The Influence of Accounting Information System on the Organizational Performance Among SMEs in Tagum City

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ABSTRACT

Accounting Information System serves as a mechanism for enhancing better organizational performance. The study intends to determine the influence of accounting information systems on the organizational performance among SMEs in Tagum City by evaluating the level of accounting information systems in terms of system quality, information quality, and system threats, and the level of organizational performance in terms of organizational efficiency, cost reduction, and quality of decision making of the small-medium enterprises in Tagum City. Also, it aims to determine the significant relationship between the accounting information system and the organizational performance of SMEs.

A quantitative and descriptive-correlational method is used, through the adapted survey questionnaires where 240 SMEs in Tagum City responded. The results were tested at a 0.05 level of significance. System quality and information quality have the highest level (4.37 mean, 0.386 SD), and (4.35 mean, 0.392 SD). System threat has a low level (2.40 mean, 0.426 SD). Cost reduction, quality of decision-making, and organizational efficiency have a very high level (4.47 mean, 0.424 SD; 4.41 mean, 0.393 SD; 4.38 mean, 0.389 SD). The results revealed that accounting information system versus organizational performance yields an R-value of 0.709, which means significant. The outcome is due to the p-value of 0.000, lower than 0.05 levels of significance. It led to the decision that the null hypothesis, which stated no significant relationship between accounting information systems and organizational performance, was rejected. Therefore, the correlation result exemplifies that the accounting information system on SMEs organizational performance in Tagum City is very high.

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Background

Globally, organizational performance addresses numerous external environmental challenges that require an organization’s survival strategies, strategic decisions, and constant training to bring off the goals. As a result, achieving organizational goals reckon both the efficiency of the complete work team’s activity and the leader’s skills.

However, the organizations must create a force to achieve the desired results, time efficiency, and effectiveness to achieve the desired goals (Conțu, 2020). A performance symbolizes the fulfillment level of the projects at the workplace that creates an employee job that relates to operational excellence to competition by the effectiveness of internal systems (Cascio, 2015).

In the Philippines, it profoundly recommends implementing an accounting information system to provide an outlet for the Accounting Department to escalate its productivity, saving its time and energy. It enhances the financial reporting quality and makes financial transactions easier; it also provides high-quality accounting information needed for a more comprehensive, relevant, reliable, and compatibility of information (Mndzebele, 2013; Spătărelu & Petec, 2015). The technology allows employees to keep track of all transactions effectively. The system has a significant effect on the company’s performance since it gives stakeholders real-time information on the company’s financial position. Since stakeholders and other interested parties would have a comprehensive insight into the company’s financial status before implementing AIS, it would help to reduce wrong business decisions. (De Gorostiza, J. A. et.al., 2017).

In Tagum City, business enterprises experienced poor organizational performance in generating their financial information. Some are still utilizing manual accounting systems, and others have skepticism and low information-driven regarding the effect of Accounting Information Systems on their organizational performance. Hence, it necessitates acquainting the business enterprises regarding innovations in generating financial information through AIS that explored the connection between success and more prominent competitive advantages.

The researchers have not found any studies of accounting information systems on the organizational performance among SMEs in Tagum City. Given the importance of accounting information systems in the industry, a study to establish the influence of AIS on organizational performance among small-medium enterprise businesses is necessary. Especially in Tagum City, where some business entities unexpectedly closed caused to a lack of management skills and poor organizational performance, the importance of this study is evident. Given the role of SMEs in a country’s economy and the lack of attention rationed to accounting information systems on business entities, this motivates the researchers to pursue this research on the accounting information system and organizational performance among SMEs in Tagum City.

Research Objective

The study aims to determine the domain of the accounting information system on the organizational performance among SME’s in Tagum City. It appears to answer the following questions in particular:

1. To assess the level of accounting information system among SME’s in terms of:
   1.1 system quality;
   1.2 information quality; and
   1.3 system threats
2. To determine the level of organizational performance among SME’s in terms of:
   2.1 Organizational Efficiency
   2.2. Cost Reduction
   2.3 Quality of Decision Making
3. To determine the significant relationship between the accounting information systems and organizational performance among SME’s in Tagum City.

Keywords: Accounting Information System, Organizational Performance, Small-Medium Enterprises
**Hypotheses.**

The study’s hypothesis will be tested at a 0.05 level of significance, stating no significant relationship between accounting information systems and organizational performance of SME’s. There is no domain in the accounting information system that significantly influences organizational performance of SME’s.

**Methods**

This chapter explains different parts of the research and how it flows, including the research design, research locale, population and sample, research instrument, data gathering procedure, and the statistical tools.

**Research Design**

This research utilized a descriptive-correlational method. A researcher tests two variables, the influence of accounting information systems on the organizational performance among SMEs in Tagum City, to understand the statistical relationship of the two variables without any other variable interference. This quantitative study involves a survey as a data collection tool to measure the accounting information system practices of the SMEs in Tagum city. It comprises applying correlational research to investigate the interrelationship between two variables (G. Radhakrishnan, 2013). The process of collecting the data based on the use of the questionnaire through the researcher’s adopted questionnaire from Maureen Acen (2019) focused on determining the influence of accounting information systems and organizational performance among small-medium-sized enterprises.

**Research Locale**

Tagum City is a first-class component city strategically located at the heart of Davao del Norte in the southern part of Mindanao, an intersection of three (3) central road network systems connecting the city to other major city destinations in the region and the entire Mindanao. It has the fastest-growing economy that is significantly presumed to attract people, presenting both opportunities and challenges for the local government. Tagum City puts heavy emphasis on infrastructure and a trading hub for small-scale gold miners, which has so far shaped its development. It has 24 barangays with a total land area of approximately 9,850 hectares, with a population of 259,444 on the report of the 2015 census, making it the most populous component city in Mindanao.

The research chooses to conduct the study in the city proper of Tagum, where most business establishments are situated and most SMEs operate. Inhabitants of the area feed information to the researchers. It is the most strategic location for the researcher to gather essential details of information via sending questionnaires to the respondents to analyze and evaluate the interferences of the two variables.

**Population and Sample**

The researchers utilized Slovin’s formula to get the sample size. Slovin formula is used to calculate the sample size (n) given the population size (N) and a margin of error (e). After that, the researchers will also use Random Sampling, select individuals from whom the data is collected, and use a specific system that selects respondents.

The research respondents are the small-medium-sized enterprises throughout Tagum City that currently utilize accounting information systems in their operations and financial transactions. A total of 240 SMEs around the city specifically engage in manufacturing, trading, and service enterprises. The researcher used a Systematic Sampling. In the future, selected small-medium enterprises have to answer the survey questionnaire to collect and obtain the data necessary for the study.

The distribution of respondents corresponds to their related industries. There has been a categorization of SMEs per industrial sector, and the sample size will get per subgroup. The researcher utilized systematic sampling to get the sample size per sub-group. The researcher ensures that each sub-group sample size is equally distributed.

The selection of the respondents utilized a quota of ten (10) SMEs per barangay. However, if the barangay had fewer than ten (10) enterprises, all enterprises are considered respondents.
Research and Sample

This study uses a survey questionnaire adopted from Maureen Acen (2019) for both dependent and independent variables. The first set of the questionnaire deals with the accounting information systems among SMEs in Tagum City with three indicators; system quality, information quality, and system threats. Experts validated the presented contents of an instrument. The respondents were asked to check on which range of scale of their choice.

Result and Discussion

The researchers presented the result of the research study regarding the Influence of Accounting Information System on Organizational Performance among SMEs in Tagum City. These findings were analysed and interpreted based on the stated problems.

RO1: Level of Accounting Information among SMEs in Tagum City

As shown in Table 1, the level of Accounting Information Systems among SMEs in Tagum City had an overall mean of 4.23 which means high with a standard deviation of 0.311. The high level was attributed to the high rating given by the respondents in all indicators. The respondent's response indicated that Accounting Information Systems among SMEs in Tagum City agreed on system quality and information quality items and disagreed on the items of system threats.

The cited overall mean score was the result gathered from the following computed mean scores from highest to lowest: 4.37 or very high for system quality with a standard deviation of 0.386; 4.35 or very high for information quality with a standard deviation of 0.392; and 2.40 or low for system threats with a standard deviation of 0.426.

Table 1. Level of Accounting Information System among SME’s in Tagum City

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Mean</th>
<th>SD</th>
<th>Descriptive Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Quality</td>
<td>4.37</td>
<td>0.386</td>
<td>Very High</td>
</tr>
<tr>
<td>Information Quality</td>
<td>4.35</td>
<td>0.392</td>
<td>Very High</td>
</tr>
<tr>
<td>System Threats</td>
<td>2.4</td>
<td>0.426</td>
<td>Low</td>
</tr>
<tr>
<td>Overall</td>
<td>4.23</td>
<td>0.311</td>
<td>High</td>
</tr>
</tbody>
</table>

The Accounting Information System indicator strongly agreed and with the highest mean was the System Quality. The findings implied that improvement in the quality of the accounting information system led and resulted in significant improvement in the organizational performance among SMEs in Tagum City.

Regarding the Information Quality in Accounting Information System that was strongly agreed, the respondents displayed a favorable response which implied that an escalation of quality information produced by the system resulted in significant growth in the organizational performance of the small-medium enterprises in Tagum City.

Moreover, the System Threats indicator of an Accounting Information System had the lowest mean and low descriptive level. The finding revealed significant improvement in the organizational performance among SMEs in Tagum City; however, it also means that an increased threat in the accounting system resulted in a significant fall in the organization's performance.

The respondents' level on the accounting information system among SMEs in Tagum City was high, which means that the descriptive equivalent was agreed. It further implied that SMEs manifest the relevance of integrating and adopting AIS in the organizations. System quality means integrating an accounting system; a well-designed and implemented accounting system improves business operations, enhances profitability, and helps organizations acquire a competitive advantage; information quality manifests an accurate and timely report and communication of information to decision-makers of an organization; system threats manifest that skilled personnel was needed to operate the system smoothly.

The result was related to the theory of Emad et al. (2017), who viewed that an
accounting information system was vital to assembling quality accounting information to provide precise and timely reports and communication of information to decision-makers. It conformed to the theory of Ali et al. (2020) that an accounting information system was a tool comprised of various interdependent subsystems that work together to achieve timely, accurate, and reliable information for the decision in order to keep track of an organization’s economic and financial activities. It played a significant advantage in daily corporate business management by making the most efficient use of existing resources such as planning, organizing, supervision, and decision-making.

In terms of being a system quality, the level of the accounting information system was very high. It indicated that the system quality in the accounting information system was positive. It implies that an accounting information system has a reliable and fast response time, safe data storage and retrieval, and technical efficiency, reducing programming errors and interconnecting the reporting activities of different functional areas of the business. The system allows users to verify before accessing the system. The viewpoint of DeLone & McLean (2016) was that system quality referred to the characteristics of a system, such as its dependability, response speed, functionality, simplicity of use, and flexibility. In line with Gorla (2010) concept, organizational advantages had favorably connected with a system that assists users in performing better. Hence, due to the integration of software, a well-designed and implemented system improved business operations, enhanced profitability, and helped a company acquire a competitive advantage. As a result, the most important criteria for achieving organizational success has a well-designed and implemented accounting information system.

Regarding the information quality of an accounting information system, the level was very high. It signifies that the information quality of an accounting information system was positive. It means that an AIS of small-medium enterprises was effective enough to produce accurate information, make relevant and complete information for decision making, protect sensitive information from unauthorized disclosure, produce information that is applied consistently from one period to another, and produce timely information for effective decision making. In line with the views of Omran Ahmad Mohammad Al-Ibni (2017) stated that information quality was related to information content concerns such as accuracy, suitability, formality, and timeliness of information provided by data systems, with a focus on the output quality processes produced by the system through reporting forms. Additionally, Stephen, D.L. (2017) said that the transactions and events are measured and reported consistently, enabling users to compare a company’s results from year to year or with the results of different companies. The information systems ensure that the measures, descriptions, and phenomena are meant to reflect all in accord. It independently verified and confirmed information, which also has prime characteristics of relevance and dependability, the subsidiary quality of comparability, and the preparer of the report not being biased toward a preconceived conclusion.

Moreover, the system threats have a low level. It indicated that the system threats in the accounting information system were hostile. It means that the accounting information system of SMEs often does not experience having a system failure, unauthorized access into the system by employees of the organization even by outsiders (hackers), and requires 24/7 internet. The organization’s users do not use the same passwords, are not experiencing interception of data transmission from a remote location, and the system does not create fictitious reports. Cahyaningsih Kristilestari (2019) stated that system threats associated with the accounting information systems were the following: data entry errors, report or data access control problems, accessing systems from outside of authorized areas, potentially unwanted programs and computer malware, natural calamities, inaccurate recording, and printing of data that the system administrator did not authorize. Internal and external reconciliation, validation, and authorization methods in programs, the usage of firewalls and antivirus, managing authentication and authorization, establishing disaster recovery plans, and exploring digital technologies were all required to
combat system danger. Additionally, it necessitates adequate human resource capacity and the company’s commitment from staff to management to prevent threats and achieve its targets.

**RO2: Level of Organizational Performance among SME’s in Tagum City**

Shown in Table 2, the mean scores of an indicator of the organizational performance among SMEs in Tagum City, which has an overall mean of 4.42, are described as very high, with a standard deviation of 0.336. The respondents gave a very high level attributed to the ratings in all indicators. The respondents’ responses to organizational performance among SMEs in Tagum City strongly agreed on organizational efficiency, quality of decision making, and organizational performance.

The cited overall mean score was the result gathered from the following computed mean scores from highest to lowest: 4.47 or very high for cost reduction with a standard deviation of 0.424; 4.41 or very high for the quality of decision making with a standard deviation of 0.393 and 4.38 or very high for organizational efficiency with a standard deviation of 0.389.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Mean</th>
<th>SD</th>
<th>Descriptive Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Efficiency</td>
<td>4.38</td>
<td>0.389</td>
<td>Very High</td>
</tr>
<tr>
<td>Cost Reduction</td>
<td>4.47</td>
<td>0.424</td>
<td>Very High</td>
</tr>
<tr>
<td>Quality of Decision Making</td>
<td>4.41</td>
<td>0.393</td>
<td>Very High</td>
</tr>
<tr>
<td>Overall</td>
<td>4.42</td>
<td>0.336</td>
<td>Very High</td>
</tr>
</tbody>
</table>

The Organizational Performance among SMEs in Tagum City that has strongly agreed was the following: Cost Reduction, Organizational Efficiency, and Quality of Decision Making, which implied that all these indicators with a very high mean, SMEs in Tagum City need to embrace and adopt accounting information systems to improve the efficacy in their operations, reduce operational expenses, generate timely reports free from human error, and provide quality of decision-making. Also, it realized that employees’ knowledge of the accounting information system must be uplifted and trained to ensure the effectiveness of integrating the system.

The respondents’ responses to their level of organizational performance among SMEs in Tagum City appeared very high. All measures described in the organizational performance among SMEs in Tagum City items were positive. The result associated with the study of Chen et al. (2002) emphasized that to enhance the organization’s problem-solving capabilities and the ability to adapt to the changes in its external factors reached through the use of the transformation of inputs into outputs such as organizational efficiency, cost reduction, and quality of decision making.

The very high level of organizational efficiency indicated that organizational performance was positive. It means that the firm has oriented towards the successful transformation of inputs into outputs. The viewpoint of Teru et al. (2017) was somewhat associated with the result. He stated that when the firm’s internal controls are efficient, it increases performance, improves accounting information dependability, and satisfies internal and external users.

Similarly, respondents also displayed a very high level to cost reduction. A very high rating means that the cost reduction indicator of the level of organizational performance among SMEs in Tagum City was positive. It implied that installing a computerized accounting information system helped firms cut costs and has potentially reduced the operational cost and enhanced efficiency in the firm’s organizational performance. The result, interconnected to the research of Lawal (2017), showed that for a company to enjoy higher profit growth, it must focus on creating high-quality goods and services, placing a high value on control, and decreasing costs to an acceptable level.

In the same manner, the respondents had a very high level of decision-making quality. It
was described as very high, which means that the items indicated were positive in SMEs' organizational performance in Tagum City. It means that accounting information systems have influenced decision-making and improved the firm organizational performance, which has in line with the views of Avino (2013); he concluded that the effectiveness and efficiency of organizational performance were influenced by the quality of decision-making of the management.

**RO3: Significance on the Relationship between Levels of Accounting Information System and Organizational Performance among SME's in Tagum City.**

It sought to ascertain this study whether or not the accounting information system has a significant relationship with the organizational performance among SMEs in Tagum City. Pearson r was used in determining the correlation between the two variables. The results of the computations have shown in Table 3.

The results revealed that an accounting information system versus organizational performance yields an R-value of 0.709, which means significant. The result was due to the p-value of 0.000, lower than 0.05 levels of significance. It led to the decision that the null hypothesis, which stated no significant relationship between accounting information systems and organizational performance, was rejected.

This further means that there was a relationship between the two variables correlated. Research on the relationship between accounting information systems and organizational performance showed that the accounting information system affects the organizational performance among SMEs. Therefore, the correlation result exemplifies that the accounting information system on SMEs' organizational performance in Tagum City is very high.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>R-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Information System</td>
<td>4.23</td>
<td>0.311</td>
<td>0.709</td>
<td>0.000</td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>4.42</td>
<td>0.336</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 significance level.

The present study shows a significant relationship between accounting information systems and organizational performance among SMEs in Tagum City. It implied that AIS influences the organizational performance among SMEs in Tagum City, as seen in the data. The result confirms the study of Emad (2017), emphasizing that with increased organizational performance, managers should focus on implementing accounting information systems that are best suited to their specific circumstances. This result related to Al-Majali (2022) presumed that the utilization of the Accounting Information System determined the excellent organizational performance to obtain effective decision-making.

The correlation between the overall accounting information system and organizational performance was significant. It implied that the organizational performance depended on the accounting information system among small-medium enterprises in Tagum City. The findings affirmed by the study of Trabulsi (2018) stated that an accounting information system served as a mechanism for enhancing better organizational performance and a shifted target. Hence, it required continual development to keep up with the changing nature of such platforms and the willingness and knowledge of management to support to boost AIS investment continually. It conforms to Alnajjar (2017) study that with AIS, the management obtains valuable information utilizing it in decision-making and strategy development to achieve the organization's goals and objectives.

**Conclusion**

Based on the study findings, the level of accounting information systems among SMEs in Tagum City was very high for system quality, very high for information quality, low for the
system threats, and high for the overall mean. It means that both an AIS indicator of system quality and information quality has agreed, and the system threat disagreed. However, the level of organizational performance among SMEs in Tagum City was very high for the organizational efficiency, cost reduction, quality of decision making, and the overall mean. All measures described in the organizational performance among SMEs in Tagum City were strongly agreed. There has a significant relationship between accounting information systems and organizational performance among SMEs in Tagum City. The accounting information system significantly influences organizational performance among SMEs in Tagum City, which in line with the study of Emad (2017), emphasized that with increased organizational performance, managers should focus on implementing accounting information systems that are best suited to their specific circumstances.

**Recommendation**

SMEs play a vital role in Tagum City’s economic development by providing employment, goods, and services. The extent of SMEs' contribution makes the development and economic growth of Tagum City dependent on the level of success attained through the SME’s operation.

SMEs need a well-designed and operating accounting information system to manage their most valuable resources and information. It can be a manual or an automated system such as MS Excel and/or QuickBooks that helps them manage their day-to-day operations or transactions used to acquire immediate access to information needed by the owner for the performance and growth of the business.

Furthermore, using an accounting information system emphasizes the system threats to place security measures like creating a culture of security in the workplace, setting up antiviruses, and providing users training to avoid data loss and valuable accounting information. SMEs may continue to improve and build up a harmonious working environment among the top and lower management. Likewise, top management may give motivation to lower management, that they may keep participating and working on their daily task. To motivate the lower management to work regarding how they will act with dignity, integrity, and effectively in the organization.

To conclude, SMEs face a significant issue that does not hinder organizational success but gradually produces a low economic development. As SMEs implement the recommendations mentioned above, the outcome will lead to organizations' sustainability and growth. Lastly, it is beneficial for the students to provide future researchers with a starting point on how to expand the research coverage in terms of the variables covered in the study.

**References**


Google Scholar


