

Accounting Information System of the Seventh-Day Adventist Schools in the Philippines: A User's Perception

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This paper seeks to find out whether the Accounting Information System (AIS) of the Seventh-day Adventist (SDA) Church-owned and operated secondary schools in the Philippines have kept-up with changes in Information Technology (IT), management's information need, and organization's growth. - This paper also seeks to assess the system's ability to meet its objectives. It was found that the SDA secondary schools' AIS is able to meet its objectives, have the characteristics of a successful AIS, and is responsive to changes in IT, management's information need, and organization's growth.

Key words: AIS, information system

INTRUDUCTION

Individuals must make decisions throughout their lives, whether as members of families, groups and societies, or as employees and employers. Organizations are also faced with the same task, however, it is more complex because organizations are engaged in many activities that affects many parties. At the early of the 21st century, developments in Information Technology (IT) offer great advantage over a manual accounting system. Past studies that looked into the usefulness of computer technology found that accounting departments of some Philippine firms benefited from the use of computer in terms of efficiency, accuracy and timeliness. Furthermore, then studies found that increased productivity and improved customer services are some of the benefits expected from a computerized system (Mitres & Chaya, 1996; Moran, 1989). Regardless of all the benefits, accounting information can only be meaningful if analysed and interpreted correctly.

The subject of this study is the Seventh-day Adventist (SDA) Church-owned and Operated secondary schools in the Philippines. These schools are non-profit organizations, and just like other profit institutions, they are faced with changes both internal and external to the organization. This study focuses on the characteristics and responsiveness of the

respondents Accounting Information Technology (AIS) to changes and its ability to meet objectives.

RESEARCH QUESTION AND HYPOTHESIS

This study sought to find out whether the AIS of the Seventh-day Adventist Church-owned and operated secondary schools have adapted to changes in IT, management's informational need, and organization's growth in terms of increase in number of students. This study also assess' the system's ability to meet objectives and, thus, its characteristics. It is also expected that the responsiveness of respondent schools' AIS to changes is associated to the number of years the schools have been in operation, current manpower size, size of budget for accounting department, but not associated with current schools year enrolment Both hypotheses were tested in its null form.

Related Literature. AIS is a collection of resources designed to transform financial and other data into information (Bodnar & Hopwood, 1995). This information is then communicated to a wide variety of decision-makers. Organizations are continually faced with the need for new or better information because of the ever-changing nature of their environment, such as, changes in nature of business, nature of organizations, needs of people, and technological development To meet this need and be responsive, organization's information system must periodically undergo changes that range from minor to major overhauls (Romney and Steinbart, 2003; Cushing & Romney, 1990).

As people gain experience or take on new

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responsibilities, their information requirements often change; thus, the information system can be greatly influenced by changes in users' information needs. Increased demand of information need is one of the reasons why IT is important. IT can improve the accuracy and timeliness of information and help ensure that the system is responsive (Moran, 1981). IT can also lower average production costs and lower average total costs, although the average overhead cost may be higher (Nitta & Chaya, 1996).

On the other hand, IT can be a problem if it is not tailored into the organization's environment properly. It must fit the organizational system and support workers; otherwise it can be a disruption and, thus, negatively impact workers by increasing workload, mental strain, or decrease workers' quality of work life. For example, a study of the computerized information system of credit guarantee corporations in the Philippines found that their system provide sufficient information on different areas. It was found to be satisfactorily accurate, reliable, timely, complete and useful. However, there are still problems encountered, such as delayed reports, lack of technical know-how, errors in reports, high cost of allocation, and lack of accounting and managerial control (Abuel, 1996). For this reasons, a system needs to be properly tailored to its environment and continuously undergo evaluation.

An accounting system is considered successful if it achieves four objectives: correct and timely information; meet organizations' informational need; gain users' satisfaction; and

completed within a reasonable amount of time (Boockholdt & Li, 1991). An ideal accounting system should be able to process information efficiently, produce relevant information on a timely basis, ensure relevant high degree of accuracy and minimize possibility of theft and fraud (Anthony & Reece, 1989). Some other critical success factors are cost effectiveness, flexibility, simplicity, reliability, users' acceptance and managements' commitment (Manuel, 1997; Nash & Heagy, 1993). These qualities are somewhat overlapping; however, they reflect the features of an ideal accounting system. The interaction between AIS and its environment and how it affects the attainment of AIS objectives is presented in the following figure.

Research Design. Population and Sample. In 1998, Seventh-day Adventist Church owns and operates twenty-two (22) secondary schools in the Philippines. Thirteen (13) were included in this study because of the number of students. It is expected that the schools AIS will face more strain as the number of students increase. **Research Instrument.** The Closed-ended questionnaires were used in gathering the respondents' perception, while documentary analysis and unstructured interview was also used in obtaining relevant historical data, policies and organizational structure. **Statistical Tools.** In quantifying and interpreting the responses received the Likert Scale, as modelled in Table 1, is used.

Figure 1. Interaction between AIS and changes and the attainment of its objectives

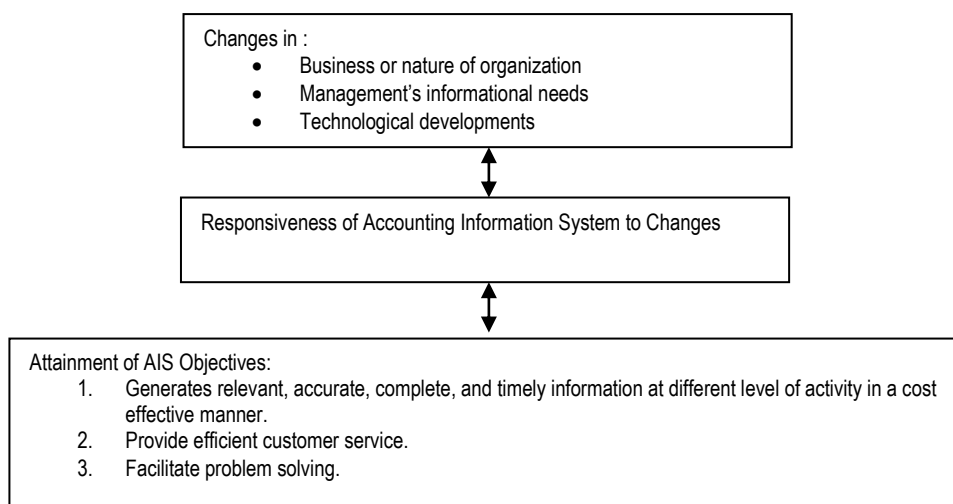


Table 1. Likert Scale Model Used to Quantify Respondents' Response

Range	Weight	Interpretation
4.51 -5.00	5	Strongly Agreed
3.51 -4-50	4	Agree
2-51 - 3.50	3	Slightly Agree
1.51 -2.50	2	Disagree
1.00-1.50	1	Strongly Disagree

The Kruskal - Wallis test (H test) was used in testing for significant difference in the characteristics of schools' AIS. Pearson Correlation was used to find any significant relationships between the responsiveness of respondent schools' AIS and the number of years the schools has been in operation, current year enrolment, manpower size and current year budget for accounting department. **Findings.** Characteristics of Respondents Schools' AIS. Summary to the question and the responses received are presented in Table 2.

Table 2. Characteristics of Respondent Schools' AIS

No.	Changes	Weighted Mean	Verbal Interpretation
1.	Information generated by accounting department is correct.	4.49	Agree
2.	The information generated by accounting department is timely.	4.10	Agree
3.	The information generated by accounting department satisfies the organization needs.	4.14	Agree
4.	The AIS wins users acceptance.	4.20	Agree
5.	The AIS is cost effective.	3.92	Agree
6.	The AIS is adequately flexible.	4.04	Agree
7.	The system offers simplicity.	4.35	Agree
8.	The AIS is reliably.	4.00	Agree
9.	The system offers simplicity.	4.03	Agree
	The AIS is reliably.	4.14	Agree
	Management shows commitments to the AIS		
	Average Weighted Mean		

The responses ranges from a low of 3.92 to a high of 4.49, all are verbally interpreted as agree. The average weighted mean is 4.14, which means that the respondents agree. The responses ranges from a low of 3.92 to a high of 4.49, all are verbally interpreted as agree. The average weighted mean is 4.14, which means that the respondents agree that the schools' AIS have the characteristics of successful AIS.

The characteristics of respondent schools' AIS were then tested for significant differences when they are grouped according to number of years schools has been in operation, degree of computerization and current year's budget for accounting department. It was found that there are no significant differences. All three calculated h-value is lesser than the X2 value of 3.841 at a 0.05 and degree of Eredom of one (2-1). This indicates that against expectations, both older and younger schools have similar AIS characteristics, schools with different level of computerization have similar AIS characteristics, and schools with

large and small budgetary support for accounting department have similar AIS characteristics. The respondents agreed that their schools' AIS are responsive enough to changes in IT, management's information needs and growth in number of students. The summary of their responses is presented in Table 3.

Table 3. Responsiveness of AIS to Changes

No.	Changes	Weighted Mean	Verbal Interpretation
1.	Information Technology	4.11	Agree
		3.99	Agree
2.	Management	4.11	Agree

The respondent school's AIS are then related to the number of years the schools have been in operation, current schools year enrolment, current manpower size and school year's budget for accounting department. The test for significance

in relationship is summarized in Table 4

Table 4. Association between Responsiveness of Respondent Schools AIS with certain Variables

No.	Variable	<i>r</i>	<i>p</i>	Verbal Interpretation
1.	Number of years schools have been in operation.	-0.4	0.228	No Association
2.	Current school year enrolment	-0.45	0.017	Negative Association
3.	Current school year manpower size	-0.64	0.132	No Association
4.	Current school year's budget for accounting department	0.17	0.478	No Association

If *p* is lesser than a 0.05, there is a significant relationship

The *r*-value showed low negative relationship for the first three variables and low positive relationship for the fourth variable. However, the relationship is not significant for the number of years the schools have been operating, the manpower size of the schools, and budgetary size for accounting department, indicating that the responsiveness of AIS is not associated with the length of years the schools have been in operation, manpower size of the organization, and the size of budget for accounting department. Ideally, the longer the schools have been in operation, the more manpower the schools have, and the larger budget accounting department has, the more responsive the AIS.

On the other hand, there is a low negative and significant correlation between the responsiveness of schools' AIS and the number of enrolment, indicating that higher number of enrolment places more strain on the AIS and, thus, making it less responsive. In terms of attainment of objectives of schools AIS, the respondents also agreed that the schools' AIS are able to meet its objectives (average weighted mean of 4.07). The questions and response are summarized in table 5.

Table 5. Attainment of AIS Objectives

No.	Objectives	Weighted Mean	Verbal Interpretation
1.	The AIS generates useful information in helping management and users solve problems.	4.16	Agree
2.	The benefits of the AIS exceed its cost.	4.21	Agree
3.	The AIS process' data and generates information accurately and completely.	4.09	Agree
4.	Users are able to access the system when they need to.	3.84	Agree
5.	The AIS generates information timely.	3.94	Agree
6.	Efficient customer service is provided.	4.30	Agree
7.	The system has sufficient capacity to operate in peak times and handle future growth.	3.97	Agree
8.	The system is user friendly.	3.82	Agree
9.	The system is sufficiently flexible to accommodate operating requirement changes of a reasonable magnitude.	3.99	Agree
10.	The AIS facilitates problem solving and future developments.	4.06	Agree
11.	The AIS is auditable.	4.44	Agree
12.	There is an adequate security to safeguard data, records and documents from unauthorized users.	4.06	Agree
Average Weighted Mean		4.07	Agree

CONCLUSIONS AND RECOMANDATION

This study examines the perception of users of AIS_ The population are the SDA Church-owned and operated secondary schools in the Philippines 1998. The study sought to find out whether the respondent schools' AIS has the characteristics of a successful AIS, how responsive it is to changes in organization or business nature, managements information need and IT. The study also sought to find out whether there are differences in the characteristics when the schools are grouped according to a variety of variables and whether -there are significant relationship between the responsiveness of the AIS and a variety of variables. Furthermore, the study sought to find out whether the AIS meet its objectives.

Generally the respondents agreed that the schools' AIS have the characteristics of successful AIS. However, when grouped according to age of school, number of students and budget for accounting department, there were no differences found in the characteristic of the schools AIS. This means that young and old schools, schools with small and larger budgetary support, and schools with low and high computerization have successful AIS.

When the- responsiveness of the schools'

AIS is related to age of schools, it was found that there was no correlation. Thus, both young and older schools are responsive to changes. There was a negative correlation when it was related to number of students. This suggests that the more students the school has the less responsive it is. It could be concluded that as the number of students increase the schools' AIS is less flexible in making changes. When the responsiveness of AIS was related to manpower size and budgetary support, there was no significant relationship

REFERENCES

- AbLiet- M_ R. C. (1996). Computerized Information Systems of the Credit Guarantee Corporations. Unpublished MBA Thesis, University of Santo Thomas, Manila.
- Anthony, R. N., and Reece, J. S. (1989). Accounting Texts and Cases. Homewood, Illinois: Richard D. Irwin, Inc.
- Bodnar, G. H., and Hopwood, W. S. (1995). Accounting Information System (5th ed.). New Jersey: Prentice Hall, Inc.
- Boockholdt, J. L., and Li, D. H. (1991). AIS.

- USA: Richard D. Irwin, Inc.
- Cushing, B. E., and Romney, M. B. (1990). Accounting Information System (5th ed.). USA: Addison-Wesley Publishing Company, Inc.
- Manuel, Z. v. C. (1997). Partnership and Corporation Accounting (7th ed.). Philippines: Zenaida Vera Cruz Manuel.
- Mitra, S., and Chaya, A. K. (1996). Analyzing Cost Effectiveness of Organizations: The Impact of Information Technology Spending. *Journal of Management Information System*, 13(2), 29-57.
- Moran, A. (1989). Cybernetics as a Plus Factor to Accounting. Unpublished MSC Thesis, University of Santo Thomas, Manila.
- Nash, J. F., and Heagy, C. D. (1993). Accounting Information System (3rd ed-). USA: South-Western Publishing Co.
- Romney, M. B., and Steinbart, P.J. (2003). Accounting Information System (96'ed.). USA: Pearson Education.