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Assessment of the Digital Literacy of Agency Authorized Officers and Electronic File Handlers of GSIS Cagayan de Oro

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Abstract: ***Digital Literacy is becoming an essential skill in delivering quality and relevant service to public. The Philippine government is cognizant of the powers of e-government and to ensure the success of e-government, a digitally literate workforce is a key factor. This paper attempts to assess the digital literacy skills of the Agency Authorized Officers (AAOs) and Electronic Remittance File (ERF) Handlers of the Government Service Insurance System. These are government personnel designated by their own government office as GSIS loan approver, updating of GSIS premiums and loans and remittances of payments. All of these tasks are done electronically. This study was conducted at GSIS Cagayan de Oro Branch from December 2017 to February 2018. Using an adapted questionnaire, it intended to assess the level of Digital Literacy in the areas of Technical, Cognitive and Social Emotional Dimensions basing on Ng's (2012) framework of Digital Literacy. Data collected were analyzed using frequency, mean and standard deviation. It also made use of researcher-made questionnaire to gather the client's feedback with regards to their assigned job performance. The results indicate that the subject government employees regularly use digital tools such as the word processing, excel, email, social media and web based systems. In terms of Technical dimension, they perceive themselves independent users and can accomplish many tasks with the digital tools. In terms of Social -Emotional Dimension, they assess themselves has have good engagement with other users online. However, in terms of Cognitive Dimension, results suggest that they lack cybersecurity awareness and critical thinking skills in terms of handling digital information and evaluating information. Despite this, the digital literacy of the AAOs and ERF Handlers work performance were considered to be very satisfactory by their constituents. Thus, it can be surmised that while the respondent-government employees are technically capable to handle digital tools and can manage themselves online, the GSIS and other Philippine government agencies should look into conducting trainings in terms of cybersecurity as it is impinges on the normal operation of the country's vital information and communication infrastructure.***

Keywords: Digital Literacy, ICT, Computer Literacy, Digital Competency

1. Introduction

Efficient delivery of government services is one of the key components of good governance. Today, governments have made use of information and communication technologies for effective delivery of services.

Electronic government (E-government) is the use of information and communications technology and other web-based technologies to enhance access of information, improve delivery, efficiency and effectiveness of service to the public. In the Philippines, E-government initiatives have been implemented by various government agencies and it is envisioned to create a "digitally empowered and integrated government that provides responsive and transparent online citizen-centered services for a globally competitive Filipino"[1].

United Nations Department of Economic and Social Affairs (UNDESA), in its 2014 report, recognizes the power of e-government or "the use of ICT and its application for the provision of information and public services to the people". However, e-government development and its effectiveness is anchored on digital literacy skills. These skills are considerably dependent on the human factor and determined by influencing the level of competence and motivation among citizens and workers of the government. The level of competence determines the efficiency and effectiveness of e-government systems [2].

The Government Service Insurance System (GSIS) is a government financial institution of the Philippines created under Commonwealth Act 186 and Republic Act 8291 (GSIS Act of 1997). It serves as a social insurance institution that provides defined benefits under the law and insures its members against the occurrence of certain contingencies in exchange of their monthly premium contributions.

The Agency Authorized Officers (AAOs) and Electronic Remittance File (ERF) Handlers are designated personnel of a government agency who function, either singular or dual role, as the loan approver, submits electronically to GSIS member data necessary for the updating of GSIS records, prepares the remittance of GSIS premiums and loan payments of its agency based on downloaded billing files and uploads remittance files online. They also make use of the following GSIS web based systems which are the Electronic Billing and Collection System (EBCS), a web-based application that allows the pension fund to send its billing statements for premiums and loan amortizations to government agencies electronically and accept payments online and Agency Authorized Officer (AAO) module, a GSIS web based facility that will electronically transmit to the AAO, the loan applications of members for approval.

Digital Literacy is defined as "the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate,

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analyze, and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process" [3]. The ability to confidently use, participate in and understand digital media and services is becoming an important prerequisite to effective participation in the digital economy [4].

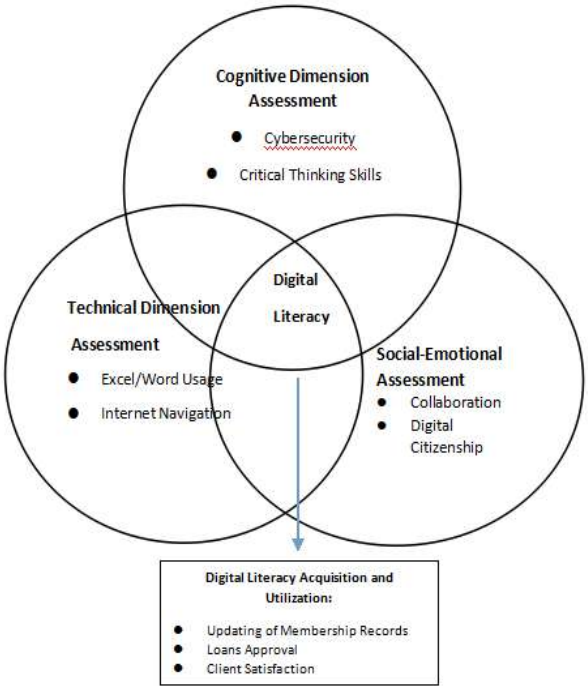

Figure 1. Schema of the Study

The study will use the above schema for which it will assess the digital literacy level of government employees particularly the AAOs and ERF Handlers of GSIS Cagayan de Oro Branch and the level of satisfaction of its constituents with regards to their work performance.

2. Digital Literacy

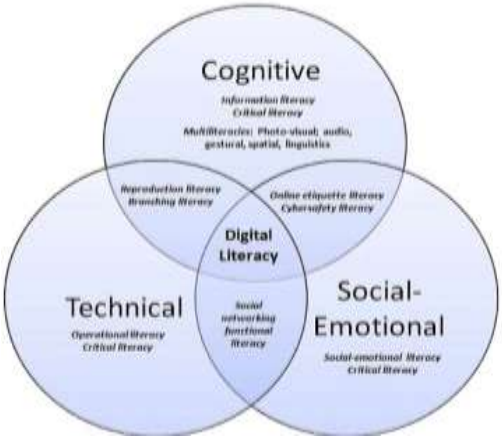

Figure 2: Digital Literacy Framework by Ng (2012)

This study is anchored on Digital Literacy Framework by Ng (2012) consists of three dimensions which are the following: Technical Dimension- one's capability of technical and operation of digital technology including ITC capability; Cognitive Dimension - one's ability in handling digital information; Social Emotional Value Dimension- one's performance of communication and social activities. The three dimensions intersect with each other forming digital literacy.

The Technical dimension is focused on the technical and operational skills on handling digital technologies. This Technical Dimension of Digital Literacy appears in virtually every study of digital literacy as it is the foundation upon which all other digital literacy skills are based. A digital literate person must be able to operate technologies satisfactorily for example, searching, downloading, using social networking tools, office systems, etc. Albeit, scholars point out that mastery of operating technology does not alone create the digitally literate person.

Scholars have theorized that digital literacy should also include the non-discrete skills of acquiring, synthesizing, and judging the quality of information. Such information has become increasingly difficult to divorce from the media and technologies that deliver it, scholars assert that it is essential to simultaneously know how to use digital tools as well as the information they contain [5]. This supported the Cognitive Dimension in Digital Literacy model of Ng (2012) relating with critical thinking skills in the cycle of search, evaluate and create. It also means the ability to evaluate and select appropriate software programs/applications and possess understanding of multi-literacies [6]. With the vast information available on the Internet, the ability to effectively and efficiently navigate the deluge of data is increasingly important in daily life [7].

The social-emotional dimension of digital literacy by Ng 2012 involves the responsible use of the technology to communicate, interact and collaborate and observing the correct and responsible way of communicating on the internet or "netiquette". It is also the ability to protect one's own safety and privacy and to recognize when he or she is under threat and appropriate responses to deal with it. Calvani, Cartelli, Fini, and Ranieri (2009) supports this as part of digital competence which is fostering awareness of one's personal responsibilities and the respect of reciprocal rights/obligations [8]. This is particularly important in the workplace settings, as communication and collaboration create an efficient and effective workplace. Internal communication with co-workers and external communication with those outside the institution is vital for a thriving work area.

3. Digital Literacy in the Philippines

In the Philippines, Digital Literacy is significantly considered in the Philippine ICT Situation and Strategic Direction. The Philippine government recognizes that " in order for our country to reap the many rewards that go along with a full-fledged digital economy, human capital development must keep pace with advances in technology, innovation and new ways of doing things. Investing in people benefits the economy, it creates more jobs and encourages economic growth. It benefits the government through increasingly skilled human resources and engaged citizens that can communicate and collaborate through ICT; and it benefits the society and people, as they have skills to improve their lives" [9]. However, the Philippines has yet to

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maximize these skills as it is ranked 77 out of 139 countries in its Networked Readiness Index as stated in the Global Information Technology Report 2016 of the World Economic Forum.[10].

4. Methodology

The descriptive method of research was used in this study and made use of an adapted questionnaire from Digital Literacy questionnaire of the University of Dundee, Library & Learning Centre (2014) [11] and AUA JISC Digital Survey (2012) [12] and that of Jeremy Riel (2012) in his thesis The Digitally Literate Citizen: How Digital Literacy Empowers in the United States [13]. The questions were based only on the needed digital literacy skills required in the performance of their roles. To gauge both the content validity and reliability of the survey, experts in their respective fields were chosen to evaluate the consistency of the content and confirm it was valid for the purposes of the research. The study was conducted in the GSIS Cagayan de Oro Branch Office, one of the 42 Branches of GSIS in the Philippines. The Cagayan de Oro Branch Office has a client coverage of 31, 389 members with 119 AAOs and 115 ERF Handlers and 31 with Dual role as AAO & ERF Handler.

To gauge the level of satisfaction of the AAOs' and ERF Handlers' work performance, the study made use of a researcher-made questionnaire and distributed thru convenience and quota sampling to 100 walk-in clients who visited the GSIS Cagayan de Oro during the conduct of the study. The instruments under content and face validity from experts and were pilot tested for test of reliability. The scale for the Feedback from Clienteles obtained a Cronbach's alpha coefficient of α=0.880, k=7 which tells us that the scale has a good internal reliability according to preceding studies of Gliem & Gliem (2003) [14] and George and Mallery [15] (2003) which provide the rules of thum that α>0.9 as Excellent, α>0.8 as Good, α>0.7 as Acceptable, α>0.6 Questionable, α >0.5 as Poor, and α <0.5 as Unacceptable (p. 231). The data collected was analyzed using descriptive statistics which includes frequency, percentage, mean and standard deviation to assess the digital literacy level of the AAO and ERF Handlers and its effect on the level of satisfaction of GSIS members.

5. Presentation, Analysis and Interpretation of Data

Table 1: Percentage Distribution of Demographic Profile of the Respondents

Gender	AAO		ERF		Dual Role	
	f	%	f	%	f	%
Males	30	28.04	11	12.5	3	14.29
Females	**77**	**71.96**	**77**	**87.5**	**18**	**85.71**
Total	107	100	88	100	21	100
Age	f	%	f	%	f	%
21-30	5	4.67	9	10.23	2	9.52
31-40	18	16.82	21	23.86	4	19.05
41-50	27	25.24	**34**	**38.63**	6	28.57
51-60	**52**	**48.6**	18	20.46	**9**	**42.86**
61-64	5	4.67	6	6.82	0	0
Total	107	100	88	100	21	100
Highest Educational Attainment	f	%	f	%	f	%
Bachelor's Degree	**43**	**40.19**	**61**	**69.32**	**11**	**52.38**
Masters with Units	27	25.23	15	17.04	2	23.81
Masters Holder	33	30.84	12	13.64	4	19.05
Doctoral with Units	1	0.94	0	0	1	4.76
Doctoral Holder	3	2.8	0	0	0	0
Post Doctorate	0	0	0	0	0	0
Total	107	100	88	100	21	100
Length of Service as an AAO/ERF Handler	f	%	f	%	f	%
10 Years and Beyond	**42**	**39.25**	26	29.55	6	28.57
6 – 9 Years	18	16.82	16	18.18	5	23.81
2 – 5 Years	**41**	**38.32**	**39**	**44.32**	**10**	**47.62**
At Least One Year	6	5.61	7	7.95	0	0
Total	107	100	88	100	21	100

Agency	f	%
Department of Education	25	11.57
National Government Agencies	91	42.13
GOCCs & GFIs	41	18.98
Local Government Units	54	25
SCU	5	2.32
Total	216	100

Table 1 presents the percentage distribution of demographic profile of the respondents. The respondents of this study were the Agency Authorized Officers (AAOs) and Electronic Remittance File (ERF) handlers from Region X. There were 107 who actively participated in this study from AAOs, 88 from the ERF handlers and 21 who have dual roles serving as AAOs and at the same time ERF handlers.

It has been shown that majority of the AAOs and ERF Handlers were females. In terms of age, most of the AAOs were 51-60 years old. For the ERF handlers, most of them were 41-50 years old. Those who were handling dual roles, most of them were also 51-60 years old.

For the highest educational attainment, majority of the respondents earned a bachelor's degree. However, it is also notable that many of the AAOs comprising 30.84 percent were master's degree holder and 25.23 percent were taking up master's units. With regard to the length of service as government workers, most of the respondents were two to five (2-5) years in service. It is also notable that many of the AAOs were 10 years and beyond serving as government employees.

The coverage of the respondents was coming from the Department of Education, National Government Agencies such as the Department of Public Works and Highways, Government Owned and Controlled Corporations and Government Financial Institutions such as the National Food Authority and State Colleges and Universities such as the University of Science and Technology of Southern Philippines.

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Table 2: Percentage Distribution of the Frequency of Using the Digital Technologies

Indicators	AAOs											
	Emails		Web-Based AAO/EBCS		Internet		Social Media		Down/Upload Files		Word/Excel	
	f	%	f	%	f	%	f	%	f	%	f	%
Daily	42	39.25	20	18.69	77	71.96	54	50.47	27	25.23	76	71.03
Weekly	13	12.15	22	20.56	8	7.48	18	16.82	20	18.69	8	7.48
Monthly	8	7.48	15	14.02	4	3.74	3	2.8	8	7.48	2	1.87
Quarterly	0	0	0	0	0	0	2	1.87	1	0.93	0	0
As Needed	44	41.12	50	46.73	18	16.82	30	28.04	51	47.66	21	19.63
Total	107	100	107	100	107	100	107	100	107	100	107	100
ERF Handlers												
Daily	26	29.55	9	10.23	66	75	49	55.68	19	21.59	68	77.27
Weekly	9	10.23	14	15.91	4	4.55	9	10.23	17	19.32	2	2.27
Monthly	12	13.64	38	43.18	5	5.68	4	4.55	24	27.27	3	3.41
Quarterly	0	0	1	1.14	0	0	1	1.14	1	1.14	1	1.14
As Needed	41	46.59	26	29.55	13	14.77	25	28.41	27	30.68	14	15.91
Total	88	100	88	100	88	100	88	100	88	100	88	100
Dual Role												
Daily	8	38.1	4	19.05	16	76.19	10	47.62	5	23.81	16	76.19
Weekly	1	4.76	6	28.57	0	0	2	9.52	3	14.29	1	4.76
Monthly	4	19.05	8	38.1	4	19.05	3	14.29	9	42.86	2	9.52
Quarterly	0	0	0	0	0	0	0	0	0	0	0	0
As Needed	8	38.1	3	14.29	1	4.76	6	28.57	4	19.05	2	9.52
Total	21	100	21	100	21	100	21	100	21	100	21	100

Table 2 presents the percentage distribution of the frequency of using the digital technologies such as emails, web-based systems (e.g. AAO/EBCS modules), Internet, social media, upload/download files, and Word/Excel. These are the digital technologies needed by AAOs and ERF handlers in the performance of their functions as they are tasked to electronically certify/approve loan applications of members of their agencies through the AAO module. The AAO module is a web-based facility that will electronically transmit to the AAO the loan applications for approval. Likewise, they also transmit electronically (thru email) to GSIS, all membership updating forms either in Excel/Word file.

With regards to emails, majority of the AAOs and ERF Handlers were checking them as needed and on a daily basis, respectively. For ERF handlers, most of the respondents accessed them as needed. Among the AAO and ERF handling dual roles, they used them daily and as needed. Hence, the respondent used them on a daily basis and as the need arises.

For the web-based systems in accessing the AAO/EBCS modules, AAOs checked them as needed. Most of the ERF Handlers were opening them on a monthly basis. Those who were handling dual roles, they accessed them monthly and weekly, respectively. In using the Internet, majority of the respondents utilized it on a daily basis.

Regarding the social media use, majority of the respondents were using them daily. With regards to downloading and uploading files, most of the AAOs and ERF handlers download and upload files as needed. For those who have dual roles, they did this monthly. Downloading and Uploading files are crucial as premium and loans remittances are being processed thru the GSIS Electronic Billing and Collection System, which is a web-based facility. Lastly, majority of the respondents were capable of using the Microsoft Word and Excel software.

Table 4: Assessment on the Digital Literacy of AAOs and ERF Handlers

TECHNICAL DIMENSION									
Word Processing & Spreadsheet Program Skills									
Indicators	**AAOs**			**ERF Handlers**			**Dual Roles**		
	Mean	SD	Desc	Mean	SD	Desc	Mean	SD	Desc
Using Word Processing to make documents such as letters, reports and the like	2.5	0.83	A	2.66	0.91	I	2.38	0.97	A
Editing documents to meet prescribed formats and file size	2.72	0.83	I	2.55	0.87	I	2.52	0.93	I
Inserting tables, charts and graphics in a word document	2.85	0.89	I	2.86	0.97	I	2.71	1.1	I
Converting a text file such as MS Word to another text format (e.g. PDF or Google Docs)	3.27	1.08	I	3.2	1.06	I	3	1.14	I
Sorting, filtering a dataset, pivoting tables in excel (e.g. filtering the dataset of employee names, positions and salary, summarized list of employees)	3.24	1.04	I	3.13	0.98	I	3	1.1	I
Overall	Mean	2.88		SD	0.99		Intermediate		
Internet Navigation Skills									
Sending email with compressed file (.zip) attachments	3.05	1.08	I	2.52	1.05	I	2.43	1.03	A
Creating a social network tool account such as Facebook, YouTube, …	3.17	1	I	2.72	1.09	I	2.9	0.89	I
Changing passwords for security and updating information in an email/social network/web based account	2.91	0.89	I	2.64	1.03	I	2.57	0.87	I
Downloading and uploading data in the internet (e.g. EBCS/GWAPS module)	2.98	0.87	I	2.63	1	I	2.38	0.97	A
Accessing GSIS records online	3.07	0.91	I	2.8	1.02	I	2.43	1.16	A
Overall	Mean	2.83		SD	1.01		Intermediate		

Legend: Desc – Description
E – Expert A – Advanced I – Intermediate B – Basic

SOCIAL-EMOTIONAL DIMENSION									
Indicators	**AAOs**			**ERF Handlers**			**Dual Roles**		
	Mean	SD	Desc	Mean	SD	Desc	Mean	SD	Desc
Interacting with others online (social networking sites, blogs, etc.)	2.34	1.08	E	2.48	1.17	E	2.95	1.5	SE
Collaborating safely with others online to create a shared document or presentation	2.57	0.91	E	2.66	1.11	E	3.38	1.6	SE
Knowing the rights and responsibilities of a digital citizen	2.43	0.94	E	2.39	1.01	E	2.48	1.25	E
Acting appropriately and responsibly online	2	0.75	E	2.02	0.87	E	2.14	1.39	E
Using other's people work without committing plagiarism	2.37	1.16	E	2.56	1.35	E	2.9	1.89	SE
Overall	Mean	2.42		SD	1.12		Engaged		

Legend: Desc – Description

VME – Very Much Engaged SNE – Somewhat Not Engaged
E – Engaged NE – Not Engaged
SE – Somewhat Engaged NEA – Not Engaged at All

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COGNITIVE DIMENSION									
Cybersecurity Protocols									
Indicators	**AAOs**			**ERF Handlers**			**Dual Roles**		
	Mean	SD	Desc	Mean	SD	Desc	Mean	SD	Desc
Activating a firewall in the computer	4.04	1.06	B	3.7	1.1	B	3.48	1.12	I
Using an anti-virus /anti-malware software	3.79	1.1	B	3.48	1.09	I	3.52	1.12	B
Creating a strong password for personal accounts	3.24	1.12	I	2.97	1.08	I	3.1	1.04	I
Setting up security settings in social network profiles	3.71	1.14	B	3.32	1.09	I	3.48	1.25	I
Identifying malicious emails or links	3.84	1.08	B	3.59	1.11	B	3.62	1.12	B
Overall	Mean	**3.57**		SD	**1.13**		**Basic**		
Critical Thinking									
Assessing whether an online resource or person is credible and trustworthy	2.81	1.1	SK	2.69	1.14	SK	2.38	0.97	K
Trusting or confident with the search and can evaluate whether reliable or not in obtaining info from the web	2.63	1.03	K	2.53	1.07	K	2.38	1.12	K
Knowing or being familiar with the Data Privacy Act	2.89	1.18	SK	2.83	1.22	SK	2.52	1.17	K
Understanding that one is not authorized to share the GSIS access credentials to others (e.g. passwords to GSIS modules)	1.49	0.78	VK	1.51	0.83	VK	1.62	0.97	VK
Knowing how to protect the computer from Cyberattacks	3.25	1.43	SK	2.99	1.36	SK	3.1	1.48	SK
Overall	Mean	**2.55**		SD	**1.26**		**Knowledgeable**		

Legend: Desc – Description
E – Expert A – Advanced I – Intermediate B – Basic
VK – Very Knowledgeable SNK – Somewhat Not Knowledgeable
K – Knowledgeable NK – Not knowledgeable SK – Somewhat Knowledgeable NKA – Not Knowledgeable at All

Table 4 presents the assessment level of the respondents' digital literacy in terms of technical, cognitive and socio-emotional dimensions. The technical dimension shows the operational capability of digital technology particularly on word processor, excel, email, setting up of social networking tools and creating accounts in GWAPS and EBCS modules among the AAOs and ERF handlers. For the cognitive dimension, it presents the ability to critically search, evaluate and handle digital information focusing on cybersecurity and knowledge on getting reliable information or critical thinking skills of the respondents. Lastly, the socio-emotional dimension shows the collaboration, online etiquette and digital citizenship practices of the AAOs and ERF handlers.

With regards to the technical dimension, in general, the respondents rated themselves at the intermediate level for the word processing and spreadsheet program skills. It was also notable that the AAOs and having dual roles have advanced level in using word processing to make documents such as letters, reports and the like. In terms of the internet navigation skills, in general, the respondents rated themselves also at the intermediate level. It was also observed that AAOs and ERF handlers both agree that they were on intermediate level. However, it was also notable that those who have dual roles were advanced in sending email with compressed file (.zip) attachments, downloading and uploading data in the internet (e.g. EBCS/GWAPS module) and accessing GSIS records online.

For the socio-emotional dimension, the respondents were generally engaged in collaboration, online etiquette and digital citizenship engagement of the AAO and ERF handlers. However, those who have dual roles were only somewhat engaged on the following: interacting with others online (social networking sites, blogs, etc.), collaborating safely with others online to create a shared document or presentation and using other's people work without committing plagiarism

Lastly, for the cognitive dimension, in terms of cybersecurity protocols, in general, the respondents only rated themselves at a basic level. It could also be noted that the AAOs have the most basic skills in cybersecurity protocols that has to be addressed. Furthermore, the knowledge on getting reliable information or their critical thinking skills was rated by the respondents at the knowledgeable level. On the other hand, it was also noted that accessing GSIS records online was only on the somewhat knowledgeable level.

Table 5: The Clients' Feedback among the AAOs and ERF Handlers

Indicators	Clients' Feedback		
	Mean	SD	Description
The person- in- charge in our office can easily electronically transmit my requests for updating of records to the GSIS upon checking my account.	1.78	0.82	Very Satisfied
The person-in-charge in our office can identify whether or not I am eligible to avail GSIS loans.	1.75	0.85	Very Satisfied
I can coordinate with ease with the person-in-charge in our office with regard to my updating of GSIS records.	1.66	0.79	Very Satisfied
The person-in-charge in our agency is adept in updating my records with GSIS.	1.74	0.75	Very Satisfied
The person-in-charge in our agency is prompt in remitting our loan and premium payments.	1.70	0.81	Very Satisfied
The person-in-charge in our agency can troubleshoot our concerns with our GSIS premium and loan remittance and membership records as well.	1.93	1.04	Very Satisfied
I am satisfied with my GSIS membership records because our person-in-charge is prompt in submitting my requests.	1.69	0.80	Satisfied
In general, I am satisfied with the AAO and ERF handlers services.	1.77	0.62	Very Satisfied
Overall	Mean	**1.75**	
	SD	**0.82**	
	Description	**Very Satisfied**	

Table 5 shows the clients' feedback with regard to their respective AAOs and ERF handlers to update their GSIS records, approve GSIS loans and remit GSIS loan and premium payments. The feedback survey instrument was given to walk-in clients of GSIS Cagayan de Oro Branch Office on the first and second week of the month of February 2018.A total of 100 clients were given the survey using convenience and quota sampling. These clients were from various government agencies located in Cagayan de Oro City, Philippines and nearby municipalities in Misamis Oriental, Philippines such as the Department of Education, Local Government Units of various municipalities and National Government Agencies such as the Department of Health, Department of Public Works and Highways. Majority of the respondents (57%) were government employees for two to five years. Many of the walk-in clients were of ages 21-30 (35%) and 31-40 (33%). These age group usually visit the GSIS Office to follow-up their payments, file over the counter loan applications and inquire on their membership records.

In general, the walk-in clients were very satisfied in the updating of their GSIS records, approval of their GSIS loans and remittances of their GSIS loan and premium payments. However, it could be noted that among all the indicators, the clients only found it satisfactory with regards to their GSIS

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membership records on promptness of the person-in-charge in submitting their requests.

6. Conclusion

In terms of Technical and Operational Capability in the use of Digital tools, majority of thee AAO/ERF Handlers assessed themselves on the intermediate level suggesting that they are able to handle independently many types of assignment/tasks using the Excel and Word software and are technically capable on navigating the internet. In the aspect of Socio-Emotional dimension, these government employees also show good engagement with others online. In general, Filipino internet users access the Internet largely for social networking rather than information seeking, commercial activities and entertainment [16]. However, they show only the most basic skill in terms of protecting themselves against Criminal or unauthorized use of their electronic data. The Philippines has been ranked 37th among 193 member states in the Global Security Index (GCI) 2017 published by the International Telecommunication Union. In its report, the country needs improvement in its cybersecurity training indicator [17]. Hence, there appears to be a need for training in terms of cybersecurity for the respondents.

Generally, the performance of the AAO and ERF Handlers were perceived to be very satisfactory by their constituents. This supports Mohammadyari, Soheila, and Harminder Singh proposal that a person's level of digital literacy has an impact on her/his performance and effort expectations [18]. While there is a need of further training in terms of cybersecurity protocols etc., they still managed to deliver their deliverables.

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