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 Inforamation Technology (IT), management's information need, and organization's growth. –This paper also seeks to assess the system's ability to meet its obejectives. It was found that the SDA secondary schools' AIS is able to meet its obejctives, have the chracteristics of a successful AIS, and is responsive to changes in IT, management's information need, and organization's growth.

Keywords: 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 organizaitons are engaged in many activities that affects many parties.

At the early of the 21" 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 departements 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 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 Sevent-day Adventist (SDA) Church-owned and Operated secondary schools in the Philippine. These schools are non-profit organizations, and just like other profit institutions, ther are faced with canges both internal and external to the organization. This study focuses on the characteristics and responsiveness of the respondent accounting Information Technology (AIS) to changes and its ability to meet obejctives.

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 student. 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's 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 enrolement Both hypotheses were tested in its nul form.

Related Literature

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

As people gain expericne or take on new responsibilities, their information requirements often change; thus the information systemcan be greatly influenced by changes in user's information nedds.

Increased demand of nformation need is one of the resons why IT is important. IT can improve the accuracy and timeliness of information and help enure that the system is responsive (Moran. 19814 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 organizations's organizational system and support workers otherwise it can be a distruption and, thus, negatively impact workers by increasing workload, mental strain, or decrease worker's quality of work life. For example, a study of the computerized information sustern 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
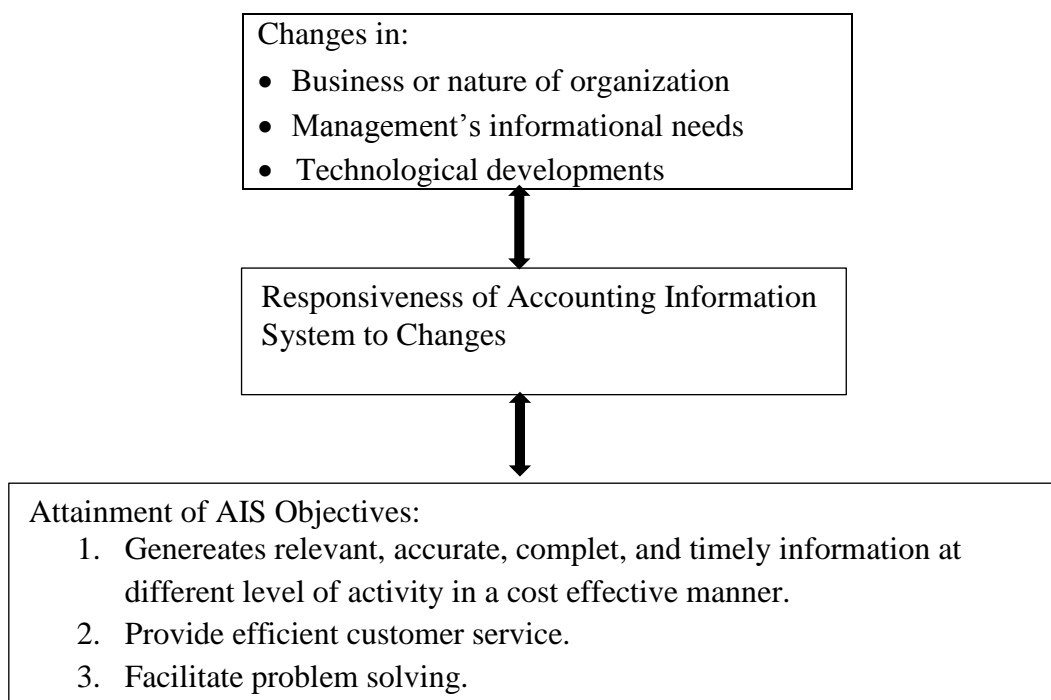
useful. However, there are still problems encounterd, such as delayed reports. Lack of technical know-how, errors in reports, high cost of allocation, and lack of accounting and managerial control (Abuel, 1996). For this reason, a system needs to be properly tailored to its environment and continuously undergo evaluation.

An according 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 (Bookholdt & Li, 1991. An ideal accounting system should be able to process information efficiently, producerelevant 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, realiability, user's acceptance and mangements' commitement (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.

Figure 1. **Interaction between AIS and changes an dteh attainment of its objectives**

Changes in:
- Business or nature of organization
- Management's informational needs
- Technological developments

Responsiveness of Accounting Information System to Changes

Attainment of AIS Objectives:
1. Genereates relevant, accurate, complet, and timely information at different level of activity in a cost effective manner.
2. Provide efficient customer service.
3. Facilitate problem solving.

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 studentws. 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, white 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 rece 1% ed the Likert Scale, as modeled in n n Table 1, is used.

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

Range	Weight	Interpretation
4.51 - 5.00	5	Strongly Angreed
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 Disangree

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 respondet schools' AIS and the number of years the schools has been in operation, current year enrolment, manpower size current year budget for accounting department.

Findings

Characteristics of Respondents School's AIS. Summary to the question and the responses received are presented in Table 2.

Table 2. **Characteristics of Respondent Schools' AIS**

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 realiably	4.00	Agree
9.	Management shows commitments to the AIS	4.03	Agree
	Average Weighted Mean	4.14	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.

The responses ranges from a low of 3.92 to a high 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 benn 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 X2 value of 3.841 at a 1.05 and degree of Ereedom 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 school's AIS are responsive enough to changes in IT, management's information needs and growth in number of students. The summary of their respondents is presentd in Table 3.

Table 3. **Responsive of AIS to Changes**

Changes	Weighted Mean	Verbal Interpretation
1. Information Technology	4.11	Agree
2. Management Information Needs	3.99	Agree
3. Increase in Number of Students	4.11	Agree
Average Weighted Mean	4.07	Agree

The respondent schools' 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**

	Variable	r	p	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 manpower size	-0.64	0.132	No Association
4	Current school year's budget for accounting departement	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 forth fouth 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 enrolemnt, indicating that higher number of enromelment 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**

	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 sysem when the 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 facilities 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 form unauthorized users.	4.06	Agree
	Average Weighted Mean	4.07	Agree

This study examines the perception of users of AIS_ The population are the SDA Chruch-owned and operated secondary schools in the Philippines 1998. The study sought to find out whether the respondent schools' AIS has the charactistics 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 relatd to manpower size and budgetary support, there was no significant relationship.

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