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Digitized scoreboard for Philippines' conditional cash transfer program: An assessment on adoption readiness

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Abstract

Conditional Cash Transfer (CCT) Program which originated in Latin America and African countries were proven as one of the effective tools for poverty alleviation. Many countries including the Philippines replicated the CCT program in 2007 with its version called Pantawid Pamilyang Pilipino Program (4Ps). 4Ps has been providing more than four million household beneficiaries in which forty-four thousand came from the province of Laguna. 4Ps has expanded at a rapid pace. Recording and monitoring of the program are done manually using a spreadsheet application. With more than thirty forms used by program implementers, there were inconsistencies, miscalculations and duplication discovered every consolidation of reports. In this regard, this study is an attempt to assess the readiness of implementers in adopting a digitized scoreboard that will record and monitor the CCT program and its beneficiaries. A mixed methodology was conducted through interviews, consultative meetings and survey to determine the level of knowledge and readiness in Information and Communication Technology (ICT) literacy were given to one hundred seven implementers of Laguna. The result of the assessment revealed that generally, the level of knowledge of implementers in ICT is relatively high. Almost all of them understand computer operations and applications. Furthermore, the willingness of these implementers in embracing technology in doing their job was also evident. Indeed, with the level of knowledge in ICT, attitude and support towards upgrading the manual monitoring, the implementers are ready to adopt a digitized scoreboard - an innovative way of continuously transforming lives and communities.

Keywords: Conditional cash transfer (CCT) program, Laguna Philippines, program implementers, ICT, digitized scoreboard

Introduction

Conditional Cash Transfer (CCT) program which originated in Latin America and African counties lifted millions of people around the world from poverty. The Pantawid Pamilyang Pilipino Program (4Ps) is the Philippine version of CCT. It is the pilot program of the Department of Social Welfare and Development (DSWD) in 2007 (Fernandez & Olfindo, 2011) that provides conditional cash grants to the poorest of the poor in the Philippines. It is the Philippine government's poverty reduction and social protection strategy which provides cash grants to beneficiary households to improve their health, nutrition, and education (Tabuga & Reyes, 2012). The 4Ps established three major systems to organize its implementation systematically, address issues, and effectively ensure that the program objectives are met. These are the Compliance Verification System (CVS), Beneficiary Update System (BUS) and the Grievance Redress System (GRS). Each process in the system is recorded and monitored by the program implementers.

CCT program has expanded at a rapid pace. As cited in the Official Gazette, as of August 26, 2015, there are about more than four million active household beneficiaries in the Philippines, covering seventy-nine provinces, one hundred forty-three cities and one thousand four hundred eighty-four municipalities. Positively, in the study conducted by Acosta et al. (2015) entitled "An Update of the Philippine Conditional Cash Transfer's Implementation Performance" estimates that the program has led to a poverty reduction of 1.4 percentage points per year or 1.5 million less poor Filipinos. In addition, according to the report of the World Bank, the 4Ps is currently the world's fourth-largest CCT program based on population coverage. It complements the government's other development priorities such as generating jobs and creating livelihood opportunities for the poor. Furthermore, Fernandez and Olfindo (2011) noted that 4Ps was successfully rolled out to the poorest households.

At present, 4Ps is on its 8th year of implementation in the province of Laguna. According to the Provincial Link Field Officer, Mildred Mina, there are at least forty-four thousand, three hundred fifty beneficiaries coming from twenty-six municipalities and four cities in Laguna and one hundred seven program implementers. Recording and encoding all the data of all the beneficiaries are done using a spreadsheet application. However, with more than thirty forms used by program implementers, there were inconsistencies, miscalculations and duplication discovered every consolidation of reports. Thus, the potential to upgrade the method used is perceived.

There is no doubt that digitizing the process in order to adhere with tedious work would produce good quality of information and services. Information and Communication Technology (ICT) can make a significant contribution to the achievement of good governance (Heeks, 2001). As what Ndou (2017) wrote, Electronic Government (e-government) is one of the many types of ICT which represents the introduction of a great wave of technological innovation as well as government reinvention. In addition, it is about delivering improved services to citizens through drastically changing the way governments manage information (Accenture, 2002). Significantly, it transforms the delivery of government services by improving quality of services, accountability and efficiency (Gupta et al. 2008).

With all the positive impacts stated above, were the program implementers ready to embrace innovative technology? That is why this assessment is conducted.

Materials and methods

With the increasing number of beneficiaries, collective challenges and difficulties are faced by program implementers on how they implement the CCT program in the province of Laguna. This study was an attempt to assess the readiness of the program implementers in adopting a digitized scoreboard that will record, collect and monitor the status of the CCT program and its beneficiaries innovatively.

This study employed a mixed research type of methodology through interviews, meetings and a survey. A total of one hundred seven program implementers and forty-two beneficiaries responded to interviews, consultative meetings and devised survey questionnaire. All of these were conducted between May to August 2018.

Interviews and consultative meetings with program implementers, officers and beneficiaries were conducted to gather relevant data which provide better understanding and insights on how the conditional cash transfer program is implemented. Interviewees were asked about how each household beneficiary is monitored. Also, during the consultative meetings, discussions focused on the issues and challenges implementers were encountering.

The level of knowledge of program implementers in computer literacy (ICT) was assessed using a devised survey questionnaire. It was administered to one hundred seven program implementers and was successfully completed. The survey was composed of six areas such as Basic Computer Concepts, File Management, Word Processing, Spreadsheets, Presentations and Internet Technology. Implementers assessed themselves on whether they have No Knowledge, Limited Knowledge, or Knowledgeable on those areas. The data collected from the survey was tallied and analyzed. Lastly, implementers were also asked on what areas they wanted to be trained as well.

Results and discussion

Employing mixed methodology, the researcher was able to gather data from the examined implementation and monitoring processes of the CCT program through interviews and consultative meetings. The profile and level of knowledge of implementers were determined through a devised survey.

The following sections were the results of the study:

On the process used for the implementation of the conditional cash transfer program - monitoring household beneficiaries

The CCT program is being conveyed in terms of monitoring household beneficiaries. The verified process is based on interviews from the provincial link of Laguna, meetings with beneficiaries and program implementers of CCT program in the regional office, provincial and municipal links in the province of Laguna.

The first step needed to accomplish is registration. In this step, all approved beneficiaries will fill-out a form and then the program implementer will encode the basic information written in the accomplished form using the designed workbook.

Once registered, the beneficiary will be monitored through the client verification system. All the beneficiaries are obligated to attend and participate in the conditionalities set by the 4Ps program such as monitoring the health and attendance in school of children of beneficiaries and attendance in family development session (FDS).

Aside from all the types of grants received by the beneficiaries, the mode and period of payment, complaints such as payment-related issues and reduced grants are also monitored by encoding them in the same workbook.

After all the activities are achieved, scoreboard consolidation is prepared. Scoreboard consolidation is the activity done by the provincial office to monitor all the data collected from each phase of the process in monitoring the beneficiaries in ten municipalities of Laguna. Each form in the designed workbook is using a spreadsheet application. Saving the application is the way to record and monitor the status of each household beneficiary. There are various reports generated from the consolidated scoreboard. These are submitted updates per type (choose health facility, correction and information, changed grantee, transfer of address, school), active households beneficiaries (migration and relocations), eligible children for education, status of delisting (cannot locate household, moved-out area) and newly created school facilities.

From the registration up to scoreboard consolidation, staff field implementers used the designed workbook to keep track of the status and conditions of all the beneficiaries of CCT. Due to the complexity of the processes in implementing Philippines' CCT and its expansion at a rapid pace, there is no doubt that monitoring the beneficiaries by just encoding in a workbook would be a big challenge in the near future. Data integrity, storage and security were issues raised.

On the demographic profile of program implementers

A total of 107 filled survey questionnaires from Laguna Provincial Operations were obtained, giving a response rate of 100%. The demographic profile of the respondents is presented below.

Most of the program implementers who responded were female with 71% (76 out of 107). Comparatively, there was a higher percentage of respondents in the age group 25-30 and a lesser number in the 40 and above age group. In addition, most of them (57%) were single. And all of them were well educated having a college level qualification.

On the level of knowledge of program implementers in terms of ICT literacy

Using the devised survey questionnaire consisting of six areas, the level of knowledge of program implementers in ICT literacy was determined. The following paragraphs were the results of the survey.

On basic computer concepts

As seen in **Figure 1**, most of the implementers have knowledge in terms of Computer Basic Concepts. They can identify hardware components and software applications but has a limited understanding of how data is being backed-up and how operating system functions.

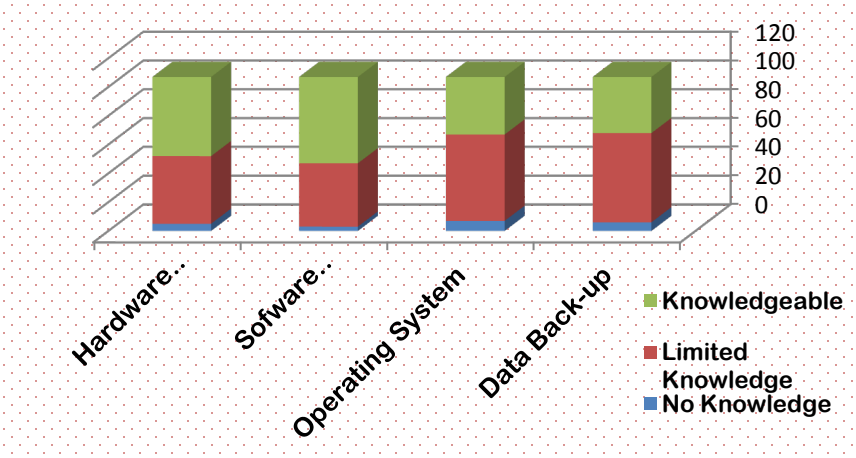

Figure 1 Level of Knowledge in terms of computer basic concepts.

On file management

Results also revealed as shown in **Figure 2** that generally, implementers are knowledgeable in file management. They know how to create directories and folders. They can easily identify and differentiate file types as well. On the other hand, they have limited knowledge and understanding on how the operating system shows drives, folders and files and the impact of virus in the computer system.

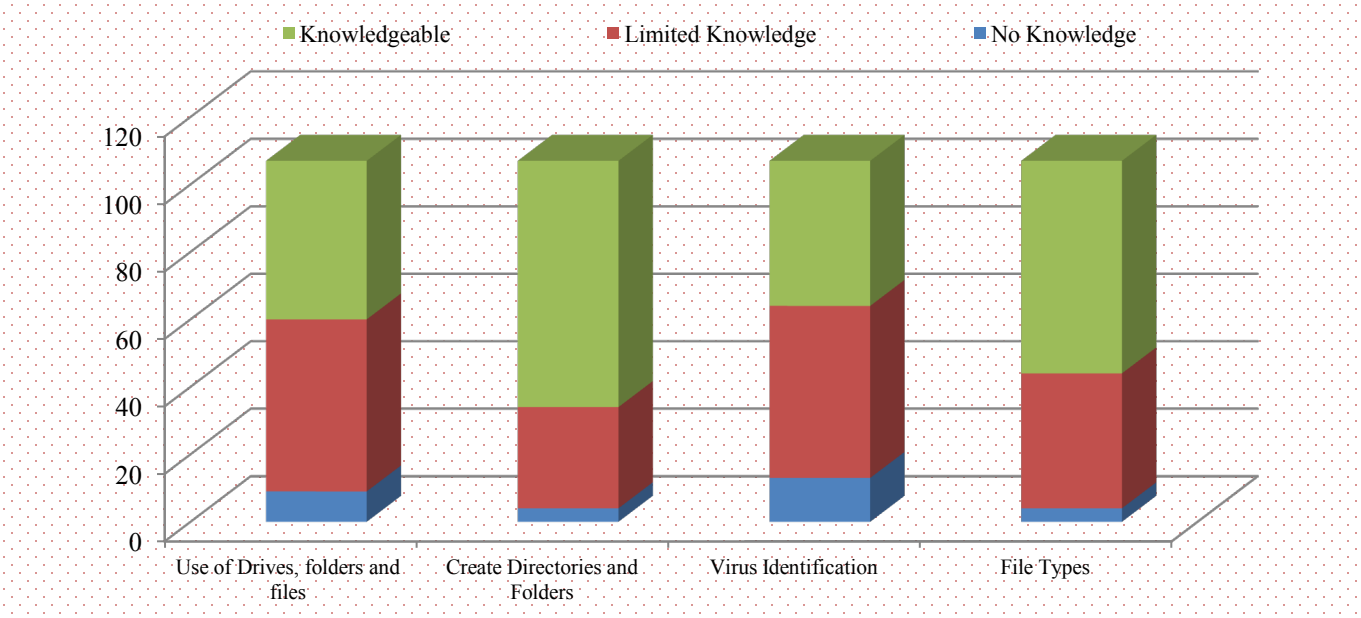

Figure 2 Level of knowledge in terms of file management.

On word processing

Figure 3 illustrates the level of knowledge in terms of word processing. Almost all the implementers are knowledgeable in the opening and saving a document, knows how to check the grammar and spelling, knows how to set the layout of the page, can print document and use of formatting features.

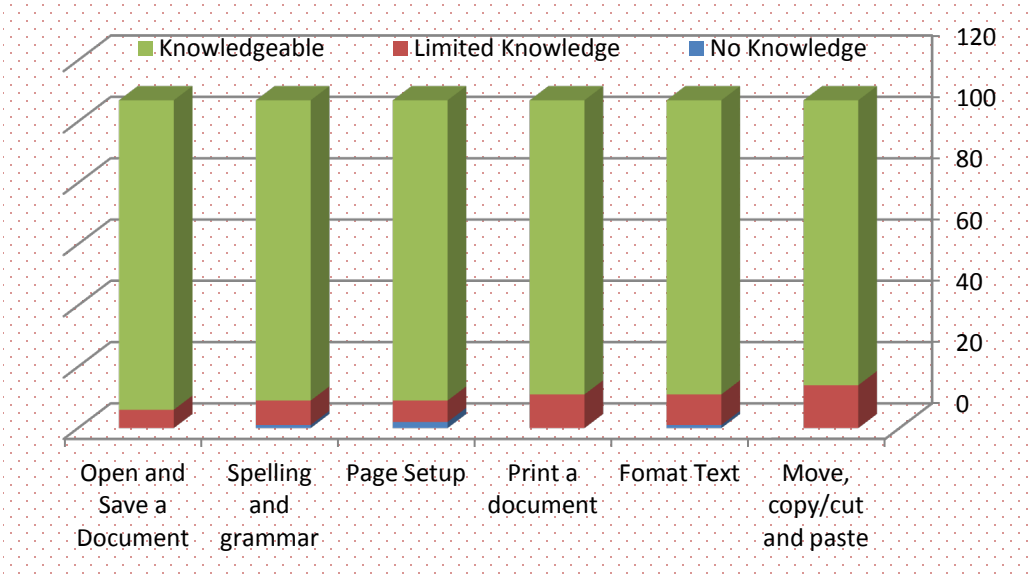

Figure 3 Level of knowledge in terms of word processing.

On spreadsheet

Since implementers are currently using spreadsheet application in monitoring the status of conditional cash transfer of its beneficiaries, it is not surprising that all of them were already knowledgeable in using a spreadsheet application. As **Figure 4** illustrates, they know how to open and save a spreadsheet, insert and delete row/columns, and sort data. A small percentage of them are relatively have limited knowledge on how to create a formula and inserting charts using a spreadsheet.

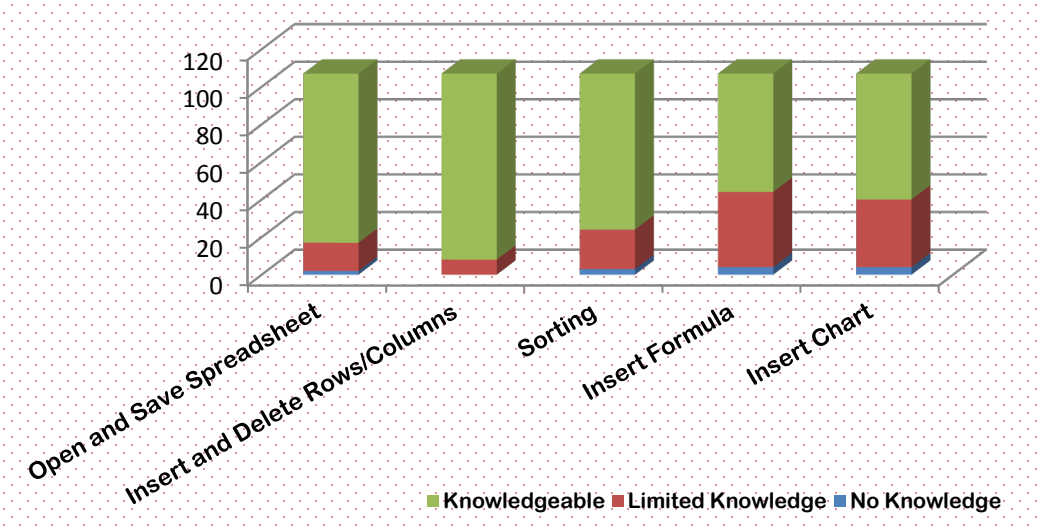

Figure 4 Level of knowledge in terms of spreadsheets.

On presentations

Only a few (6 out of 107) have no knowledge of how to create presentations as presented in **Figure 5**. Most of them know already how to insert text, objects and graphics on slides, incorporate transition and animation effects and knows how to print slides and handouts.

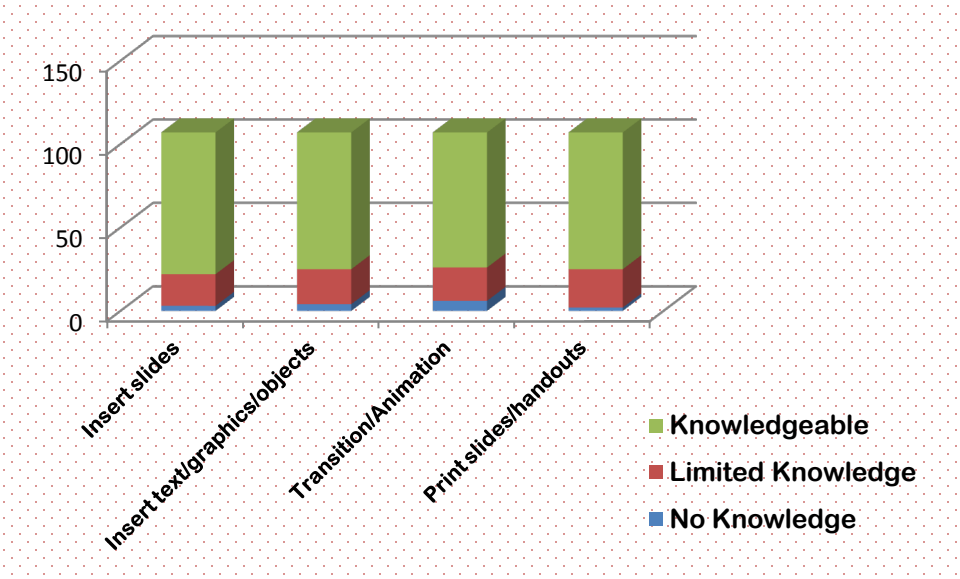

Figure 5 Level of knowledge in terms of creating presentations.

On internet technology

When it comes to internet technology as seen in **Figure 6**, results revealed that the majority of the program implementers were familiar with the basics of using the internet.

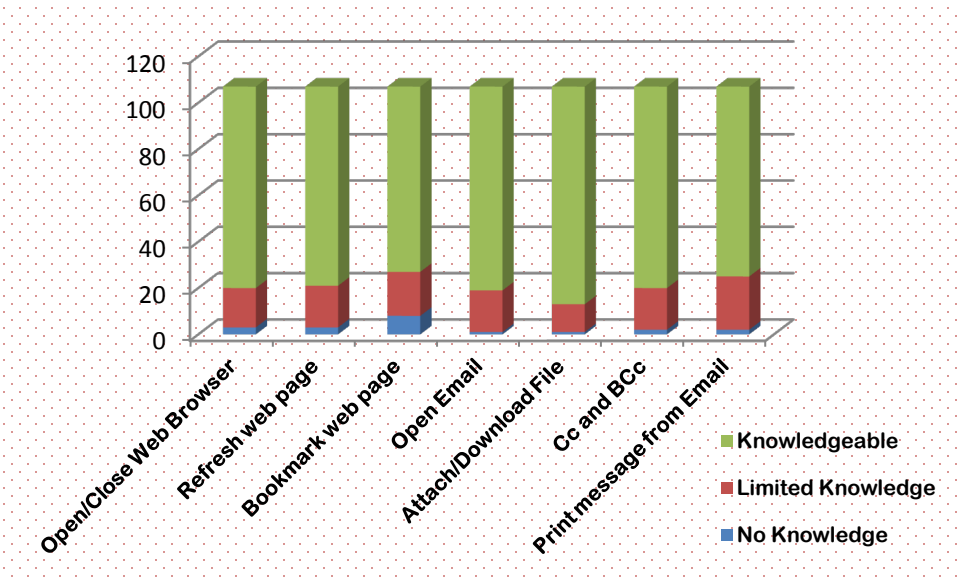

Figure 6 Level of knowledge in terms of internet technology.

Request training

In general, the level of knowledge of implementers when it comes to ICT literacy is high. Almost all of them understand and they were familiar with how to use a computer in delivering the CCT program. However, since the program accommodates 4 cities and 26 municipalities in the Province of Laguna, according to them, there is a need to upgrade what at present they are using. Based on the survey completed by 107 implementers, they wanted to gain more skills and knowledge. They have the desire to implement the CCT program innovatively. **Figure 7** shows that they wanted more training that will greatly help them to be more equipped. Trainings such as multimedia technology, advanced office applications, ICT operations and internet technology and web development were the areas they wished to receive.

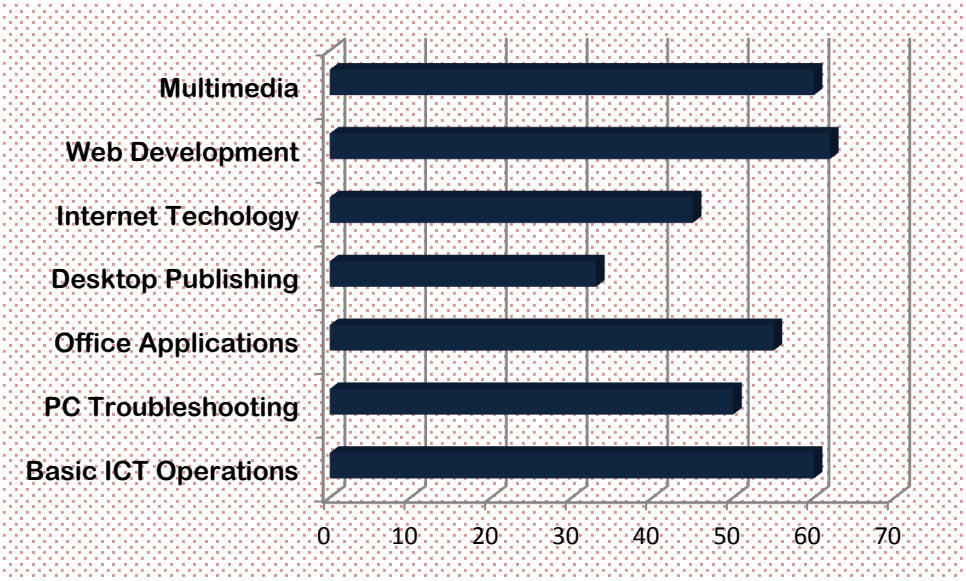

Figure 7 Request trainings program implementers wished to receive.

Conclusions

This study was an attempt to assess the readiness of program implementers in adopting an innovative way to implement conditional cash transfer program in Laguna. The following are the conclusions drawn based on the results of the assessment on adoption readiness.

Interviews and consultative meetings revealed that there were five phases in implementing the CCT program. It is composed of registration, client verification system, finance, GRS monitoring tool and scoreboard consolidation. Using the designed workbook, the status and condition of each household beneficiary are monitored. As verified during interviews and meetings, there were difficulties encountered specifically: a. encoding the contact information, conditions and activities of each household repeatedly in the worksheet; b. the worksheet is susceptible to security and data integrity issues; c. rapid increase of beneficiaries that a simple worksheet could not handle in the future so an upgrade in terms of storage should be considered; and d. checking the report of each municipal link gave the provincial link hardship and effort in consolidating them.

Program implementers in Laguna were all degree holder and the majority of them were in the 25-30 age bracket. This indicates that given the demographic profile and development of program implementers, they are likely and qualified to adopt new technologies. Also, it is interestingly to note that, there seems to be complementariness among them. Although younger implementers were comfortable in using ICT, not so young implementers were experienced and knowledgeable with the process of CCT.

In terms of ICT literacy, program implementers are generally knowledgeable in word processing, spreadsheet, presentation and internet technology. However, they have limited knowledge of computer basic concepts and file management especially backing-up files and the impact of the virus. These denote that program implementers are equipped with knowledge on how to use ICT but need more understanding when it comes to handling important operations of the computer. This finding emerges that program implementers want more training to be more equipped in the adoption of technology especially in web development, multimedia and ICT operations.

Based on the assessment conducted, program implementers are ready to adopt the perceived digitized scoreboard in implementing the CCT program. With the knowledge they already have, it would be easy for them to upgrade the way they do their job. More so, if they would be trained on the web development, ICT operations and multimedia, they will be comfortable and more than ready to utilize the digitized scoreboard.

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