefits are also higher. So, when certain aspects related to service quality, including error-free performance, timely and reliable service, will improve decision-making which ultimately leads to increased internal efficiency of the organization.

However, there are also several studies which state that the quality of service does not affect the effectiveness of the Accounting Information System. It can be seen in the research of Farhan and Rahayu (2019), Abdullah (2017), and Utmary and Agustin (2020). This means that service quality is not a success factor in the effectiveness of the Accounting Information System. In this case, it shows that the construction of service quality has little or no effect on the success of the effectiveness of accounting information systems in an organization. Therefore, further research is needed to investigate this relationship.

### CONCLUSIONS AND SUGGESTION

Based on the results of research that has been done, using the Literature Review method or a literature review on the effectiveness of accounting information systems from an organizational perspective, it can be concluded that the three components in the DeLone and McLean (1992) Information System Success Model theory are Information Quality, System Quality and Service Quality. They can be critical success factors in realizing the effectiveness of the Accounting Information System as it helps run an organization. Because by improving Information Quality, System Quality and Service Quality in an accounting information system, it will increase the availability of quality information so as to improve the performance of users and improve decision-making processes that lead to higher organizational benefits.

### REFERENCES


