International Journal of Education Humanities and Social Science

ISSN: 2582-0745
Vol. 4, No. 06; 2021

LEVEL OF EFFECTIVENESS AND SATISFACTION ON THE USE OF OFFICE PRODUCTIVITY TOOL AMONG BARANGAY LEADERS AND WORKERS IN THE MUNICIPALITY OF BOTOLAN, ZAMBALES, PHILIPPINES

[1]Glenda D. Siasat and [2]Nemia M. Galang
[1]Botolan National High School, Botolan Zambales, Philippines
[2]President Ramon Magsaysay State University, Iba, Zambales, Philippines

ABSTRACT
The advent of using computer in our time make a significant contribution to business reform, particularly in the areas of business process automation, such as billing and collection systems. In today's world, distribution utilities have implemented important changes by utilizing information technology as a key enabler for increasing billings and collections, reducing losses, maintaining appropriate accounting, and providing efficient consumer services.
The main goal of this study is to assess level of effectiveness and satisfaction on the use of office productivity tool among barangay leaders and workers in the municipality of Botolan that leads to the development of series of trainings that will enable the barangay leaders to be acquainted with the different office productivity tools. It employs descriptive research with documentary and survey analysis the data collected were treated using descriptive statistics.
Based on the finding on the level of knowledge and effectiveness in the use of office productivity tool is generally both fall under less proficient. This suggest that there should be continuous training to enhance the knowledge and use of office productivity tool of the barangay officials.

Key Words: Office Productivity Tool , Barangay Leaders And Workers And Efficient Consumer Services.

1. INTRODUCTION
Information Technology (IT) has the potential to contribute significantly in the business reforms process particularly in the areas of business process automation such as billing and collection systems. The distribution utilities in today's world have initiated major reforms by using information technology as the key enabler for improving billings and collections, minimizing losses, proper accounting and efficient consumer services. This makes the process of balancing the commercial objectives vis-à-vis the social concerns even more challenging. (Rico et al (2012)

In the present business environment, utilities have to re-engineer and automate their business processes for sustainable growth and survival with the objective of capacity building and operational efficiency, business process efficiency, loss reduction, billing and collection efficiency, accounting and better customer relations and customer satisfaction.

The adoption of the latest and best-of-the-breed technology is very essential to fulfill the above objectives and therefore information technology is perceived as the principal thrust area to spearhead our country's agenda of business reforms. In addition, billing and collection system as the basic foundation of the business enterprise shall offer a high standard secure procedure which can only achieved through the use of IT. The computerization program manifest on global

ISSN: 2582-0745
Vol. 4, No. 06; 2021

adherence and participation for better business transactions and to attain success, growth and development.

2. BACKGROUND OF THE STUDY

The Barangay government is an agency unit mandated to administer transaction on the request of clearances, business permits, settling disputes, issuances of notices of hearing, subpoenas, and many other as submission of reports to the Department of Local Unit and Government.

For several decades, the barangay government encounters difficulty and thereby affect efficiency in the delivery of services in providing records and requests of permits and resolution of cases. The process of recording the transaction for hearings, payment of business permits took several processes of entering into a book of record which requires much time and effort. There are times were entering into the book of account mis-declaration of names, birthdates, birthplace and other pertinent information about the payees. Most of the person in charge in the payment and collection of fees encounters greater dilemma especially at the end of the month or quarter where preparation of reports has to be prepared. According to the personnel of the barangay office, they often late in the submission of reports because of manual system where needs to conduct several reviews before finalizing the report.

The computer literacy training and development program is envisioned to enhance the capabilities and competencies of barangay leaders and workers

The primary objective of this research is to assess level of effectiveness and satisfaction on the use of office productivity tool among barangay leaders and workers in the municipality of Botolan

3. STATEMENT OF THE PROBLEM

The study aims to determine the level of knowledge, awareness, and effectiveness on the use of Information and Communication Technology among barangay leaders and workers in the municipality of Botolan, Zambales: Basis for the development of training design to enhance their competence and capabilities. Specifically, the study seeks to find answers to the following questions:

1. What is the profile of the respondents with regards to:
   1.1. Age;
   1.2. Sex;
   1.3. Civil Status;
   1.4. Religion
   1.5. Highest Educational Attainment; and
   1.6. Classification?
2. What is the level of knowledge on the use and application of computer in the performance of barangay leaders and workers be described as to the following aspects:
   2.1. MS-Word;
   2.2. MS-Excel;
   2.3. MS-Power Point;
3. What is the level of effectiveness on the usage of computer be described?
4. What is the level of satisfaction on the use of computerized barangay transaction be described?

ISSN: 2582-0745
Vol. 4, No. 06; 2021

5. Is there a significant difference on the level of knowledge on the use and application of computer in the performance of barangay leaders and workers as cited in problem number 2?
6. Is there a significant difference on the level of effectiveness on the use of computerized barangay transaction as cited in problem number 3?
7. Is there a relationship between the level of effectiveness and satisfaction on the use of computer in barangay?

A. Null Hypotheses

The following hypotheses are to be tested:

1. There is no significant difference on the level of knowledge on the use and application of computer in the performance of barangay leaders and workers as cited in problem number 2.
2. There is no significant difference on the level of effectiveness on the use of computerized barangay transaction as cited in problem number 3.
3. There is no relationship between the level of effectiveness and satisfaction on the use of computer in barangay.

B. Significance of the Study

This study shall be of great importance and beneficial to the following entities:

The Barangay Office. The results and findings of the study will provide insights on how to improve the performance and competence of the leaders and workers in the barangay. The delivery of services will be more efficient and submission of reports will be done easily and more systematic.

***The Barangay Leaders and Workers*.** The results and findings of the study will provide greater satisfaction to the residents of the barangay for more accurate, reliable and fast transaction of barangay business in the office.

The Employee. The result of the study will provide to be more efficient and accommodate more payers with lesser business time transactions.

C. Scope and Limitation of the Study

This research study focused on level of knowledge, awareness, and effectiveness on the use of Office Productivity Tool among barangay leaders and workers in the municipality of Botolan, Zambales: Basis for the development of training design to enhance their competence and capabilities.

The study was limited to determine the profile of the barangay leaders and worker respondents with regards to their age, sex, civil status, religion, highest educational attainment, and classification. This includes to determine the level of effectiveness on the submission of written reports, presentation of oral reports, preparation of barangay documents, preparation of subpoenas, minutes for hearings and meetings, and administration of reports and other documents. This research study is also limited on satisfaction as to accuracy, speed and efficiency.

D. Conceptual Framework

Barangay Leaders and workers who are committed to provide services to the people and residents of every barangay must also improve or upgrade competence in their respective tasks.

The framework of this study will concentrate on the knowledge and skill on the use of Information and Communication Technology which can serve as a ready reference for barangay leaders in future planning, training and supervision.

The Research Paradigm, as illustrated in Figure 1, presents the IPO Variable Model

ISSN: 2582-0745
Vol. 4, No. 06; 2021

E. The Paradigm

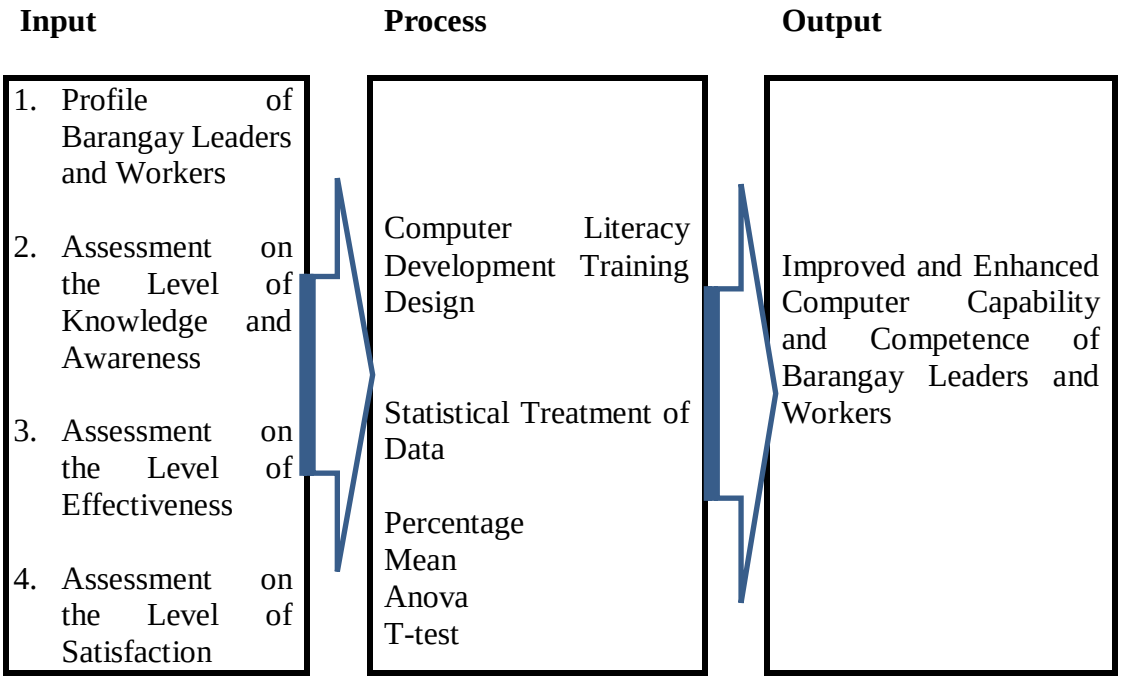

Figure 1. The Paradigm of the Study

Figure 1 shows the paradigm of the study. This research study was utilized the Input-Process-Output Model of research.

For the Input frame, it deals with the profile of the respondents as to their age, sex, religion, highest educational attainment and classification. Part 2 deals with the assessment of the respondents towards level of knowledge and awareness on the use of computers; Part 3 covers on the assessment towards level of effectiveness and Part 4 deals with the level of satisfaction on the use of computers in the delivery of services to the people.

For the Process frame it deals with the proposed implementation of the computer literacy development training programs and the statistical treatment of data using frequency, percentage, mean, analysis of variance and the Pearson Product Moment Coefficient of Correlation.

For the Output frame it deals with the final objective of the study which is to improve or enhanced the computer capability and competence of barangay leaders and workers in Botolan , Zambales.

4. METHODOLOGY

This section presents the methodology and technique used in this study. This includes the research design, research locale, population and sample, the instrument, validation of the instrument, the data gathering procedure and the statistical treatment used in the analysis and interpretation of the collected data.

A. Research Design

ISSN: 2582-0745
Vol. 4, No. 06; 2021

This study employed descriptive research with documentary and survey analysis. The descriptive method does not merely accept the gathering of data and tabulation of results but also includes interpretation, and evaluation of what has been described in the questionnaire without analyzing relationships among variables. **Calmorin (2003)** justified that a descriptive method signifies the gathering of data regarding the present situation. Justification was likewise made **by Sevilla (1993)** when he said that descriptive method includes of data to test the hypothesis and the answer to the questions concerning the present status of the study.

B. The Research Locale

The study was conducted in the municipality of Botolan, Zambales. Botolan is located adjacent to Iba, Zambales on the north and Cabangan, Zambales on the south. It has a total of 30 barangays. And is now considered a first-class municipality. At present, Botolan is managed by Hon. Bing Maniquiz as the Municipal Mayor.

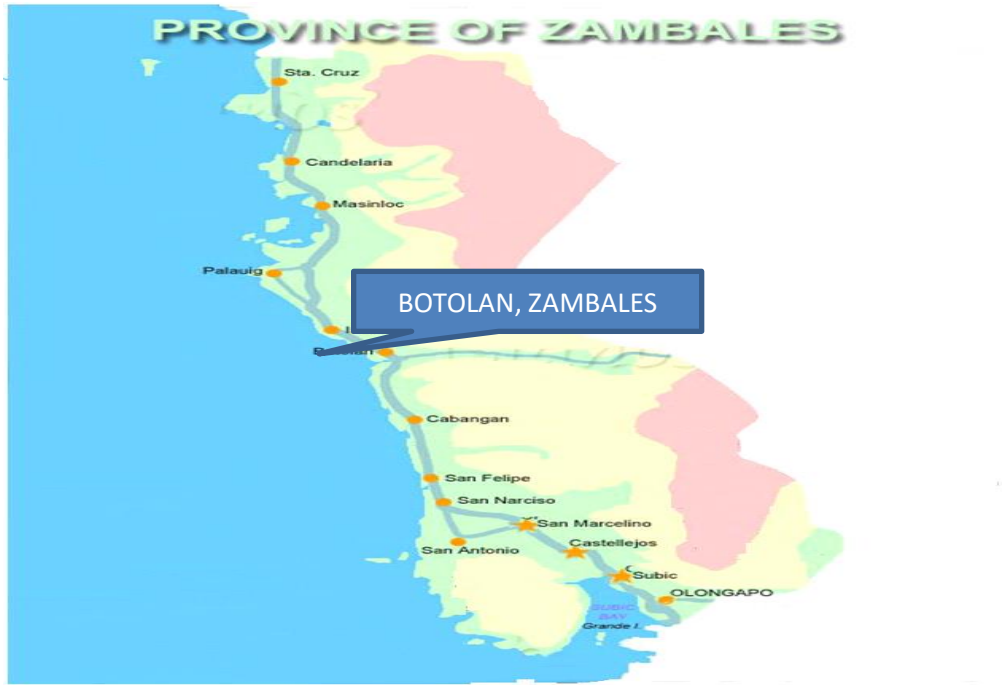

Figure 2. Map of Zambales

C. Respondents of the Study

This study involved all barangay leaders and workers. The names of participants were revealed to maintain privacy and confidentiality of their responses as per ethics in research explained by Fraenkel (2003).

Table 1 Distribution of the respondents according to their classification

Classification	Frequency	Percentage

ISSN: 2582-0745
Vol. 4, No. 06; 2021

Barangay Captain	21	6.77
Secretary	29	9.35
Lupon	22	7.10
Kagawad	120	38.71
Treasurer	24	7.74
Tanod	57	18.39
Health Worker	37	11.94

Research Instrument

The survey questionnaire is the main instrument to be used in gathering the data. The questionnaire consists of the basic computer skills in different office productivity tools such as (1) MS word (2) MS Excel, (3) MS PowerPoint

D. The Data Gathering Procedure

Upon the approval of the authority under the jurisdiction, the researcher hopped from one barangay to another and administered the questionnaires supported with unstructured interview and observations. The researcher allotted 10 to 15 days distribution to assure 100 % retrieval of the instrument.

E. Statistical Treatment of Data

Descriptive statistics was used in the analysis of data gathered. Specific tools for treatment are illustrated as follows:

Frequency Counts and Percentage were applied in order to gain information in the frequency of respondents categorized in the different profile variables considered in this study. The formula is as follows:

Weighted Mean. It is a mean where there are some variations in the relative contribution of individual data values to the mean. Each data value has a weight assigned to it. Data values with larger weights contribute more to the weighted mean and data values with smaller weights contribute less to the weighted mean.

Analysis of Variance (ANOVA). It was used to measure the significant difference on the level of perceptions when grouped according to the profile of the respondents. This tool is considered appropriate because Downie and Heath as mentioned by Ballares (1999), stressed that the Analysis of Variance or F is one of the most widely used and highly developed statistical method in modern research. In order to facilitate in the processing and computation of the data, the researcher utilized SPSS, the Statistical Package for Social Sciences computer software program guided by the criteria. If the computed significant value is greater than (>) 0.05 Alpha

ISSN: 2582-0745
Vol. 4, No. 06; 2021

Level of Significance, the Null Hypothesis shall be Accepted, hence there is no significant difference.

Pearson – Product Moment Correlation Coefficient (r) will be used to indicate the significant relationship of the respondent's perception towards level of knowledge and effectiveness on the level of satisfaction.

Decision Rule*:*

Interpretation of Correlation Coefficient Value (C)

An r from ± 0.00 to ±0.20 denotes negligible correlation
An r from ±0.21 to ±0.40 denotes low or slight correlation
An r from ±0.41 to ±0.70 denotes marked or moderate relationship
An r from ±0.71 to ±0.90 denotes high relationship
An r from ±0.91 to ±0.99 denotes very high relationship
An r from ±1.00 denotes perfect correlation.

Likert Scale. In interpreting the averages of the rating for the questions, the following scale will be adopted:

Table2 Likert Scaling for the Knowledge on the Use and Application of Computer in the Performance of Barangay Leaders and Workers

Numerical Value	Point Scale	Descriptive Equivalent
5	4.20 - 5.00	*Very Proficient*
4	3.40 - 4.19	*Proficient*
3	*2.60 – 3.39*	*Somewhat Proficient*
2	*1.80 – 2.59*	*Less Proficient*
1	*1.00 – 1.79*	*Not Proficient*

Table3 Likert Scaling for the Level of Effectiveness on the Application of Computer Technology

Numerical Value	Point Scale	Descriptive Equivalent	*SYMBOL*
5	4.20 - 5.00	*Very Effective*	*VE*
4	3.40 - 4.19	*Effective*	*E*
3	*2.60 – 3.39*	*Moderately Effective*	*ME*
2	*1.80 – 2.59*	*Less Effective*	*LE*
1	*1.00 – 1.79*	*Not Effective*	*NE*

Table 4 Likert Scaling for the Level of Satisfaction on the Application of Computer Technology

ISSN: 2582-0745
Vol. 4, No. 06; 2021

Numerical Value	Point Scale	Descriptive Equivalent	SYMBOL
5	4.20 - 5.00	*Highly Satisfied*	*HS*
4	3.40 - 4.19	*Satisfied*	*S*
3	*2.60 – 3.39*	*Moderately Satisfied*	*MS*
2	*1.80 – 2.59*	*Less Satisfied*	*LS*
1	*1.00 – 1.79*	*Not Satisfied*	*NS*

5. RESULTS AND DISCUSSION

A. Profile of the respondents according to:

a. age

Table 5 presents the distribution of the respondents according to their age.

Table 5 Distribution of the Respondents According to their Age

Age	Frequency	Percentage
21 - 25 yrs. old	34	10.97
26 - 30 yrs. old	32	10.32
31 - 35 yrs. old	26	8.39
36 - 40 yrs. old	38	12.26
41 - 45 yrs. old	32	10.32
46 - 50 yrs. old	52	16.77
51 - 55 yrs. old	35	11.29
56 - 60 yrs. old	33	10.64
61 - and above	28	9.03

As seen in table 5, 34 or 10.97% of the respondents belong to 21-25 years old, 32 or 10.32% belong to 26-30 years old, 26 or 8.39% belong to 31-35 years old, 38 or 12.26% belong to 36-40 years old, 52 or 16.77% belong to 46-50 years old, 35 or 11.29 belong to 51-55 years old, 33 or 10.64% belong to 56-60 years old and 28 or 9.03% belong to 61 and above years old. It is seen that majority of the barangay officials and. workers are those belong to 40 and above. From the study of Venancia Noble-Nur, 2018, the results indicated that typically the Punong Barangays were adult (40-50 years old).

b. Sex;

Table 6 presents the distribution of the respondents according to their sex.

Table 6 Distribution of the Respondents According to their Sex

ISSN: 2582-0745
Vol. 4, No. 06; 2021

Sex	Frequency	Percentage
Male	145	46.77
Female	165	53.22

As seen in Table 6, 145 or 46.77% respondents are male and 165 or 53.22% are female.

c. Civil Status;

Table 7 presents the distribution of the respondents according to their civil status.

Table 7 Distribution of the Respondents According to their Civil Status

Civil Status	Frequency	Percentage
Married	185	59.68%
Widow/er	15	4.84%
Single	65	20.97%
Separated	10	3.22%
Others	35	11.29%

As it seen in table 7, 185 or 59.68% of the respondents are married, 15 or 4.84% are widow/er, 65 or 20.97% are single, 10 or 3.22% are single and there 35 or 11.29% of the respondents who answered others.

d. Highest Educational Attainment

Table 8 presents the distribution of the respondents according to their highest educational attainment.

Table 8 Distribution of the Respondents According to their Highest Educational Attainment

	Frequency	Percentage
BS Degree	64	20.64%
BS with MA	5	1.61%
MA Degree Holder	7	2.26%
HS Undergrad	94	30.32%
HS Graduate	75	24.19%
College Undergraduate	129	41.61%

ISSN: 2582-0745
Vol. 4, No. 06; 2021

As seen in table 8, 64 or 20.64% are BS Degree, 5 or 1.61% are BS with MA, 7 or 2.26% are MA Degree Holder, 94 or 30.32% are HS Undergrad, 75 or 24.19% are HS Graduate, and 129 or 41.61% are College Undergraduate.

Level of knowledge on the use and application of computer in the performance of barangay leaders and workers be described as to the following aspects:

MS-Word

Table 9 presents the results of data analysis in the level of knowledge on the use and application of computer in the performance of barangay leaders and workers in the aspect of Microsoft Excel.

Table 9
Level of knowledge on the use and application of computer in the performance of barangay leaders and workers using MS Word

	MS Word	5	4	3	2	1	Mean
1	Opening a word a document	32	26	26	103	123	2.16
2	Minimize and maximize windows using the mouse	38	46	31	97	98	2.45
3	Create and save a new document	35	27	25	100	123	2.20
4	Format Text using special text effects	31	28	28	100	123	2.17
5	Cut and Paste to move text	28	26	30	102	124	2.14
6	Change text/paragraph alignment	33	23	28	103	123	2.16
7	Create a table	26	27	30	103	124	2.12
8	Use drawing toolbar	30	26	30	101	123	2.16
9	Use Letter and Memo templates	30	26	28	102	124	2.15
10	Print a range of pages	29	27	28	102	124	2.15

As seen in table 9, indicator Opening a word a document 32 answered 5, 26 answered 4, 26 answered 3, 103 answered 2, and 123 answered 1 with the computed mean of 2.16 and a descriptive rating of Less Proficient. Indicator Minimize and maximize windows using the mouse, 38 answered 5, 46 answered 4, 31 answered 3, 97 answered 2 and 98 answered 1 with the computed mean of 2.45 with a descriptive rating of Less Proficient. Indicator Create and save a new document, 35 answered 5, 27 answered 4, 25 answered 3, 100 answered 2 and 123 answered 1 with the computed mean of 2.20 and a descriptive rating of Less Proficient. Indicator Format Text using special text effects, 31 answered 5, 28 answered 4, 28 answered 3, 100 answered 2 and 123 answered 1 with the computed mean of 2.17 and a descriptive rating of Less Proficient. Indicator Cut and Paste to move text, 28 answered 5, 26 answered 4, 30 answered 3, 78 answered 2 and 101 answered 1 with the computed mean of 2.14 and a descriptive rating of Less Proficient. Indicator Change text/paragraph alignment, 33 answered 5, 23 answered 4, 28 answered 3, 103 answered 2 and 123 answered 1 with the computed mean of 2.16 and a descriptive rating of Less Proficient. Indicator Create a table, 26 answered 5, 27 answered 4, 30 answered 3, 103 answered 2 and 124 answered 1 with the computed mean of 2.12 and a descriptive rating of Less Proficient. Indicator Use drawing toolbar, 30 answered 5, 26 answered 4, 30 answered 3, 101 answered 2 and 123

ISSN: 2582-0745
Vol. 4, No. 06; 2021

answered 1 with the computed mean of 2.16 and a descriptive rating of Less Proficient. Indicator Use Letter and Memo templates, 30 answered 5, 26 answered 4, 28 answered 3, 102 answered 2 and 124 answered 1 with the computed mean of 2.15 and a descriptive rating of Less Proficient. Indicator Print a range of pages, 29 answered 5, 27 answered 4, 28 answered 3, 102 answered 2 and 124 answered 1 with the computed mean of 2.15 and a descriptive rating of Less Proficient.

MS-Excel

Table 10 presents the results of data analysis in the level of knowledge on the use and application of computer in the performance of barangay leaders and workers in the aspect of Microsoft Excel.

Table10 Level of knowledge on the use and application of computer in the performance of barangay leaders and workers using MS Excel

MS Excel		5	4	3	2	1	Mean
1	Starting Excel	36	30	34	101	109	2.30
2	Saving a workbook	32	32	39	102	105	2.30
3	Previewing and printing worksheet	31	32	36	99	112	2.26
4	Entering and changing data	38	43	50	78	101	2.48
5	Inserting a row or column	28	45	38	101	98	2.37
6	Copying and moving data	38	40	46	91	95	2.47
7	Adjusting column widths and row heights	38	33	36	99	104	2.36
8	Creating formulas	28	31	36	97	118	2.21
9	Using AutoSum and other features.	28	29	27	99	127	2.14
10	Sorting of data	28	30	36	103	113	2.22
11	Application of higher statistics	28	33	36	97	116	2.23

As seen in table 9, indicator starting MS Excel 36 answered 5, 30 answered 4, 101 answered 2, and 109 answered 1 with the computed mean of 2.30 and a descriptive rating of Less Proficient. Indicator Saving a workbook, 32 answered 5, 32 answered 4, 39 answered 3, 102 answered 2 and 105 answered 1 with the computed mean of 2.30 with a descriptive rating of Less Proficient. Indicator Previewing and printing worksheet, 31 answered 5, 32 answered 4, 36 answered 3, 99 answered 2 and 112 answered 1 with the computed mean of 2.26 and a descriptive rating of Less Proficient. Indicator Entering and changing data, 28 answered 5, 45 answered 4, 38 answered 3, 101 answered 2 and 101 answered 1 with the computed mean of 2.48 and a descriptive rating of Less Proficient. Indicator Inserting a row or column, 38 answered 5, 43 answered 4, 50 answered 3, 78 answered 2 and 101 answered 1 with the computed mean of 2.48 and a descriptive rating of Less Proficient. Indicator Inserting a row or column, 38 answered 5, 45 answered 4, 38 answered 3, 101 answered 2 and 98 answered 1 with the computed mean of 2.37 and a descriptive rating of Less Proficient. Indicator Copying and moving data, 38 answered 5, 40 answered 4, 46 answered 3, 91 answered 2 and 95 answered 1 with the computed mean of 2.47 and a descriptive rating of

ISSN: 2582-0745
Vol. 4, No. 06; 2021

Less Proficient. Indicator Adjusting column widths and row heights, 38 answered 5, 33 answered 4, 36 answered 3, 99 answered 2 and 104 answered 1 with the computed mean of 2.36 and a descriptive rating of Less Proficient. Indicator Creating formulas, 28 answered 5, 31 answered 4, 36 answered 3, 97 answered 2 and 118 answered 1 with the computed mean of 2.21 and a descriptive rating of Less Proficient. Indicator Using AutoSum and other features, 28 answered 5, 29 answered 4, 27 answered 3, 99 answered 2 and 127 answered 1 with the computed mean of 2.14 and a descriptive rating of Less Proficient. Indicator Sorting of data, 28 answered 5, 30 answered 4, 36 answered 3, 103 answered 2 and 113 answered 1 with the computed mean of 2.22 and a descriptive rating of Less Proficient. Indicator Application of higher statistics, 28 answered 5, 33 answered 4, 36 answered 3, 97 answered 2 and 116 answered 1 with the computed mean of 2.23 and a descriptive rating of Less Proficient.

MS- Power Point

Table 11 presents the results of data analysis in the level of knowledge on the use and application of computer in the performance of barangay leaders and workers in the aspect of Microsoft PowerPoint.

Table11 Level of knowledge on the use and application of computer in the performance of barangay leaders and workers using MS PowerPoint

MS PowerPoint		5	4	3	2	1	Mean
1	Starting a PowerPoint Presentation	31	58	36	96	89	2.50
2	Save a PowerPoint Presentation	30	32	36	103	109	2.26
3	Enter and Edit Text in Outline View	39	30	36	95	110	2.33
4	Entering Slide Titles and Bullets	29	28	37	107	109	2.23
5	Copy and Move Data	34	31	35	107	103	2.31
6	Delete Slides or Bullets	31	29	35	105	110	2.25
7	Using the Undo command on the Edit menu	29	29	37	107	108	2.24
8	Apply a Template to a Presentation	27	30	36	106	111	2.21
9	.Insert the Clip Arts and Objects	28	29	37	108	108	2.23
10	Slide Setup and Printing	27	28	38	107	110	2.21
11	Animation and background set-up	26	27	36	106	115	2.17

As seen in table 11, indicator Starting a PowerPoint Presentation, 31 answered 5, 58 answered 4, 36 answered 3, 96 answered 2, and 89 answered 1 with the computed mean of 2.50 and a descriptive rating of Less Proficient. Indicator Save a PowerPoint Presentation, 30 answered 5, 32 answered 4, 36 answered 3, 103 answered 2 and 109 answered 1 with the computed mean of 2.26 with a descriptive rating of Less Proficient. Indicator Enter and Edit Text in Outline View, 39 answered 5, 30 answered 4, 36 answered 3, 95 answered 2 and 110 answered 1 with the

ISSN: 2582-0745
Vol. 4, No. 06; 2021

computed mean of 2.33 and a descriptive rating of Less Proficient. Indicator Entering Slide Titles and Bullets, 29 answered 5, 28 answered 4, 37 answered 3, 107 answered 2 and 109 answered 1 with the computed mean of 2.23 and a descriptive rating of Less Proficient. Indicator Copy and Move Data, 34 answered 5, 31 answered 4, 35 answered 3, 107 answered 2 and 103 answered 1 with the computed mean of 2.31 and a descriptive rating of Less Proficient. Indicator Delete Slides or Bullets, 31 answered 5, 29 answered 4, 35 answered 3, 105 answered 2 and 110 answered 1 with the computed mean of 2.25 and a descriptive rating of Less Proficient. Indicator Using the Undo command on the Edit menu, 29 answered 5, 29 answered 4, 37 answered 3, 107 answered 2 and 108 answered 1 with the computed mean of 2.24 and a descriptive rating of Less Proficient. Indicator Apply a Template to a Presentation, 27 answered 5, 30 answered 4, 36 answered 3, 106 answered 2 and 111 answered 1 with the computed mean of 2.21 and a descriptive rating of Less Proficient. Indicator Insert the Clip Arts and Objects, 28 answered 5, 29 answered 4, 37 answered 3, 108 answered 2 and 108 answered 1 with the computed mean of 2.23 and a descriptive rating of Less Proficient. Indicator Slide Setup and Printing, 27 answered 5, 28 answered 4, 38 answered 3, 107 answered 2 and 110 answered 1 with the computed mean of 2.21 and a descriptive rating of Less Proficient.

Indicator Animation and background set-up, 26 answered 5, 27 answered 4, 36 answered 3, 106 answered 2 and 115 answered 1 with the computed mean of 2.17 and a descriptive rating of Less Proficient.

Level of Effectiveness on the Use of Computer in the performance of Barangay Leaders and Workers

Table 14 presents the results of data analysis in the level of knowledge on the use and application of computer in the performance of barangay leaders and workers in the aspect of Internet Surfing.

Table 14 Level of Effectiveness on the Application of Computer Technology

Level of Effectiveness on the Application of computer technology		5	4	3	2	1	Mean
		VE	**E**	**ME**	**LE**	**NE**	
1	Submission of Written Reports	34	36	37	99	104	2.35
2	Presentation of Oral Reports	33	38	38	98	103	2.35
3	Preparation of Barangay Documents	33	38	37	98	102	2.34
4	Preparation of Subpoenas	33	42	37	102	96	2.40
5	Minutes for hearings and meetings	33	36	36	98	107	2.32
6	Administration of Reports and other documents	34	36	39	98	103	2.35
7	Resolution or endorsement of cases	33	35	37	97	108	2.32

ISSN: 2582-0745
Vol. 4, No. 06; 2021

8	Computation of Revenues and Collections	33	35	38	99	105	2.33
9	Submission of research projects and proposals	34	37	39	101	99	2.37
10	Record Management	34	35	37	103	101	2.35

As seen in table 9, 1) indicator Submission of Written Reports, Hotmail and other popular sites, 34 answered 5, 36 answered 4, 37 answered 3, 99 answered 2, and 104 answered 1 with the computed mean of 2.35 and a descriptive rating of Less Effective. 2) Indicator Presentation of Oral Reports, 33 answered 5, 38 answered 4, 38 answered 3, 98 answered 2 and 103 answered 1 with the computed mean of 2.35 with a descriptive rating of Less Effective. 3) Indicator Preparation of Barangay Documents, 33 answered 5, 38 answered 4, 37 answered 3, 98 answered 2 and 102 answered 1 with the computed mean of 2.34 and a descriptive rating of Less Effective. 4) Indicator Preparation of Subpoenas, 33 answered 5, 42 answered 4, 37 answered 3, 102 answered 2 and 96 answered 1 with the computed mean of 2.40 and a descriptive rating of Less Effective. 5) Indicator Minutes for hearings and meetings, 33 answered 5, 36 answered 4, 36 answered 3, 98 answered 2 and 107 answered 1 with the computed mean of 2.32 and a descriptive rating of Less Effective. 6) Indicator Administration of Reports and other documents, 34 answered 5, 36 answered 4, 39 answered 3, 98 answered 2 and 103 answered 1 with the computed mean of 2.35 and a descriptive rating of Less Effective. 7) Indicator Resolution or endorsement of cases, 35 answered 5, 33 answered 4, 37 answered 3, 97 answered 2 and 108 answered 1 with the computed mean of 2.32 and a descriptive rating of Less Effective. 8) Indicator Computation of Revenues and Collections, 33 answered 5, 35 answered 4, 38 answered 3, 99 answered 2 and 105 answered 1 with the computed mean of 2.33 and a descriptive rating of Less Effective t. 9) Indicator Submission of research projects and proposals, 34 answered 5, 37 answered 4, 39 answered 3, 101 answered 2 and 99 answered 1 with the computed mean of 2.37 and a descriptive rating of Less Effective. 10) Indicator Record Management, 34 answered 5, 35 answered 4, 37 answered 3, 103 answered 2 and 101 answered 1 with the computed mean of 2.35 and a descriptive rating of Less Effective.

Level of satisfaction on the use of Computerized Barangay Transaction

Table 15 presents the results of data analysis in the level of satisfaction on the use of computer barangay transaction.

Table 15 Level of Satisfaction on the Application of Computer Barangay Transaction

Level of Satisfaction on the Application of computer technology		5 **HS**	4 **S**	3 **MS**	2 **LS**	1 **NS**	Mean
1	Submission of Written Reports	36	27	32	107	108	2.28
2	Presentation of Oral Reports	36	32	32	103	107	2.31
3	Preparation of Barangay Documents	36	32	32	99	111	2.30
4	Preparation of Subpoenas	36	32	33	103	106	2.32

ISSN: 2582-0745
Vol. 4, No. 06; 2021

5	Minutes for hearings and meetings	36	30	32	101	111	2.29
6	Administration of Reports and other documents	36	33	27	105	109	2.30
7	Resolution or endorsement of cases	36	35	31	99	109	2.32
8	Computation of Revenues and Collections	36	33	33	98	110	2.31
9	Submission of research projects and proposals	36	35	33	97	109	2.33
10	Record management	36	35	33	98	108	2.33

As seen in table 9, 1) indicator Submission of Written Reports, Hotmail and other popular sites, 36 answered 5, 27 answered 4, 32 answered 3, 107 answered 2, and 108 answered 1 with the computed mean of 2.28 and a descriptive rating of Less Satisfied. 2) Indicator Presentation of Oral Reports, 36 answered 5, 32 answered 4, 32 answered 3, 103 answered 2 and 107 answered 1 with the computed mean of 2.31 with a descriptive rating of Less Satisfied. 3) Indicator Preparation of Barangay Documents, 36 answered 5, 32 answered 4, 32 answered 3, 99 answered 2 and 111 answered 1 with the computed mean of 2.30 and a descriptive rating of Less Satisfied. 4) Indicator Preparation of Subpoenas, 36 answered 5, 32 answered 4, 33 answered 3, 103 answered 2 and 106 answered 1 with the computed mean of 2.32 and a descriptive rating of Less Satisfied. 5) Indicator Minutes for hearings and meetings, 36 answered 5, 30 answered 4, 32 answered 3, 101 answered 2 and 111 answered 1 with the computed mean of 2.29 and a descriptive rating of Less Satisfied. 6) Indicator Administration of Reports and other documents, 34 answered 5, 36 answered 4, 39 answered 3, 98 answered 2 and 103 answered 1 with the computed mean of 2.35 and a descriptive rating of Less Satisfied. 7) Indicator Resolution or endorsement of cases, 36 answered 5, 35 answered 4, 31 answered 3, 99 answered 2 and 109 answered 1 with the computed mean of 2.32 and a descriptive rating of Less Satisfied. 8) Indicator Computation of Revenues and Collections, 36 answered 5, 33 answered 4, 33 answered 3, 98 answered 2 and 110 answered 1 with the computed mean of 2.31 and a descriptive rating of Less Satisfied. 9) Indicator Submission of research projects and proposals, 36 answered 5, 35 answered 4, 33 answered 3, 97 answered 2 and 109 answered 1 with the computed mean of 2.33 and a descriptive rating of Less Satisfied. 10) Indicator Record Management, 36 answered 5, 35 answered 4, 33 answered 3, 98 answered 2 and 108 answered 1 with the computed mean of 2.33 and a descriptive rating of Less Satisfied.

Significant difference on the level of knowledge on the use and application of computer in the performance of barangay leaders and workers

Table 16 presents the significant difference on the use and application of computer in the performance of barangay leaders and workers.

Table 16 Significant Difference on the Level of Knowledge on the Use and Application of Computer in the Performance of Barangay Leaders and Workers

SUMMARY						
Groups	*Count*	*Sum*	*Average*	*Variance*		

ISSN: 2582-0745
Vol. 4, No. 06; 2021

MS Word	10	21.85484	2.185484	0.008957		
MS Excel	10	23.1	2.31	0.012497		
MS PowerPoint	10	22.77097	2.277097	0.007919		
e-mail	10	23.56452	2.356452	0.000828		
Internet surfing	10	24.16129	2.416129	0.001989		
ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.300033	4	0.075008	11.65101	1.41E-06	2.58
Within Groups	0.289707	45	0.006438			
Total	0.58974	49				

at 0.50 marginal error

As seen in the result of data analysis with MS Word equal to 0.008957, MS Excel is equal to 0.012497, MS PowerPoint equal to 0.007919, email is equal to 0.000828, and Internet Surfing equal to 0.001989 which is lower than 0.05 degree of marginal error at 2.58 F critical with the degree of freedom equivalent to 4 and 45, respectively, there is no significant difference on the Level of Knowledge on the Use and Application of Computer in the Performance of Barangay Leaders and Workers.

e. Significant difference on the Level of Effectiveness on the Use of Computerized Barangay Transaction

Table 17 presents the significant difference on the effectiveness on the use of computer barangay transaction.

Table 17 Significant Difference on the Level of Effectiveness on the Use of Computerized Barangay Transaction

	Variable 1	*Variable 2*
Mean	2.34871	2.34871
Variance	0.000616	0.000616
Observations	10	10
Pooled Variance	0.000616	
Hypothesized Mean Difference	0	
df	18	
t Stat	0	

ISSN: 2582-0745
Vol. 4, No. 06; 2021

P(T<=t) one-tail	0.5	
t Critical one-tail	1.734064	
P(T<=t) two-tail	1	
t Critical two-tail	2.100922	

at 0.05 marginal error

As seen in the result of data analysis with the value of variance both equal to 0.000616 which is lower than 0.05 degree of marginal error using 10 observations at t Critical one-tail equal to 1.734064 and t Critical two-tail 2.100922, there is no significant difference on the Level of Effectiveness on the Use of Computerized Barangay Transaction.

Relationship between the level of effectiveness and satisfaction on the use of computer in barangay

Table 17 presents the significant relationship on the use of computer in the barangay.

Table 17Significant Relationship on the Level of Effectiveness and Satisfaction on the Use of Computer in Barangay

t-Test: Paired Two Sample for Means		
	Variable 1	*Variable 2*
Mean	2.34871	2.309032
Variance	0.000616	0.00033
Observations	10	10
Pearson Correlation	0.297855	
Hypothesized Mean Difference	0	
df	9	
t Stat	4.819927	
P(T<=t) one-tail	0.000474	
t Critical one-tail	1.833113	
P(T<=t) two-tail	0.000947	
t Critical two-tail	2.262157	

at 0.50 marginal error

As seen in the result of data analysis with the value of variance equal to 0.000616 and 0.00033 which is lower than 0.05 degree of marginal error using 10 observations with the degree of freedom equal to 9 at t Critical one-tail equal to 1.734064 and t Critical two-tail 2.100922, there is no significant difference on the Level of Effectiveness on the Use of Computerized Barangay Transaction.

7. CONCLUSION

Based on the results of the analysis of data the researcher concluded that the typical respondents belong to 40-50 years old. Majority of the active member in the barangay are often women. Barangay governance played a vital role in the empowerment of the local government

ISSN: 2582-0745
Vol. 4, No. 06; 2021

units in the country. This is linked with the leader's accountability, fairness, and transparency in the exercise of their duties and functions as a servant in the community. The results indicated that majority of the Barangay Chairpersons in the Municipality of Botolan were very supportive that they were able to deliver a very satisfactory public service in their barangays, hence they were able to cope up in all the roles and responsibilities that would be of greater impact in community development.

8. RECOMMENDATIONS

In view of the findings and conclusions, the following were the researcher's recommendations: Some Barangay Leaders should undergo further studies or at least to be more participative or be involved in the trainings and seminars that are related to effective and efficient governance. More funds should be appropriated for the trainings and seminars related to the improvement of the competencies of the Barangay Leaders and workers. There should be an annual evaluation of performance to be conducted in the barangays based on the programs and projects implemented by the Barangay Leaders. And a proposed training design plan to enhance their competence and capabilities to be presented for the barangay officials for review and consideration.

ACKNOWLEDGEMENT

We sincerely give thanks to the Local Government Unit of Botolan headed by Honorable Mayor Bing Maniquiz and the Association of Barangay Chairman for their timely support to complete this study.

REFERENCES

Philippine Education for All EFA 2015

Encyclopedia of Knowledge, Grolier Inc., USA: 2000

Hargreaves, A. **Changing Teachers, Changing Times: Teachers' Work And Culture In The Postmodern Age.** Professional Development and Practice Series. New York: Teachers College Press.1994.

Mayer, Richard E. International Journal of Educational Research**. "Multimedia Aids To Problem-Solving Transfer"** p. 617.,1999.

Rusten, E., and Hudson, H.E. "Infrastructure: Hardware, Software, and

Connectivity." In W. Haddad and A. Draxler (eds.).Technologies for Education: Potentials, Parameters, and Prospects.Paris: UNESCO;Washington: Academy for Educational Development, 2002.

Smith, G. (2000). Teaching, Learning, Technology and Effectiveness - Part 2. NSWCEG Information IT Transfer, 19 (4), 24-39.

Macneil, A. & Delafield, D. (2000). Principal Leadership for Successful School Technology Implementation. Paper presented at the Society for Information Technology & Teacher Education International Conference, March 10-14, Washington.

Hafkin, Nancy, and Taggart, Nancy. Gender, Information Technology, andDeveloping Countries. Washington: Learn Link, Academy for Educational Development, 2001.

ISSN: 2582-0745
Vol. 4, No. 06; 2021

Carlson, Sam, and Gadio, Cheick Tidiane. "Teacher Professional Development inthe Use of Technology." In W. Haddad and A. Draxler (eds.). Technologies for Education: Potentials, Parameters, and Prospects. Paris: UNESCO;Washington: Academy for Educational Development, 2002.

Rusten, E., and Hudson, H.E. "Infrastructure: Hardware, Software, and Connectivity." In W. Haddad and A. Draxler (eds.). Technologies for Education: Potentials, Parameters, and Prospects. Paris: UNESCO;Washington: Academy for Educational Development, 2002

Bustos, Alicia S. et al **Psychological, Anthropological and Sociological Foundation of Educations,** Goodwill Book Store, 1985.