

The Effectiveness of Accounting Information System as Determinant on the Operational Performance of Micro Business

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Abstract— Accounting information systems are vital in the operational performance of micro business or any types of business organization to help business grow. This study intends to determine the effectiveness of accounting information system as the determinant on the operation performance of micro business in Panabo City by examining the level of effectiveness of an accounting information system in terms of user satisfaction, system quality, system use, decision making quality and economic success; and to ascertain the level of operational performance of micro business in terms of revenue generation, productivity and gross profit. It also aims to determine the significant relationship between the effectiveness of the accounting information system and the operational performance of the micro business. Also, to determine which domain in the effectiveness of the accounting information system significantly influences the operational performance of micro-business in Panabo City. A Quantitative and descriptive- correlational research design is used, this design measures a correlation between the two variables where 200 micro business owners responded in the study. Results were tested at a 0.05 level of significance, whereas system use has the highest level (4.56 mean and 0.45 standard deviations). Productivity has the highest level (4.59 mean and 0.42 standard deviations) in the micro business. Using Pearson-r, significant value ($p = 0.01$), confirming that the operational performance of micro business was significantly associated with the levels of the accounting information system. Moreover, through multiple regression analysis, 53.1% variance with a corresponding F -ratio = 44.012 and p -value = 0.01 revealed that the accounting information system has significantly influenced the operational performance of micro business. Specifically, decision making quality ($\beta = 0.250, p = 0.001$), and economic success ($\beta = 0.234, p = 0.001$) are correlated to operational performance of micro business. Owners struggle to become successful and to be stable in the market. Thus, being innovative and knowledgeable in the business can help you keep up in the volatile market.

Keywords— Accounting Information System, Operational Performance.

I. INTRODUCTION

Globally, the micro-businesses practice has failed to notice and recognize the way owner-managers run such entities in spite of their significance in the developing economy. In a more intuitive decision-making method, some corporate managers combine informally gathered knowledge, algorithms, and other simple tactics. (P. Greenbank, 2000). Micro-business owners and administrators often have difficulty enhancing business operational performance due to conducting transactions without using an accounting

information system or proper financial judgment. The operating performance of an enterprise includes two main issues: first, financial performance (profit), and second, product performance in the market (sales) Richard and Devinney (2009). Misallocation of funds, credit transactions, low-return on investments, and even losses result from inaccurate decisions, faulty organizational actions, and unproductive business activities caused by a lack of knowledge on utilization of AIS (Chakraborty, 2015).

An AIS is assessed as an ideal instrument to strengthen the operational performance of a business entity (Caulkin, 2003; Hope & Fraser, 2003). According to Caulkin, Hope & Fraser (2003) if the AIS works well, in that case, it will produce a source of quality data for the entity administration, which helps the process of a business to become more productive and the operating performance of the organization will be higher. For the accounting information system to exercise efficiently, accurately, and bring high efficiency, the organizations need to base upon concerns associated with operational performance (Indeje & Zheng, 2010).

The operational performance of the organization is broadly examined in management studies. The interpretation of the operating performance of the organization has numerous varying views. As cited by way of Felício et al. (2014) the organization's operational overall performance in phrases of raising proceeds, decreasing financing risks, and putting competitiveness as adverse to competitors. Ogbonna and Harris (2000) describe the organization's overall operational performance and suggest that employers generally increase their investment and market segment in the company. In step with Bodnar and Hopwood (2010), AIS collects assets inclusive of people and gadgets used to transform accounting, cash, and a spread of other statistics into records of cost to choice makers. Romney and Steinbart (2006) argue that AIS is a manner to acquire, record, and technique statistics to make choices. AIS is a mixture of additives inclusive of tools, software, techniques, databases, and networks (Stair & Reynolds, 2011).

Research on accounting information systems ought to have continually been a subject of interest to several researchers. Dameri, Garelli, and Ricciardi (2013) presume that the accounting information system combines data based on accumulated and nearly connected pieces of information. (Kwarteng and Aveh (2018) also denote that the accounting

information system and operational performance positively correlate when the organization is well-established. However, this research is carried out to differentiate and verify the effectiveness of the AIS as a determinant of the operational overall performance of micro-corporations in Panabo City. On this foundation, the research will promote organizational assumptions to improve the accounting information system and operating performance in micro-businesses by interacting with source credibility, accuracy of information, and system usage by effectively implementing AIS critical factors, as well as practicing a positive workplace environment.

Research Objective

The major goal of this research is to examine the usefulness of the accounting information system as a predictor of operational success among Panabo City's microbusinesses.

Specifically, it shall seek the answer:

1. To determine the level of Effectiveness of an Accounting Information System in terms of:
 - 1.1 User Satisfaction;
 - 1.2 System Quality;
 - 1.3 System Use;
 - 1.4 Decision-making Quality; and
 - 1.5 Economic Success
2. To ascertain the level of Operational Performance of Micro Business in terms:
 - 2.1 Revenue Generation;
 - 2.2 Productivity; and
 - 2.3 Gross Profit
3. To determine the significant relationship between the effectiveness of the accounting information system and the operational performance of the micro business in Panabo City.
4. To determine which domain in the effectiveness of the accounting information system significantly influences the operational performance of micro-business in Panabo City.

Hypotheses.

The hypothesis of the study will be tested at 0.05 level of significance, stating that there is no significant relationship between the Effectiveness of Accounting Information System and Operational Performance in micro-business in Panabo City; there is no domain in Effectiveness of Accounting Information System that significantly influences the Operational Performance of Micro Business.

II. 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

The researcher will examine and assess the information collected utilizing a descriptive- correlational research design. This design measures a correlation between the two variables, revealing how one variable may predict another (Y. Katzukov, 2020). The researcher tested two variables to estimate the effectiveness of AIS on operational performance among micro-businesses in Panabo City, which comprehends and

assesses their measurable relationship and does so without the mediation of some other factors. This quantitative study involves a survey questionnaire as a way of data collection tool to examine the operational performance in Panabo City. Quantitative research is the statistical illustration and manipulation of measurements to define and interpret the phenomena that those observations indicate (S. Sukamolson, 2007). Questionnaires are applied in sample surveys or polls to extract statements of facts, opinions, and additional personal circumstances. It is a process to collect comparable data by asking the same topics across a large group of people to reach a conclusion (E. Martin, 2006).

Research Locale

The conclusions of this research were specific to the context of the selected barangays in Panabo City, Davao Del Norte. The scope and the sample limit the possibility for the general applicability of the results. Accordingly, even though there could be standard features, the findings may not have broad applicability to other systems.

Population and Sample

The researchers will use Slovin's formula to get the sample size. The 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 respondents of this study will be the micro-businesses owners around Panabo City. For a total of 200 micro-businesses in Panabo City, the researcher will use Systematic Sampling. In the future, chosen micro-businesses will have to utilize answering the survey questionnaire to collect and gather the data needed for the study.

Research Instrument

In order for the researchers to calculate the level of the independent variable, the researchers utilize questionnaires to know the level of effectiveness of the accounting information system (AIS) of micro-businesses in Panabo City. Each indicator has a corresponding question and consists of five items. The questionnaire will be given to the respondents who are entrepreneurs of Panabo City. The questionnaire for the independent variable is concise and straightforward so that the respondents will understand it clearly and precisely.

III. RESULT AND DISCUSSION

RO1: Level of Effectiveness of the Accounting Information System

Table 1 shows the level of Effectiveness of the Accounting Information System with an overall mean of 4.49 with standard deviation of 0.35 which was described as very high. This means that the level of effectiveness of the accounting information system was very much observed.

Among all the indicators, The System use obtained the highest mean of 4.56 with standard deviation of 0.45, followed by Economic Success having a mean of 4.51 with the standard deviation of 0.44, next was Decision Making

Quality whereas obtained the mean of 4.50 and standard deviation of 0.44, then the System Quality with the mean of 4.49 and standard deviation of 0.46, and the least indicator was User Satisfaction with a mean of 4.41 with standard deviation of 0.51. All the indicators got a descriptive equivalent of very high.

The indicators about Effectiveness of the Accounting Information System that was very much observed among microbusinesses in Panabo City was the system used being the indicator with the highest mean. The accounting information system was a good platform to keep proper accounting track records, essential to the business growth and efficiency, contribute a lot in achieving organizational performance, encouraged employees to keep proper transaction records systematically and scientifically, and effective accounting systems reduce inefficiency and increase performance.

TABLE 1. Level of Effectiveness of the Accounting Information System

Indicators	Mean	SD	Descriptive Level
Use Satisfaction	4.41	0.51	Very High
System Quality	4.49	0.46	Very High
System Use	4.56	0.45	Very High
Decision Making Quality	4.50	0.44	Very High
Economic Success	4.51	0.44	Very High
Overall	4.49	0.35	Very High

RO2: Level of Operational Performance of Micro business in Panabo City

Table 2 shows the level of Operational Performance of Micro Businesses in Panabo City with an overall mean of 4.54 with the standard deviation of 0.33 which was described as very high. This means that the level of operational performance of the microbusinesses in the said place was very much observed.

Among all the indicators, Productivity obtained the highest mean of 4.59 with the standard deviation of 0.42, followed by the Revenue Generation obtained the mean of 4.53 with the standard deviation of 0.40, and the least indicator was Gross Profit obtained by the mean of 4.50 with the standard deviation of 0.41. All of the indicators got a descriptive equivalent of very high.

The indicators about the level of Operational Performance of Microbusinesses in Panabo City, the Productivity being the indicator with the highest mean. Operational performance was a common contribution from all employees, there was a positive relationship between the implementation of accounting information system and the organizational performance, the use of accounting information system could increase micro business efficiency and it helps the different departments to work together in a more effective way. Putting the right person to their specific job would helped the business have been more productive.

TABLE 2. Level of Operational Performance of Micro business in Panabo City

Indicators	Mean	SD	Descriptive Level
Revenue Generation	4.53	0.40	Very High
Productivity	4.59	0.42	Very High
Gross Profit	4.50	0.41	Very High
Overall	4.54	0.33	Very High

RO3: Significant Relationship between the Effectiveness and Operational Performance

One important purpose of this study was to determine whether or not the accounting information system had a significant relationship with the operational performance of the microbusiness person or was used to determine the correlation between the two variables. Results of the computations were shown in table 3.

The results revealed that the effectiveness of the accounting information system versus the operational performance yields an r-value of 0.719 which was significant. The result was due to the p-value of 0.001 which was lowered to 0.05 level of significance. This led to the decision that the null hypothesis which stated that there was no significant relationship between accounting information system and operational performance was rejected

This further means that there was a relationship between two variables correlated. On the basis of researchers on the relationship between the accounting information system and operational performance, it had been evident that the accounting information system had an effect on the operational performance of micro businesses. Therefore, the result of the correlation exemplifies that the effectiveness of accounting information system as observed have been high by the microbusiness owners.

TABLE 3. Significant Relationship between Effectiveness of Accounting Information System and Operational Performance

Variables	R-square	R-value	P-value
Accounting Information System	0.5170	0.719	0.001
Operational Performance			

*Significant at 0.05 significance level.

RO4: Regression Analysis of the Effectiveness of Accounting Information System and the Operational Performance of Micro Business.

Data shown in table 4 were the regression coefficients to test the significant influence of the overall accounting information system and operational performance of microbusinesses.

Table 4. Regression Analysis of the Effectiveness of Accounting Information System on determining Operational Performance of Microbusinesses.

Accounting Information System (Indicators)	(Unstandardized Coefficient) B	SE	Standardized Coefficient B	t-value	p-value	Decision
(constant)	1.376	0.214				
User Satisfaction	0.045	0.043	0.069	1.049	0.296	Do not Reject H ₀
System Quality	0.151	0.045	0.209	3.326	0.001	Reject H ₀
System Use	0.141	0.050	0.191	2.801	0.006	Reject H ₀
Decision Making Quality	0.189	0.045	0.250	4.244	0.001	Reject H ₀
Economic Success	0.176	0.045	0.234	3.887	0.001	Reject H ₀
Dependent Variable: Operational Performance						
R= 0.729				R ² = 0.531		
F-ratio= 44.012				P-value= 0.01		

*Significant at 0.05 significance level

Using multiple regression analysis the data revealed that the Effectiveness of the Accounting Information System on determining the Operational Performance of Micro Businesses had the f-value of 44. 012 and corresponding p-value of 0. 01.

This means that the effectiveness of the accounting information system significantly influences the operational performance of micro businesses since the probability value was less than 0. 05 the significance leveled. The r^2 value of 0. 531 implies that 53. 1% of the operational performance of microbusinesses was influenced by the effectiveness of accounting information system while the remaining 46.9% were influenced by other factors

The indicator User Satisfaction had a beta of 0. 069 and a corresponding p-value of 0. 296 which means that the User Satisfaction had no statistically significant influence on the effectiveness of the accounting information system since its probability level was 0. 296 which was greater than the significance leveled at 0. 05. Also, the System Quality indicator had a beta of 0. 209 and p-value of 0. 001 which means that System Quality had a significant influence on the effectiveness of the accounting information system since the probability leveled was 0. 001 which was less than the level of significance at 0. 05. Next, the System Used indicator had a beta of 0. 191 and p-value of 0. 006 which means that the System Used had a significant influence on the effectiveness of the accounting information system since the probability level was 0. 006 which was less than the significance leveled at 0. 05. Followed by the Decision Making Quality indicator had a beta of 0. 250 and p-value of 0. 001 which means that the Decision Making Quality had a significant influence on the effectiveness of the accounting information system since the probability level was 0. 001 which was less than the significance leveled at 0. 05. Lastly, the Economic Success indicator had a beta of 0. 234 and p-value of 0. 001 which means that Economic Success had a significant influence on the effectiveness of the accounting information system since its probability level was 0. 001 which was less than the significance leveled at 0. 05. The overall result on determining the effectiveness of the accounting information system significantly influences the operational performance of the microbusinesses

IV. CONCLUSION

In view of the findings of this study, conclusions were drawn in this section. The attitude of the owners or managers towards the effectiveness of accounting information systems resulted in a high level of operational performance of micro business in terms of user satisfaction, system quality, system used, decision-making quality and the overall mean was high for economic success of the micro business. This means that most micro business owners or managers manifest a positive attitude in the effectiveness of accounting information systems.

The level of effectiveness of accounting information systems was high for revenue generation, high productivity and high gross profit and the overall mean was high for economic success of the micro business. This means that the extent of the respondent opinion in the effectiveness of

accounting information systems as the determinant in the operational performance of a micro business was all positive.

There was a significant relationship between the accounting information system and operational performance of the organization. The accounting information system influences the operational performance of the micro business. This is in line with the study of Trabulsi (2018) The Accounting Information System (AIS) is a tool used by businesses to improve its management control for the level of business operations and performance. This also refers to a formal process for collecting, processing data into a piece of helpful information, and distributing it to the respective users. AIS is the complete system wherein implemented for recording financial transactions and other related activities.

Recommendation

Based on the result of the studies, the researchers came up with the following recommendations; owners or managers needed to strictly and highly maintain the accounting information system of the organization to secure the profitability and the growth of the micro business. Moreover, the owners or managers needed to attend a seminar or workshop that would help them to gain more knowledge and experience about accounting information systems. The accounting information system of operational performance in micro business needs have been improved and well maintained as the technology would improve day by day, they needed to cope up with the changes to ensure that the data was secured and reliable.

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