

THE ROLE OF ACCOUNTING INFORMATION SYSTEM ON BUSINESS PERFORMANCE

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Abstract

Accounting Information System (AIS) provides a tool for finance department to enhance organizational performance especially in this era of global technology advancement. The respondents strongly agreed on the role of AIS and on the business performance, with positive high relationship. On the other hand, an AIS hardware may implemented for efficiency, accuracy and processing of accounting duties and responsibilities; an in-service training or workshop for the accounting officer on the application of the software for better efficiency and productivity; and using an AIS effectively in all the business' activities to ensure the desired benefits and to better understand the financial dimensions of development as one of the important tools in decision making and planning.

Keywords: AIS, profitability, productivity, cost reduction, decision-making and planning

INTRODUCTION

Accounting Information System is a collecting, storing and processing financial and accounting data that are used by decision makers, a tool and system designed for the collection of accounting information that the accountants can make a decision. It is a computer-based system that increases the control and enhances the corporation in an organization.

Increasing investment in the AIS makes the corporate culture more flexible and stronger, which enables the organization to face challenging business environment conditions. AIS uses the financial data and combines the accounting techniques and controls along with different methodologies by using IT to track the external and internal reporting data, financial statements and trend analysis, and thus to impact the performance of an organization (Grande, Esteanez, & Colomina, 2011).

In managing a business organization and implementing an internal control system, the role of accounting information system (AIS) is crucial; with benefits that can be evaluated by its impacts on the improvement of decision-making process, quality of accounting information, performance evaluation, internal controls and facilitating business's transactions (Sajady, Dastgir, & Nejad, 2008).

This study therefore, aims to investigate how effective is the AIS implementation on business performance such as improving the quality, cost reduction and decision making; given that, AIS is very important to decision-makers in obtaining and using of information for decision making and strategy building in achieving business goals and objectives, thus businesses need to have a competitive strategy considering all the circumstances.

STATEMENT OF THE PROBLEM

This study investigates the implemented AIS effectiveness in relation to business performance. Specifically, the researcher sought to find answers to following questions:

1. How do the respondents perceive role of AIS implemented in terms of:
 - 1.1 convenience;
 - 1.2 cost reduction;
 - 1.3 decision-making;
 - 1.4 reliability?
2. How do the respondents perceive the role of AIS implemented in relation to business performance in terms of:
 - 2.1 profitability;
 - 2.2 productivity?
3. Is there a relationship between the AIS implemented and business performance?

REVIEW OF LITERATURE

Accounting Information Systems (AIS)

Information system is a set of interrelated subsystems that work together to collect, process, and store, transform, and distribute information for planning, decisions making and controlling (Pol & Lim, 2013). The use of computer in information systems can improve the efficiency of information collection, process, store, transform and distribute. It is the one responsible in generating reliable financial information needed for decision making, but, it will still depend on the anticipated users of the information and the types of decisions they are expected to make; given that the design of the system may also depend on the size of the firm, volume of transaction data, nature of operations, organizational structure and business form. Because, many businesses which would otherwise have been successful have been brought down by their failure to maintain proper financial records (Yap, 2019).

Previous authors noted that AIS processes data and transactions to provide users with the information they need to plan, control and operate their businesses (Stair & Renoid, 2010); as a system that helps management in planning and controlling processes providing relevant and reliable information for decision making (Laudon & Laudon, 2012; Hall, 2011); and that AIS functioned beyond the traditional to include planning and managing business activities, controlling mechanism as budgeting (Romney & Steinbart, 2010).

Convenience. Computerized accounting system have also improved the functionality of accounting departments by increasing the timeliness of accounting information. By improving of financial information, accountants can prepare reports and operations analyses that give management an accurate picture of current operations. The number of financial reports has also

been improved by computerized systems; cash flow statements, departmental profit and loss and market share reports are now accessible with computerized systems; have an internal check and balance measures to ensure that all transactions and accounts are properly balanced before financial statements are prepared; and also allow accountants to process large amounts of financial information and process it quickly through the accounting system. AIS enhances the management efficiency and cost control by supporting rational operational decision (Nwinee et al., 2016); facilitates the exchange of data between different programs, aligning the various subsystems in business organization, and overall, it provides efficient and effective service delivery systems (Al-Khozendar, Assumpcao, & Campeanu, 2014).

Cost Reduction. AIS produces the financial statements namely, the income statement, the balance sheet, and cash flow statement (Hla & Teru, 2015), and when the controls are used properly, there will be better operating effectiveness and efficiency which will result in better financial information reliability. The process of regulating the cost of operating a business is cost control and is involved within acceptable limits (Akeem, 2017), it is the process of avoiding wasteful use of valuable resources and encouraging efficiency and cost consciousness, thereby planning a positive approach to reduce expenditure. Having price competitive advantage, the company can increase its market share and become the market leader (Lockey, 2002).

Decision-Making. Accounting information may help managers to understand their tasks more clearly and reduce uncertainty before making their decisions (Ulla et al., 2014). The information concerns the financial situation and the performance of a company and there is intended to the users to taking decisions, to achieve the objectives of the company it is necessary to know exactly the situation of the company, either compared to other companies that work in the same field or in relation to previous periods, this thing being possible through accounting information.

Reliability. The integrity and reliability of data produced by accounting information systems are critical, not just for the production of reliable financial reports, but also for overall business success (Krishnan, Peters, Padman, & Kaplan, 2006). Accounting information needs to possess capacity to influence decisions; without this characteristic, there is no purpose of producing information.

BUSINESS PERFORMANCE

Business performance can be both financial and operational outcomes in general (Hosain, 2015); the degree to which businesses realized its goals (Daft, 1983); and the ability to produce desire results (Oguntimehin, 2001). Business organizations pursue multiple goals, and such goals must be achieved in the face of competition limited resources.

Profitability is the degree to which a business or activity yields profit or financial gain; and it was found out that AIS has a positive significant relationship to business profitability (Patel, 2005). The effectiveness of AIS helps in better decision-making by managers, more effective internal control systems, improvement of the quality of financial reports, enhancement of

performance measures, facilitating financial transaction processes and helps in expansion of profitability of the business organization.

Productivity. It is the productivity that measures the performance of an organization and it can also be used for companies themselves in order to assess their own progress. It is the ability of a business organization to utilize its available resources in order to produce profitable goods or services as desired by clients (Tikkala, 2012).

METHODOLOGY

This is a descriptive research method, which deals with the statistical analysis through the gathering of quantifiable information through survey method, which better define and measure the respondent's perception on the role of AIS to business organization performance.

Mean analysis was used guided by a 4-point Likert scale, from the highest 4-strongly agree to lowest 1-strongly disagree; and the profile of the respondents is determined using the frequency and percentage distribution. On the other hand, the hypothesis was tested through Pearson r correlation to determine if there is an association exists between variables, rejecting H_0 when $p \leq 0.05$ and accepting H_0 when $p \geq 0.05$; +1.00 as perfect correlation and +0.00 as negligible correlation.

The study was conducted in the Province of Zambales, Municipality of Sta Cruz; with 50 employees of businesses that uses and AIS, selected randomly.

RESULTS AND DISCUSSIONS

1. Perceived Role of AIS

Table 1: Respondents Perception on the Role of AIS in Terms of Convenience

Statements	Mean	QI
1. Accounting Information System makes Financial Information up to date.	3.68	Strongly Agree
2. Accounting Information System helped to reduce manual efforts and can perform the same operations more cost effectively.	3.60	Strongly Agree
3. Accounting System easy to adapt and user friendly.	3.34	Strongly Agree
4. An effective Accounting Information System uses hardware and software to effectively store and retrieve data.	3.32	Strongly Agree
5. Accounting Information System make the job easier.	3.64	Strongly Agree
Overall Weighted Mean	3.52	Strongly Agree

The respondents strongly agreed on the AIS role that makes Financial Information up to date manifested on the high mean value of 3.68 and ranked 1st, while AIS uses hardware and software to effectively store and retrieve data with lowest mean value of 3.32 and ranked 5th. The computed overall weighted mean on the role of AIS as to Convenience is 3.52 with qualitative interpretation of strongly agreed.

AIS improved the functionality of accounting departments by increasing the timeliness of accounting information, thereby accountants can prepare reports and operations analyses that give management an accurate picture of current operations, with generated financial reports

such as cash flow statements, departmental profit and loss and market share reports that are accessible with computerized systems (Ghasemi et al.,2011).

Table 2: Respondents Perception on the Role of AIS in Terms of Cost Reduction

Statements	Mean	QI
1. Accounting Information System being a cost saving in an organization.	3.52	Strongly Agree
2. Accounting Information System help cuts the payroll for accounting staff substantially.	3.32	Strongly Agree
3. Maintenance cost can be reduced through Accounting Information System.	3.52	Strongly Agree
4. Cost of providing social responsibility can be effectively managed through Accounting Information System.	3.32	Strongly Agree
5. Accounting Information System reduce company's costs and helps to increase their profit.	3.50	Strongly Agree
Overall Weighted Mean	3.44	Strongly Agree

The respondents are strongly agreed on the role of AIS being a cost saving in an organization and the maintenance cost can be reduced, manifested on the equal high mean values of 3.52 and ranked 1.5th respectively while AIS help cuts the payroll for accounting staff substantially and the cost of providing social responsibility can be effectively managed through AIS with equal lowest mean value of 3.32 and ranked 4.5th respectively. The computed overall weighted mean pm the role of AIS as to Cost Reduction is 3.44 with qualitative interpretation of strongly agreed.

AIS through its computerized accounting system produces the financial statements namely, the income statement, the balance sheet, and cash flow statement (Hla & Teru, 2015), and when the controls are used properly, there will be better operating effectiveness and efficiency which will result in better financial information reliability.

Table 3: Respondents Perception on the Role of AIS in Terms of Decision-Making

Statements	WM	QI
1. Accounting Information System is important in decision making in an organization.	3.26	Strongly Agree
2. Accounting Information System be able to make decisions making more effective.	3.54	Strongly Agree
3. Accounting Information System provide a necessary and appropriate information facilitating the decision-making process.	3.48	Strongly Agree
4. Accounting Information System provide timely information for decision making.	3.48	Strongly Agree
5. The decision-making process become easier by the help of Accounting Information System.	3.46	Strongly Agree
Overall Weighted Mean	3.44	Strongly Agree

The respondents are strongly agreed on the role of AIS that be able to make decisions making more effective manifested on the high mean value of 3.54 and ranked 1st, while the AIS is important in decision making in an organization with lowest mean value of 3.26 and ranked 5th. The computed overall weighted mean on the role of AIS as to Decision Making is 3.44 with qualitative interpretation of strongly agreed.

The efficiency of an organization depends on the quality of managerial process, which requires competence and rational decisions, thereby being possible through accounting information. And through AIS, it provides financial information to the managers, owners and the stakeholders who are interested in an organization and to help them reduce uncertainty in decision-making (Romney, 2009).

Table 4: Respondents Perception on the Role of AIS in Terms of Reliability

Statements	WM	QI
1. Automated Accounting Information System contribute to make the information output more credible.	3.50	Strongly Agree
2. All the data from using Accounting Information System is reliable.	3.38	Strongly Agree
3. Accounting Information System increasing the accuracy and lessen the errors.	3.42	Strongly Agree
4. Accounting Information System provide a necessary and appropriate information facilitating the decision-making process.	3.54	Strongly Agree
5. Accounting Information System is free from biases.	3.42	Strongly Agree
Overall Weighted Mean	3.45	Strongly Agree

The respondents are strongly agreed on the role of AIS that it provides predictable financial information which assist the organization in finalizing the future plans manifested on the high mean value of 3.54 and ranked 1st, while all the data from using AIS is reliable with lowest mean value of 3.38 and ranked 5th. The computed overall weighted mean on the role of AIS as to Reliability is 3.45 with qualitative interpretation of strongly agreed. The integrity and reliability of data produced by accounting information systems are critical, not just for the production of reliable financial reports, but also for overall business success (Krishnan, Peters, Padman, & Kaplan, 2006). The role that accounting information has in past events confirmation is significant, because users often want to analyze the accuracy of past forecast that they have made, what may have impact on accuracy of current decisions (Buljubasi & Iln, 2015). Therefore, any company's management should apply an adequate and strong internal control framework for assuring the reliability of the AIS process over the quality of financial data reporting and other reports.

2. Role of AIS in Relation to Business Organization Performance

Table 5: The Role of AIS in Relation to Business Organization Profitability Performance

Statements	WM	QI
1. Profitability affects the organizational performance of the business	3.50	Strongly Agree
2. Organizational performance effective in making the company more profitable.	3.46	Strongly Agree
3. Business operation make the business profitable.	3.50	Strongly Agree
4. Being profitable means your operation is doing great.	3.48	Strongly Agree
5. Profitability of the business result of the business organizational performance	3.46	Strongly Agree
Overall Weighted Mean	3.48	Strongly Agree

The respondents strongly agreed that the used of AIS affects the profitability of the organizational performance and the business operation manifested on the equal high mean values of 3.50 and ranked 1.5th respectively; while the organizational performance effective in making the company more profitable and the profitability of the business result of the business organizational performance with equal low mean values of 3.46 and ranked 4.5th respectively. The computed overall weighted mean on the role of AIS to the business organizational performance as to Profitability was 3.48 with qualitative interpretation of strongly agreed.

Every business either small, medium or large organizations, AIS support all levels of management such as operational level, mid-level and top-level management. The work of Patel (2005) found out that there was a positive significant relationship between the AIS used and business profitability. Furthermore, AIS helps in better decision making by managers, more effective internal control systems, improvement of the quality of financial reports, enhancement of performance measures, facilitating financial transaction processes and helps in expansion of profitability of the organization.

Table 6: The Role of AIS in relation to Business Organization Productivity Performance

Statements	WM	QI
1. The product or service of the business offer can meet the expectation of customer.	3.50	Strongly Agree
2. The employee doing their best to meet the customers expectation.	3.56	Strongly Agree
3. The employee reach business goal or they exceed.	3.50	Strongly Agree
4. Business satisfies customers.	3.52	Strongly Agree
5. The employee maximizes his/her time and effort to reach the business goal.	3.54	Strongly Agree
Overall Weighted Mean	3.52	Strongly Agree

The respondents are strongly agreed that through AIS employees are doing their best to meet the customers' expectation manifested on the high mean value of 3.56 and ranked 1st, while the product or service of the business offer can meet the expectation of customer and employee reach business goal or they exceed with equal low mean values of 3.50 and ranked 4.5th, respectively. The computed overall weighted mean of AIS to the business organizational performance as to Productivity is 3.52 with qualitative interpretation of strongly agreed.

AIS improves the business productivity; in which productivity increases the overall efficiency of a business. It is also the ability of an organization to utilize its available resources in order to produce profitable goods or services Tikkala (2012).

3. Test of Relationship between AIS and Business Organization Performance

Table 7: Test relationship between the Role of AIS and Business Organizational Performance

Sources of Correlation		Profitability	Productivity
Convenience	Pearson Correlation	.328*	.495**
	Sig. (2-tailed)	.020	.000
Cost Reduction	Pearson Correlation	.480**	.569**
	Sig. (2-tailed)	.000	.000

Decision Making	Pearson Correlation	.443**	.469**
	Sig. (2-tailed)	.001	.001
Reliability	Pearson Correlation	.474**	.397**
	Sig. (2-tailed)	.000	.004

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

There is positive slight correlation and significant relationship between the Convenience and Profitability manifested on the computed ($r=0.328^*$, $p=0.020$); while there is positive moderate correlation and significant relationship between the Convenience and Productivity manifested on the computed ($r=0.495^{**}$, $p=0.000$).

There is positive moderate correlation and significant relationship between the Cost Reduction and Profitability manifested on the computed ($r=0.480^{**}$, $p=0.000$), and Productivity manifested on the computed ($r=0.569^{**}$, $p=0.000$).

There is positive moderate correlation and significant relationship between the Decision Making and Profitability manifested on the computed ($r=0.443^{**}$, $p=0.001$), and Productivity manifested on the computed ($r=0.469^{**}$, $p=0.001$).

There is positive slight correlation and significant relationship between the Reliability and Productivity manifested on the computed ($r=0.397^{**}$, $p=0.000$); while there is positive moderate correlation and significant relationship between the Reliability and Profitability manifested on the computed ($r=0.474^{**}$, $p=0.004$).

CONCLUSIONS

AIS has a significant role in the business operation, whether it can be small, medium, or large size. The results indicated that AIS makes financial information up to date and make the job easier in generating financial reports. AIS also reduced the maintenance cost and thereby a cost savings in businesses. AIS able decision-makers to make decisions more effectively on a timely manner, and facilitates necessary and appropriate information for current and future decision-making process.

Therefore, business organization performance is highly associated with the use of AIS in the business operations.

Recommendations

It is recommended that AIS may use in all business size for efficiency, accuracy, and processing of accounting duties and responsibilities. An in-service training or workshop for the accounting officer and employees may be conducted by businesses on the application of the AIS. Businesses may pay utmost attention to the role of accounting information system in better understanding of financial dimensions of development as one of the important tools of decision making and planning.

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