Information Technology Utilization of the Local Government Employees in the Province of Capiz, Philippines

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Abstract

The purpose of this study was to determine the extent to which local government employees in Mambusao, Capiz, used information technology. Using stratified random sampling, 261 respondents were identified and surveyed using a modified questionnaire. The descriptive-inferential research method was used, and the results were interpreted at the level of significance of 0.05. The findings revealed that the respondents were middle-aged females, married, college graduates with 16 years of service and had no IT related trainings attended. Furthermore, respondents used IT in their jobs only moderately. The extent to which they used information technology was significantly influenced by their age, implying that this factor should be prioritized in the selection and hiring of employees in the local government unit. Moreover, the number of IT equipment, software, and internet connectivity utilized by Local Government Unit employees has significantly increased, indicating that the employees are willing to use IT equipment and that the government may ensure that the IT equipment required may be made available. The LGUs may prepare and implement a comprehensive e-modernization program highlighting the maximum use of IT for efficient delivery of basic social services. The said program may include: allocation for purchasing IT equipment, training and re-training of the employees.

Keywords: *Information Technology utilization, Local Government Employees, Local Government Unit*

Introduction

The government uses information technology to improve its operations and services to the public, business, and other sectors. The internet and information technology can be used to reduce the time and resources required to carry out daily operations. Today, we live in a global information society, with a global economy that is increasingly dependent on the creation, management, and dissemination of information resources. As a result, enhancing an organization's IT skills can increase business success. Ananda, R.H., Astuti, E.S., Wilopo (2023**)**. The labor forces are made up of knowledge workers who spend the majority of their time creating and disseminating information. (O'Brien, 1996).

The majority of studies and projects have tended to concentrate on problems with the information infrastructure, while only a small number have attempted to gauge the level of IT usage in the Philippines, particularly in the Local Government Units. The term "IT utilization" is preferred in this paper as it takes into account both the actual use of the technologies and the

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accessibility of the Internet in the province. The capacity to use the available resources and internet services will determine how effectively the IT is utilized. Such capacity may be assessed based on the respondents' age, gender, length of service, level of education, number of computers they use, number of software applications they have, and internet connectivity, (Kiptalam, G. K., & Rodrigues, A. J., 2010).

The researcher hopes that this study will provide appropriate and practical recommendations to local government units on how to improve employee performance in the utilization of IT. It is also hoped that the study will contribute to the best service delivery by local government constituents in order to facilitate a quick, transparent, accountable, efficient, and effective public service.

Statement of the Problem

The purpose of this study was to determine the extent to which local government unit employees in the province of Capiz used information technology. This aims to specifically answer the following questions:

1. What is the profile of the respondents in terms of age, gender, educational attainment, length of service and IT related trainings?
2. What is the profile of the Local Government Units in terms of number of equipment in the office, number of software used, availability of internet connection?
3. What is the extent to which respondents use information technology?
4. Are there significant differences in the extent of information technology utilization when respondents are grouped according to their profile and organization profile?

Research Method Used

The quantitative method of descriptive research design was used for this study, with the researcher focusing on gathering numerical data and generalizing it across a group of employees. The respondents of the study were the 261 local government employees occupying a plantilla position and utilizing IT equipment in the Province of Capiz. Simple random sampling was used to give each employee a chance to be included in the study. The quantitative method referred to the systematic empirical investigation of social phenomena using statistical, mathematical, or computational techniques. Using an adapted survey questionnaire, the numerical data were gathered from the respondents' extent of IT utilization, work attitude, peer relationships, and organizational commitment as perceived by themselves. The survey questionnaire was adopted from the previous study and is divided into four sections: The first section of the questionnaire asked about the respondents' age, gender, civil status, educational attainment, and length of service. The second section included a series of statements about work attitudes, work attitudes, peer relationships, and organizational commitment. Finally, the third section included various indicators relating to the extent to which local government employees in the Province of Capiz use information technology. Prior to the administration of the research instrument, a communication was prepared for the Municipal Mayors of the Province of Capiz in order to collect data from respondents. Prior to data collection, an informed consent was obtained from them as soon as permission was obtained, assuring them that there is no wrong answer and that their identity and information will be handled with

utmost confidentiality and maintained in strict compliance with the provisions of Republic Act 10173, commonly known as the Data Privacy Act of 2012. The respondents were also briefed on the Data Collection Tool and how it will be used.

Results and Discussion

Profile of the Respondents

Figure 1 depicts the respondents' profile, which includes their age, gender, civil status, educational attainment, length of service and IT related trainings. The majority of respondents (59.40%) were middle-aged, ranging in age from 36 to 48 years old; 28.10 percent were 59 years and older; and 12.50 percent were between the ages of 23 and 35. Furthermore, nearly three-quarters (73.6%) were females, with the remainder (26.4%) being males. In terms of educational attainment, the highest percentage of respondents (73.2%) held a bachelor's degree; 16.9 percent held a bachelor's degree with units toward a master's degree; 9.2 percent held a master's degree; and 0.4 percent held a master's degree with units toward a doctoral degree and had completed their doctoral degree. Almost half, or 49.8 percent, had served between the 13 – 25 years; 36 percent had served for 12 years or less; and 14.2 percent had served for more than 26 years. In terms of IT related trainings a little over one-half (50.2%) of the respondents had not attended any IT related trainings; 42.5 percent, 1-5 trainings and 16.9 percent of the respondents had attended 11 trainings or more.

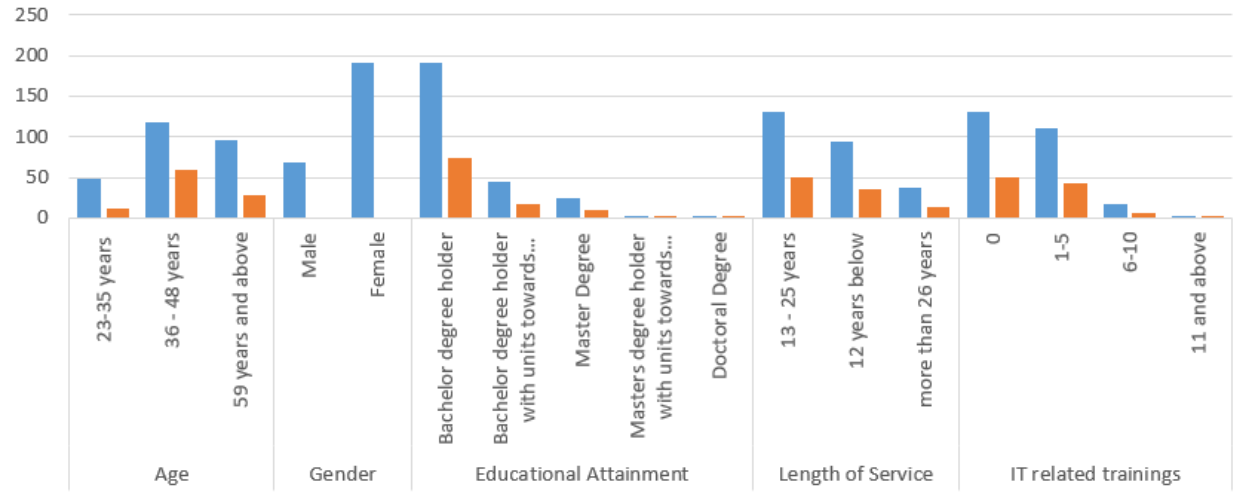

Figure 1. Profile of the respondents.

Organization-related profile

Local Government Units-related variables is presented in Figure 2, which includes number of IT equipment in the office, Number of software used and the availability of internet connection in the office. Most of the respondents had 2-27 units IT equipment in their office, 5 percent had 28-53 units and 1.5 percent had 54 units of IT equipment and above. The results implies that LGUs on the average had 13 units of IT in their office. In terms of number of software used, more than four-fifths of the respondents used 1-2 software in the office; 13.8

percent had 2-4 and 5.7 percent 5-6 software. This signifies that LGU has lesser number of software used in the office. Moreover, more than four-fifths of the respondents were working in the LGUs with internet connection and the rest 19.9 percent of them revealed that they had no internet connection in the office. This implies that most of the LGUs in the province had internet connection.

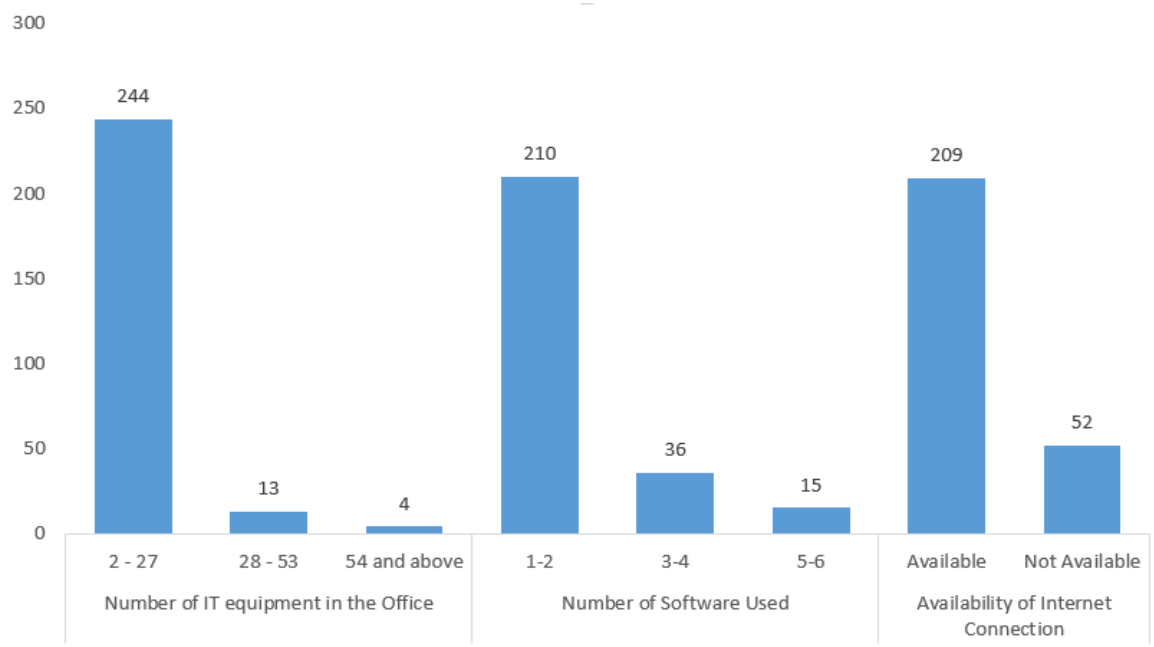

Figure 2. Organization-related variables

Extent of IT utilization among LGUs

Figure 3 depicts the level of IT utilization among local government employees. More than two-thirds (67.4%) of respondents had moderate IT utilization, while 27.60% had average IT utilization and 5.0% had high IT utilization, according to the findings. The mean score was 2.70, indicating that respondents utilized IT moderately in the performance of their duties. This indicates that the majority of respondents' IT utilization in the workplace was comparable. The SD of 0.58 indicates that most of the respondents' extent of IT utilization in the office were almost the same. According to Milearosari, A.T. & Ramadhan, H.M. (2023), the use of IT and that of technological advancements can contribute to boosting the efficacy and efficiency of an organization's work. Moreover, the study of Tungadi, A., Suharjito (2017), the utilization of information technology using the Balanced Scorecard shows that the average performance is sufficient.

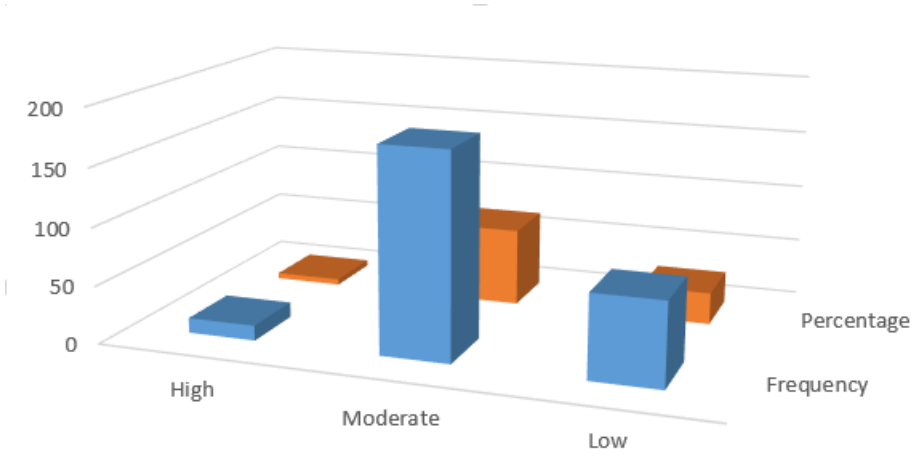

Figure 3. Extent of IT utilization among LGUs

Differences in the Extent of IT utilization of the respondents When Grouped According to Respondents' Profile

Table 1 shows the analysis of the differences in the extent of IT utilization of the respondents when grouped according to respondents' profile such age, gender, civil status, educational attainment, length of service. Findings revealed that there were no significant differences in the extent of IT utilization when the respondents were grouped according to gender, educational attainment, length of service. This implies that the respondents' extent of IT utilization were not affected by gender, educational attainment and length of service. When the respondents were divided into groups according to age and IT related trainings, there were discernible differences in the level of IT utilization.

Age has a significant impact on how people use technology, as shown by numerous studies (Gefen & Sraub, 1997; Venkatesh et al., 2003; Jones & Hubona, 2005; Guerrero, Egea &Gonzalez, 2005; Knutsen, 2005; Masrek, M. N., Karim, N. S. A., & Hussein, R., 2007; Tanko, Adeniji & Nwachukwu, 2012). Age may have a variety of effects on how people use technology, including I directly influencing how people use technology, II indirectly influencing how people use technology through perceptions, and III moderating the relationships between perceptions and technology use, according to a study by Yi, Wu, and Tung (2005). The study's findings indicate that workers who use personal computers have more positive attitudes toward new technologies, perhaps because they are more aware of how those technologies can help them do their jobs more effectively (Vozikis, A., Ypofanti, & Papadopoulos, I., 2010; Edmunds, R., Thorpe, M., & Conole, G., 2012).

According to a number of studies, adequate IT-related training is necessary to enhance the skills and knowledge of employees, particularly in local government units, so that they can provide comprehensive and high-quality service to the various types of constituents they serve. (Bello, I. S., Arogundade, F. A., Sanusi, A. A., Ezeoma, I. T., Abioye-Kuteyi, E. A., & Akinsola, A., 2004; Olatoye, R., 2011.)

Table 1. Test of differences in the extent of IT utilization and respondents' profile.

Variable	Statistical Tools Used	Value	Prob	Interpretation
Age	Pearson r	1.0	0.000	Significant at 1% level
Gender	T-test	2.546	0.903	Not significant
Educational Attainment	F-test	2.912	0.208	Not significant
Length of Service	Pearson r	-0.076	0.221	Not significant
IT related trainings	Pearson r	0.193	0.002	Significant at 1% level

Differences in the Extent of IT utilization of the respondents When Grouped According to Organization-related profile

Table 2 shows the analysis of the differences in the extent of IT utilization of the respondents when grouped according to organization-related profile such number of equipment in the office, number of software used, and availability of internet connection. Findings revealed that there were significant differences in the extent of IT utilization when the respondents were grouped according organization-related profile such as number of equipment in the office, number of software used, and availability of internet connection. This implies that the extent of utilization is affected by the IT equipment, software and the internet connectivity. This means that to encourage employees to increase IT utilization, more software should be made available in the LGUs. This may encourage employees to explore and make use of the available software in accomplishing their job effectively and efficiently. New technologies are being developed all the time and LGUs often need to upgrade software if only to keep up with the quality service delivery to their clientele. The availability of internet connection might have improved the skill of the office employees and likewise increase IT utilization. The findings supported by the Lau & Sim, 2008).

Table 2. Test of differences in the extent of IT utilization and Organization-related variables.

Variables	Statistical Tool Used	Value	Prob	Interpretation
Number of IT equipment in the Office	Pearson r	-0.354	0.000	Significant at 1% level
Number of Software Used	Pearson r	0.130	0.035	Significant at 5% level
Availability of Internet Connection	t-test	0.306	0.000	Significant at 1% level

Conclusions

Based on the foregoing findings, the following conclusions were drawn.

1. The employees of the local government units in the province of Capiz were dominantly middle aged, female college graduate, in the service for 16 years

2. The local government units under study appear to have adopted information technology and may have come to understand its benefits, suggesting that the aforementioned LGUs have already begun the process of using IT to modernize their operations.

3. Local government administrators in the province of Capiz should set aside funds for the purchase of IT equipment and additional staff training because the employees of the LGUs there only moderately used IT in their work.

4. The extent to which the respondents used IT was significantly influenced by their age and IT related trainings attended suggesting that this factor should be a key factors in hiring employees.

5. The amount of IT equipment, software, and internet connectivity used by Local Government Unit employees has significantly increased, indicating that the employees are willing to use IT equipment and that the government may ensure that the IT equipment required may be made available.

6. Prepare and implement a comprehensive e-modernization program (e-governance) highlighting the maximum use of information technology for efficient and effective delivery of basic social services. The said program may include: allocation of purchasing IT equipment, training and re-training of employees.

7. Revise/expand recruitment and hiring policies considering the age, number of IT equipment in the office, frequent use of IT and ability to download, retrieve information from the internet for intelligent decision making.

8. Conduct an inventory of all IT equipment and facilities to determine the areas needing improvement in terms of Information Technology.

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