

# Accounting Information System Framework for NPO (A Case Study on Children Development Centers Salatiga Cluster)

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## Abstract

Both commercial organization and non-profit organization produce financial reports which are the form of their responsibility to the stakeholders. However, the financial reports are different since there are differences in business process and stakeholders' interest. These have driven the difference of their accounting information system. This study will give a contribution to the accounting information system of non-profit organization literatures. The research and development approach has been applied to this study. CDCs Salatiga cluster which has 15 centers are the chosen research object. The accounting information system framework is adopted from 'Give and Take' exchanges of Dunn and McCarthy (2009) and five major transaction cycles of David (2009). The results are examined into three elements which are the business process, the involved entities, and the accounting information system framework. Three main activities in CDC's business process are (1) The preparation of the program/budget master and program proposal, (2) The activity execution in accordance to the program/budget master, and (3) Financial and operational reporting. Then, there are nine involved entities which are CIF, partner church, local donors, third parties, bank, children, operational and administration staff, management, and committee. The last element is accounting information system framework which consists of five accounting cycles including operational cycle as its business process. The study is a basic discussion to the further research about accounting information system of other NPO. Also, accounting information system instruments of each cycle should be developed.

**Keywords:** Accounting Information System, Non-profit Organization, Children Development Center

## 1. Introduction

The purpose of commercial organization establishment is to gain profit. The commercial organizations generally transform the resource into products or services to be sold. The selling price is formed of the cost of product or service added to profit margin. In order to run the business, the commercial organizations have loan from creditor or investment from investor. Creditor and investor both also have profit orientation. Contradictory, non-profit organizations have no profit goal. The prime focus in the organizations is to accomplish programs that confirm the organization vision. The programs are funded by donors who would like to grant their asset to the organizations.

Similar to commercial organizations, business process in non-profit organizations will also be accounted by the management through financial reports. There are some differences between their financial report processing because the business process and the interest of stakeholders are also different.

Most of accounting information system literatures studied about the accounting information system of commercial organizations. This study will give a contribution to the accounting information system of non-profit organization literatures. The study aims to construct non-profit organizations' accounting information system framework. The study is a case study in Children Development Centers (CDCs) which are non-profit organizations in community development with focus on education.

## 2. Literature Review

### 2.1 Accounting Information System

Romney and Steinbart (2009) defined that Accounting Information Systems (AIS) is a system that collects, records, stores, and processes data to produce information for decision makers. The definition refers to the system as a process infrastructure. The process could be either a simple AIS without computer or a sophisticated AIS using computer (Romney and Steinbart, 2009). According to Andone and Tabara, cited by Mihalache (2011), the AIS is the main component of corporate information systems, since it is the only system which is able to figure out the company's overall performance to both internal and external users.

Cheryl L. Dunn and William E. McCarthy (Romney and Steinbart, 2009) developed the AIS model which is a set of 'Give and Take' exchanges. They stated that a repetition of each type of exchange is called as a business or transaction cycle (Romney and Steinbart, 2009). Julie Smith David (Romney and Steinbart, 2009) figured that there is five major business or transaction cycles. Five cycles are connected to each other as a system.

The AIS is differentiated with management information system in terms of data of transactions. AIS manages

data of transactions which has three characteristics, among others are there are an agreement between minimum 2 entities, an exchange of goods/services between these entities, and an economic exchange value (Romney and Steinbart, 2009)

### 2.2 Non-profit Organization

According to the Ministry of Law and Human Right in NPO Domestic Review (2010), in the year of 2009 there are 21.699 NPO having legal status officially registered. Most of them, 21.301 NPO or 98%, have Yayasan as their legal status. The research object of Compassion Indonesia Foundation is a type of NPO in community development. One of their services is Children Development Centers (CDCs) which are spread in the entire Indonesia, use education approach to improve children as a part of community. Especially in Salatiga cluster of Central Java, there are fifteen CDCs which service more than 3.000 children.

### 2.3 Previous Research

Siddika, Rekabder and Hosain (2007) conducted a research of Accounting Information System and Financial Reporting of NGOs: Case Study of a BRAC's Project. Research object was NGOs in Bangladesh. They found that the AIS of BRAC Education Program has strengths and weaknesses. They convinced that the system is well managed and modern. It is also useful for the internal control such as cash, internal auditing process, budget, and asset management. On the other hand, one of some weaknesses is that the information gathering in project workers is weak and does not have supporting documents. The research suggested that BRAC Education Program should give the other NGOs some guidelines for preparing and installing AISs, also determining assumptions about accounting principles to present financial statements.

United Nations Center for Human Settlements in Building NGO/CBO Capacity (2001) stated that a strong financial management must be supported by good AIS. The center has suggested concepts and strategies that NPOs could follow.

This is a further of previous project of Haryani and Pranoto (2012), which have discussed about CDCs. The research proposed a model of Internal audit. From the figure 1 below, financial report which is produced by AIS is the main object of internal audit.

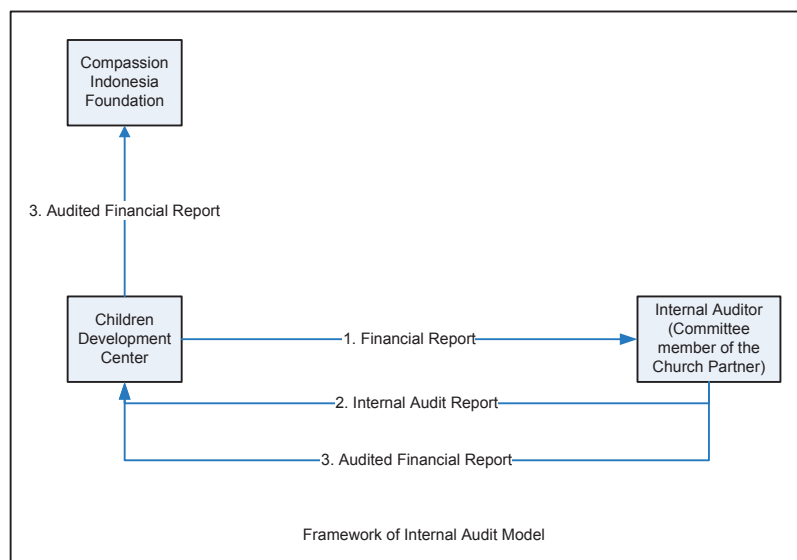


Figure 1. Framework of Internal Audit Model (Haryani and Pranoto, 2012)

### 3. Research Methodology

This project has employed the research and development approach (Borg and Gall, 1989). Developing the model/framework has been accomplished after finishing the research. The framework is adopted from 'Give and Take' exchanges of Cheryl L. Dunn and William E. McCarthy (2009) and five major transaction cycles of Julie Smith David (2009). The research object, CDCs Salatiga cluster which has 15 centers, was chosen on purpose. Data consists of primary and secondary data. Primary data was the result of in-depth interview and the observation on the current AIS. While secondary data such as the CDCs' financial report was gathered by documentation study.

The research steps which have referred to the development system of Bodnar and Hoopwood (2006) were designed as follow:

1. Preliminary study: At this first stage, there was activities among others were literature study, data cluster acquiring, survey team determining, guided-questions drafting, and the current AIS understanding. The result was the business activities in business process of CDCs and their description.
2. Need analysis: The next stage, there was an entities analysis and accounting transaction of the AIS. It determined a description of involved entities and sort of managed transactions.
3. Framework development: Based on business process, involved entities, and types of transactions, there was a framework development. The outcome of this stage was a framework of AIS according to transaction cycles. The developed framework was discussed in a group of CDCs' members to achieve the final framework.

#### **4. Result and Discussion**

##### *4.1 Business Process of CDCs*

CDCs' business process is divided into 3 main activities, which are (1) The preparation of the program/budget master and program proposal, (2) The activity execution in accordance to the program/budget master, and (3) Financial and operational reporting.

The program/budget master is a monthly plan (both activity plan and budget) which is made for a fiscal period from July, 1 year Y1 to June, 30 year Y2. While, program proposal is tentative plan which is made through all year if a CDC is in high balance or urgent needs condition. Both are made by administration staff. These plans should be approved by Compassion Indonesia Foundation (CIF).

Every month a CDC gets support fund. This support fund is the center's revenue. According to approved the program/budget master and program proposal, administration and operational staff execute the program. Programs are divided into routine and non routine program. Routine program refers to child mentoring which is held on weekly schedule. While, non routine program is non mentoring activity which is held according to annual agenda, like christmas celebration, out class or togetherness activity. The programs are funded by monthly support fund. If the execution plan is different from the plan in the program/budget master, then the executor has to apply an amendment of the program/budget master before the execution.

The execution of non routine program is by mentors and administration staff. After the execution they make an operational report which is comprise of activity profile, financial report and activity evaluation. Meanwhile, the executor of routine program is mentors. The executor merely gives financial transaction evidence to a treasurer. The executor does not make an operational report. All financial record, both revenue and expenditure for both routine and non routine program are managed by the treasurer. At the end of the month, a secretary prepares the financial report to be sent to CIF.

#### 4.2 'Give and Take' Exchanges in the CDC

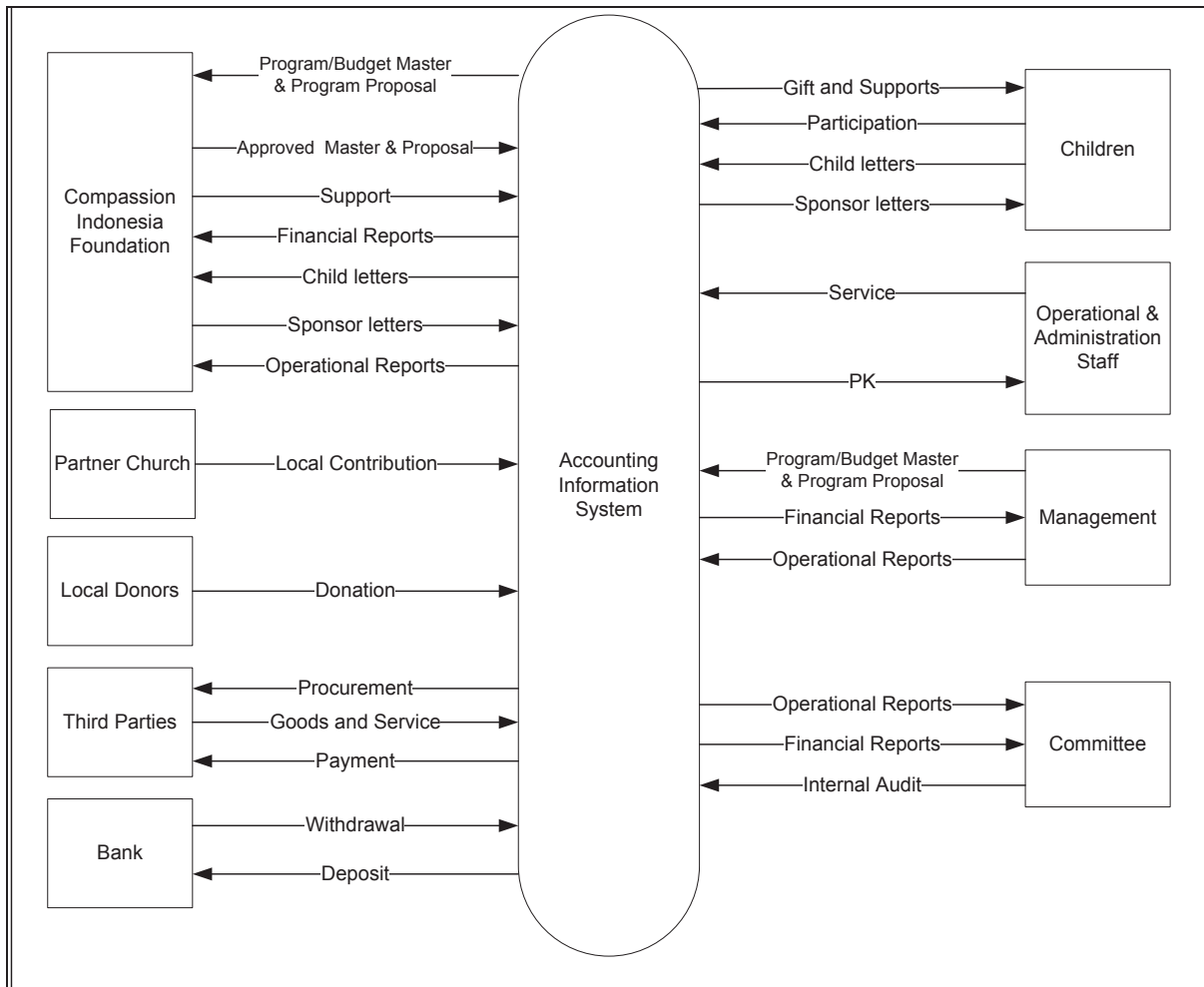


Figure 2. 'Give and Take' Exchanges in a CDC (processed data)

Nine entities are involved in business process of the CDC (see Figure 2). The first entity is CIF. In term of managing CDC, CIF plays a key role to approve the program/budget master and program proposal. Without the approval, a CDC is not able to run the programs. Every month CIF transfers supporting funds from Child sponsors to CDC and receives monthly financial report from them. For operational managing, some entities play an important function; among others are Partner Facilitator (PF), Child sponsor (CS), and Auditor. PF is a pointed personal of CIF to assist and control a group of CDCs (called cluster), especially related to three main activities of business process above. CS is a fund provider for each child. CS transfers the support through CIF. CS will receive child letters and send letters as well. An auditor is an independent personal who assesses CDC in a whole aspect, from program execution and financial accountability.

Partner church (PC) is the second entity which is a local church which has cooperation with CIF and provides CDC infrastructure, human resources, and other resources. PC has also obligation to support through local fund raising. Then, there are local donors who give donation as outside entity of CIF and PC. Donation may be goods and/or fund. Children are the major entity to be served. Definition of children refers to registered children in a CDC. They consist of sponsored children and unsponsored children. Sponsored children are children who are chosen by CS. Children in this category will receive support and gift. They will get CSs' letters and be required to reply their sponsor. Unsponsored children do not have CS. They will only receive support. Photographs of this kind of children will be posted on Compassion website until they get CS. These two category children have to attend in routine and non routine programs.

The fifth entity is staff. Staffs are composed of operational and administration staffs. Operational staffs are called mentors who have a duty of child mentoring. Administration staffs are office staffs; include Coordinator, Secretary, and Treasurer. Mentors are the main organizer of routine programs and prepare mentoring documents, such as lesson plans, evaluation of child and class, visiting reports, attendance monitoring, and child document

filing. A treasurer manages cash collection and disbursement. A secretary handles administration of child and office, and is an accounting function to prepare financial reports. Mentors and administration staffs are executors of non-routine programs and deal with operational reports, such as a program report. All staffs receive special offerings monthly as their compensation which should be done by committees.

Next entity is Management. CDC's management consists of local church's pastor of CIF's partner, committees, administration staffs, operational staffs, cooks, and tutors. Management manages the program/budget master and program proposal annually. Regarding to them, staffs should run the programs and prepare programs report. In addition, management has to produce financial reports to be sent to CIF.

CDC's committees are entity that represents local church that consists of some pointed people to assist and control a CDC in the operational running. Committees accompany staffs to handle and organize the three main activities above. Internal auditor who is one of committees has a duty to audit operational reports and financial reports before sending to CIF. Third parties are entity that provides goods and services which are needed to run CDC programs. Procurement transactions contain goods/services exchange. Their payment should be proved by transactions' documents. The last entity is Bank. All revenue from support and gift is received through bank account. As the consequence, there are transactions of deposit and drawing in bank.

#### *4.3 Accounting Information System Framework*

After this study acquired cluster AIS data from survey and interview, the business activities in business process of CDCs are analyzed based on business or transaction cycle in Romney and Steinbart (2009). Moreover, the CDC's AIS framework is developed, which is adapted from Dunn and McCarthy model in Romney and Steinbart (2009). There are 5 transaction cycle in CDC's AIS (Figure 3) : (1) Revenue Cycle, (2) Financing Cycle, (3) Expenditure Cycle, (4) Operational Cycle, and (5) Human Resources /Payroll Cycle.

The revenue cycle includes transactions which a CDC gets money from CIF based on the approved program/budget master and program proposal, also the last Financial Reports. A CDC is only asking for money from CIF, entity who distribute CSs' funds. It is not generating money or income.

The second, financing cycle is when a CDC withdraws money from Banks and pays money to both staff and third parties. A CDC simply prepares money based on the program/budget master and program proposal. It has no purpose of cost efficiency or profit optimization.

Next, expenditure cycle is when a CDC purchases goods/services to be used in program execution. A CDC basically spends money based on the program/budget master to execute program. It does not spend money in order to get revenue.

Then, the operational cycle is when the approved the program/budget master and program proposal are executed in programs. A CDC is in a relative certain environment. The program execution in one fiscal period is definitely assured in the approved program/budget master and program proposal. Whereas, commercial organizations do those efforts in order to achieve the determined target. Thus, commercial organization is facing a lot of uncertainty.

The last, human resources/payroll cycle is when staff are hired, trained, compensated, evaluated, and terminated. All activities in this cycle are determined by current year support fund (it is related to the amount of served children), CDC's policies, and partner's policies. Basically, staff receive a special offering (gift) of the community service as their compensation, not a reward. While in commercial organization it is merely determined by government regulations and essentially as performance compensation.

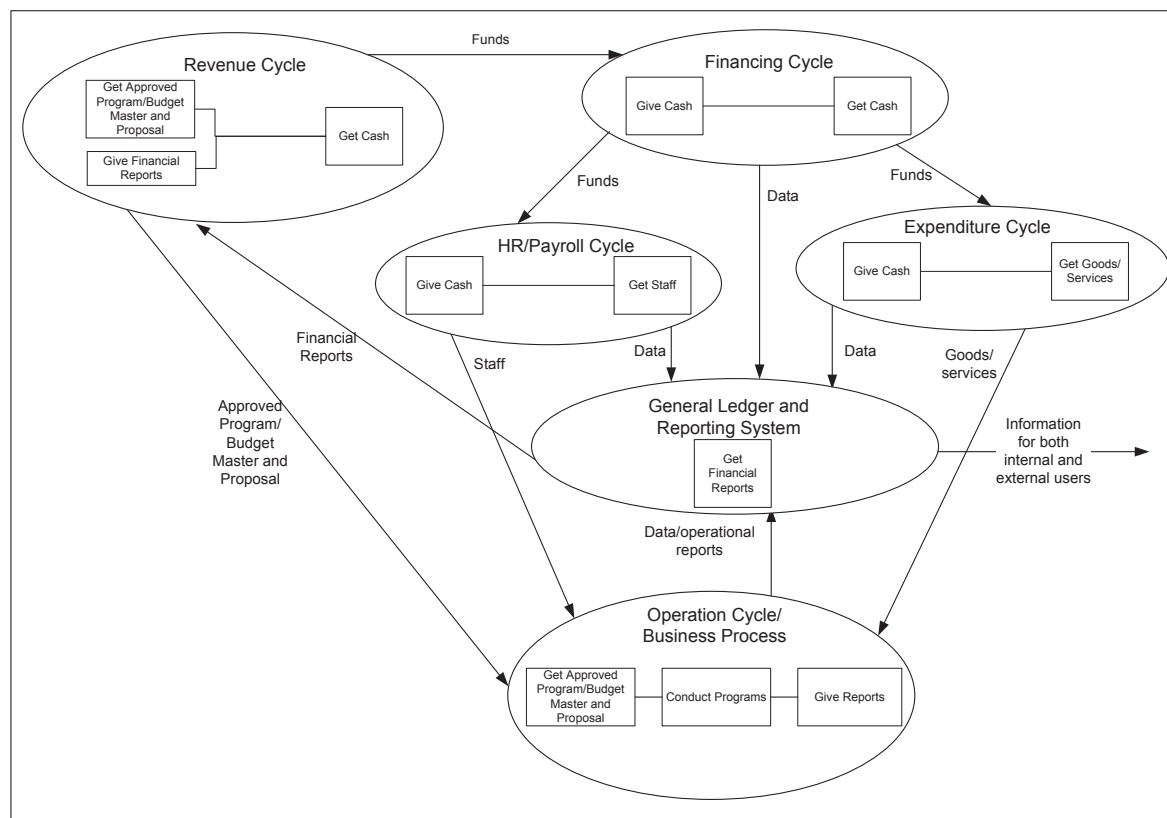


Figure 3. Transaction cycle in a CDC (processed data)

## 5. Conclusion

The AIS in NPO is different from that one in commercial organizations. It is driven by the difference of business process in those two kinds of organizations. Therefore, in order to develop a framework of AIS in NPO, it is necessary to understand organization's business process, involved entities and data of transactions. The business process shows main activities in the organization which will lead to determine what transactions have to be managed and who entities are related. The study is a basic discussion to the further research about AIS of other NPO. Also, AIS instruments of each cycle should be developed.

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