

# Effectiveness Of Application Softwares On Filipino Generational Workers As A Basis For Career Growth

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## ARTICLE INFO

## ABSTRACT

This study investigates the usage of application software on Filipino Generational Workers on their career advancement, employee productivity and performance enhancement. As Software Technologies become increasingly integrated into various aspects of Filipino Generational Workers, concerns arise regarding on boosting their career development, productivity and performance enhancement in the context of the usage of different software technology. The scope of the study is to determine their demographic profile, their monthly salary, the nature of industry that they are currently working, the generation era usually they frequently used application software technology on doing their work tasks, and lastly the kind of application software do the respondents often use from Filipino workers.

**Keywords:** Application Software, Career Advancement, Employee Productivity and Performance Enhancement.

## INTRODUCTION

As the globe emerges into a modernized approach on using thru online modes, the usage of technology becomes increasingly prevalent. In concentration with that, in the last few years with rapid technological advancements, there is a rising tool that has the intellectual processes characteristics of humans such as to perform using computer application software's. Application software's pertains to the ability of a computer to perform activities typically associated with code units given by the user. These Application Software's can-do tasks that includes problem solving, learning, reasoning, perception, language editing. As people learn how to use the advances of application software tools that have an impact on every aspect of their lives in their workplace environment.

This software is being utilized nowadays as it offers services that are much faster and more convenient. Therefore, the availability of application software's encourages the workforce nowadays to be reliant on innovation, which then reflects on the lack of knowledge. The rapid evolution of the global workforce in the digital age will identify if the application software technologies totally speed up their performance. With the rising use of different application software, the researcher is motivated to uncover the influence of application software tools on the workforce job satisfaction, employee productivity and their performance enhancement. With that, the employees can have clarifications and understand the challenges and opportunities in choosing to use application software technologies. Various companies have specialization in terms of usage of application software tools. The purpose of this study is to identify the influence of Application Software on their job satisfaction, employee productivity and their performance enhancement. While the positive impact of Application software's on performance is evident, measuring its precise contribution remains challenging. Metrics such as return on investment (ROI), customer retention rates, and innovation indices are commonly used to evaluate the impact of software initiatives. The adoption of software's in product management strategies is a critical factor influencing the performance of career growth in Philippines.

While challenges persist, the strategic integration of Application software offers significant opportunities for innovation and growth. In the current context of digitalization and intelligence, application software technology has experienced significant development and wide application, covering many sub-fields such as

machine learning, deep learning, and natural language processing. These technologies have not only made breakthrough progress in theoretical research but also gradually changed the business models and operational methods of various industries in practical applications.

### Statement of the Problem

This study aims to determine the influence of Application software's on Filipino Generational Workers on their career growth. Specifically, this study aims to answer the following queries:

1. What is the Demographic Profile of Respondents in terms of:
  - a. Generation Classification as prescribed on Age
  - b. Gender
  - c. Industry Currently Working
  - d. Monthly Income
  - e. Estimated Using Application Software
2. What application software do Filipino Generational Workers usually use in work?
3. How Application Software Tools affects the Job Satisfaction of Filipino Generational Workers in terms of?
  - a. Career Advancement
  - b. Role Alignment
4. How Application Software Tools affects the Employee Productivity of Filipino Generational Workers in terms of?
  - a. Employee Efficiency
  - b. Service Quality
  - c. Job Performance
5. How Application Software Tools affects the Performance Enhancement of Filipino Generational Workers in terms of?
  - a. Quality
  - b. Focus
  - c. Accuracy
6. In What Generation usually workers used Application Software Tools on doing their work tasks?
7. What Application Software Tools software do they often use in the Philippines?
8. Based on the study, what are the basis of using Application Software Tools for Career Development for Filipino generational workers?

### Hypothesis

The researchers temporarily state the response to the queries in the null hypothesis at 0.05 level of significance that:

1. There is no significant difference between the effectiveness of Application Software and the demographic profile of respondents
2. There is no significant difference between estimated frequency of using Application Software for accomplishing their task on the performance enhancement of Filipino Generational Workers
3. There is no significant difference on the influence of Application Software on the Job Satisfaction of Filipino Generational Workers on the demographic profile of respondents.

### Significance of the Study

As we embraced a more diligently reliant world, it's important to determine and emphasize the influence of different emerging forms of technology, including Application Software. This research aims to provide information and knowledge on the influence of Application Software on Filipino generational workers. The researchers believe that the result and outcome of this paper will benefit the following:

**The Managers and Practitioners.** This research provides valuable insights and practical experiences for managers and practitioners within different industries. By understanding the application cases of application software's technology in business model innovation, product development, marketing, and other aspects, managers and practitioners can better grasp the trends in technological development, formulate corresponding strategies and business plans, and enhance the competitiveness and adaptability of their enterprises. Specifically, they can learn from successful implementations of application software technologies in areas such as supply chain optimization, customer relationship management, and market analysis, to optimize their own operational processes, improve decision-making efficiency, and ultimately drive business growth.

**The industries.** The application of application software technology in areas such as supply chain management, marketing, and customer service may have profound implications for industries like retail, manufacturing, and logistics.

For instance, the retail sector can learn from software applications in market positioning and marketing strategies to optimize product promotion and sales campaigns. Similarly, the manufacturing sector can benefit

from software applications in production process optimization and quality control to enhance productivity and product quality. Furthermore, the logistics industry can leverage software applications in logistics route planning and transportation management to streamline operations, reduce costs, and improve service levels. Therefore, the conclusions and findings of this study have broader applicability and offer valuable insights for innovation and development across related industries.

**Economic Agencies.** This study would help economic agencies a comprehensive representation of the workplace landscape that uses technology to fasten the services of the workers in their workplace environment.

**Legislative.** This study would help the legislative of the Philippines in formulating a regulatory framework policy that regulates and recognize the dos and don'ts for workers on using the software technologies.

**Information and Communication Technology.** This study would help Philippine government to understand how software technologies can be integrated with their system to enhance their services. It can also help them create policies and rules on the implementation of technology with ethical consideration.

### Collection Techniques

Data collection techniques used in this study namely using a questionnaire, where according to (Gujarati, 2003) states that the questionnaire is a data collection technique that is done by giving a set of questions or written to the respondent to be answered. This questionnaire is a data collection technique used by researchers to determine perceptions as well as information from generational workers in the Philippines.

In this study, a Likert scale was used to measure respondents' perceptions. According to (Gujarati, 2003) measuring the perceptions and opinions of a person or a group of people about social phenomena is called the Likert scale. This data collection technique involves a series of related statements with the attitude of the respondent, and asked to state:

- A. Strongly Agree (SA): score 4
- B. Agree (A): score 3
- C. Disagree (D): score 2
- D. Strongly Disagree (SD): score 1

### Population

Population is a group of people or events for something that is used researchers to draw conclusions (Gujarati, 2003) The target population used in this study namely Generational Workers in the Philippines.

### Sample

The researchers followed the recommendations put forward by Roscoe (Sekaran, 2000), namely sample size is greater than 30 and less than 500. The number of samples to be studied in this study were 150 Generational Workers from the Philippines.

### Characteristics of Respondents

Respondent characteristics are criteria used by researchers to determine the respondents to be studied. As for the respondents in this study determined by purposive technique, namely the technique of determining the subject (respondent) based on the criteria and objectives of this study. This criterion is determined by the researcher, where the researcher chose is related generational workers currently working and employed from various companies in the National Capital Region.

The stages in obtaining respondents are:

1. Researchers are looking for respondents, namely generational workers from India and Philippines whose criteria are in accordance with researcher needs.
2. Researchers then select the prospective respondents by how to evaluate the suitability of the criteria and based on the nature of openness respondents to the needs of researchers.
3. Then the researcher gave a willingness sheet to the respondent as evidence or basis for conducting interviews.

### Research Instruments

The instrument or research measurement tool used is in the form of open questions, The question begins with the identification of the informant. questions asked is a question that leads to the impact of Application Software's on Generational Workers from NCR. Further questions are possible from the description given by the informant in addition to the main questions as described.

### Reliability test

After the questionnaire was collected, the reliability of the questionnaire was tested. Reliability is an index to assess the reliability of the research object in the questionnaire, and it also reflects the uniformity of the results obtained when the questionnaire conducts a large number of repeated statistics on a certain event, that is, the stability of the measurement tool, which represents the closeness of the repeated measurement results. The main methods used to test reliability are Cronbach's Alpha coefficient, Theta coefficient method, retest reliability method, duplicate reliability method, split half reliability coefficient method, rater reliability, etc., among which Alpha coefficient is the most commonly used, therefore, this paper will use Krumbach a coefficient method to study the reliability of the questionnaire and verify the reliability of the questionnaire. Its reliability coefficient can be expressed as:

$$\alpha = (k / (k - 1)) * (1 - (\sum \sigma_i^2 / \sigma_t^2))$$

Among them:

" $\alpha$ " denotes the Cronbach's alpha coefficient, which is used to assess the internal consistency of the measurement tool.

" $k$ " indicates the number of measurement items in the measurement tool.

" $\sum \sigma_i^2$ " denotes the sum of the variances of the measurement terms.

" $\sigma_t^2$ " denotes the variance of the overall measurement instrument.

The value of the Cronbach's alpha coefficient ranges from 0 to 1. The closer to 1 indicates a higher internal consistency of the measurement tool. In general, an alpha greater than or equal to 0.7 is considered acceptable and indicates a high internal consistency of the measurement tool.

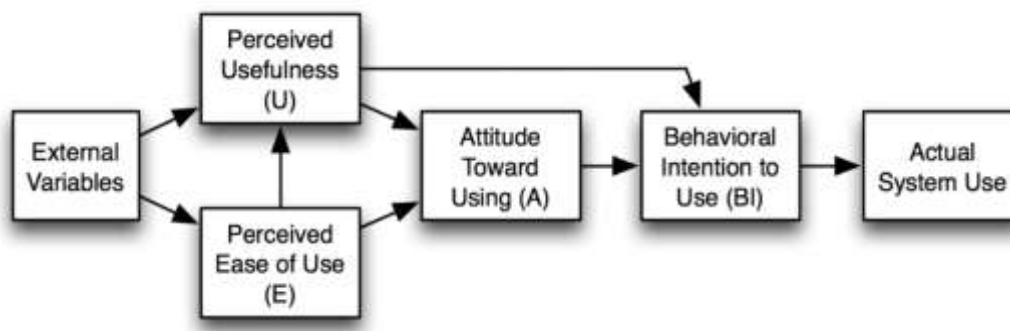
### Reliability Test of Survey Questionnaires.

Survey Questionnaire	Cronbach's Alpha	Interpretation
<b>Part I. Job Satisfaction</b>	0.894	Acceptable
<b>Part II. Employee Productivity</b>	0.822	Acceptable
<b>Part III. Performance Enhancement</b>	0.837	Acceptable
<b>OVERALL</b>	0.8765	Acceptable

Based on the Cronbach's Alpha rate, the results of the conducted reliability test of the survey questions above were all Good because it is more than 70 percent of the standard rate. It signifies that the researcher's survey questionnaires were approved, and the data collected is significant and relevant to the study.

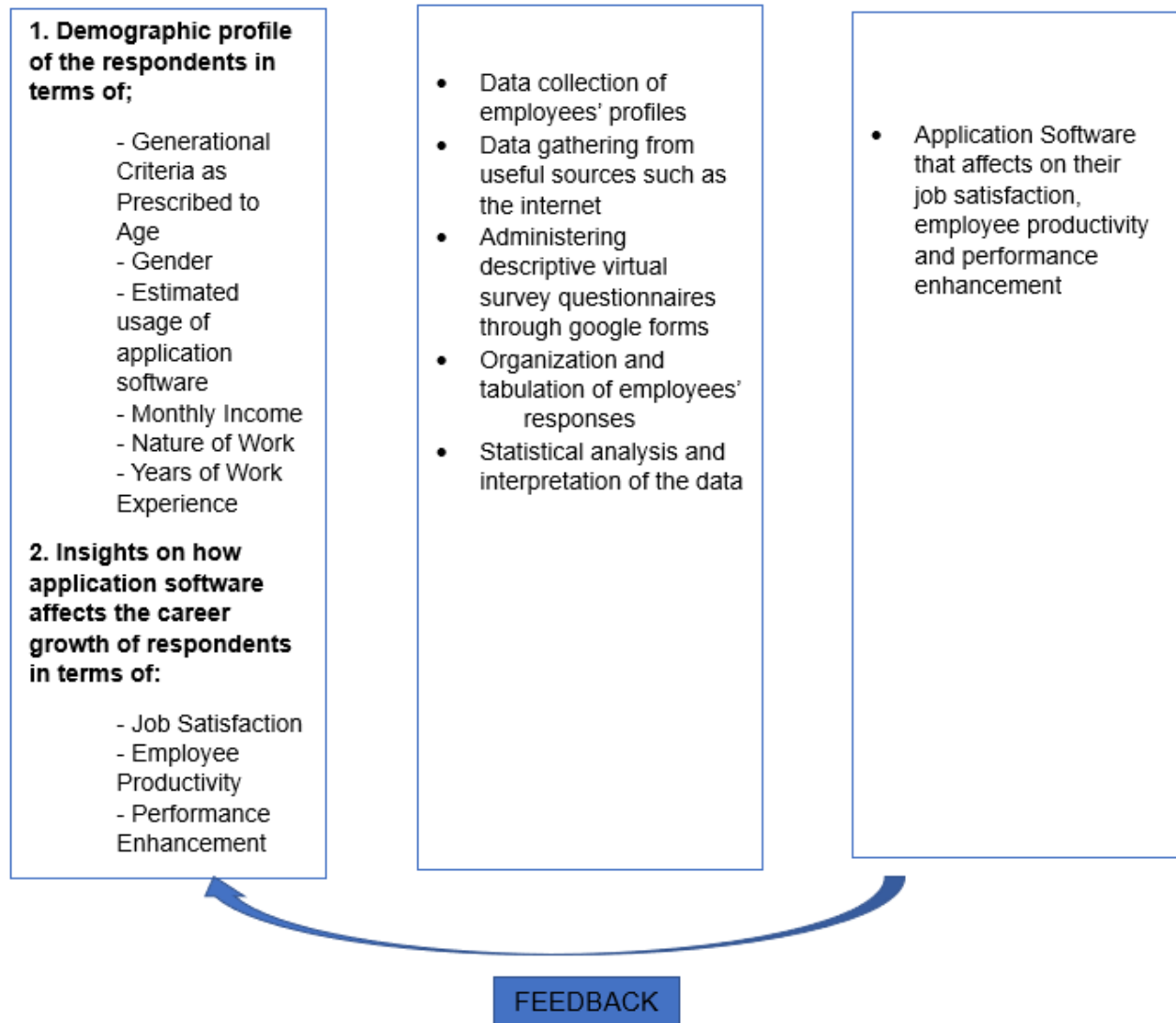
### Theoretical Framework

This research was similar on the Fred Davis Technology Acceptance Model, which consists of the attitudes towards emerging technology are influenced by perceived usefulness and perceived ease of use. These factors serve as determinants in shaping individuals' intentions to adopt technology. Perceived usefulness pertains to the conviction that utilizing technology will enhance performance and accomplish goals in a professional setting. Conversely, perceived ease of use concerns the extent to which individuals anticipate that using any technology will be straightforward and effortless. In summary, people are more likely to adopt technology if it requires little effort to use and is also convenient.



## Conceptual Framework

### Conceptual Framework



Input (I) included the data to be collected and sampled from the selected respondents. This involved identifying the key variables and relationships that would guide this study. The input would outline the main constructs to be explored and their interconnections. The data to be collected were the personal characteristics of the respondents.

Process (P) included the step-by-step process that the researcher would take to obtain the desired data and results of the study. This covers the study involving how application software affects the job satisfaction, employee productivity and performance enhancement as a basis for their career growth. Output (O) was the expected outcome of this study. This includes how application software improves the quality of their job satisfaction, employee productivity and performance enhancement.

### Research Design

The study utilized a cross-sectional research design and applied quantitative methods to evaluate the impact of application software as a basis for career growth for Filipino Generational Workers. As stated in an article by Kumar and Sankarapandian (2018), the descriptive design is used to get a clear understanding of a particular topic or subject, making it suitable for this study since the researcher needs to examine the current usage of application software for Filipino employees.

The study utilized quantitative methods. This research design is well-suited for the study, as it enables a thorough examination of the research problem. To collect quantitative data, a survey questionnaire will be administered to working professionals via online. The questionnaire will seek information regarding the



generational age category, monthly income, estimated time of using application software's, the application software category do they usually use on their work, the effect of the application software technology on their job satisfaction, employee productivity and performance enhancement.

## Review of Related Literature

### Demographic Profile

According to the published work of Develi et. al., (2022), it is possible to explain or describe the factors that are affecting job satisfaction. It is divided into two groups which are individual and organizational. This clarifies that the factors including age, gender, occupational title, years of experience in business life and education level are included in the individual group, while the factors in the organizational group are factors namely, job description, wages and personal rights, working environment and motivation. While the article didn't state a broad explanation about how the demographic profile affects the job satisfaction of accountants, it still clarified how the demographic profile is involved and one of the main factors to their job satisfaction including its groups of classification.

A study in the year 2020 examined how the accounting and auditing fields are affected by the digital technologies that come with Industry 4.0. It explained and suggested that accounting professionals should persistently or continuously update themselves on the rapid changes on digital technologies and that human-machine harmony will increase (Kruskopf et al., 2020). Accounting professionals should allow themselves to enhance their skills and proficiency as the digitalization process evolves for them to catch up with the advancements and their existing skills will not come into waste. This suggests that a demographic profile will also be involved as the accounting professionals' qualifications and quality will also change and improve according to the accounting profession's demand.

According to a research study entitled, "The Effect of Demographical Variables On Digitalization And Job Satisfaction: An Empirical Study On Professional Accountants" (2023), the perceptions of accounting professionals with job satisfaction is examined regarding their demographic characteristics. The findings gathered from the analysis are assessed and evaluated according to demographic variable.

### Cost – Effectiveness

Application software plays a crucial role in improving the cost-effectiveness of accounting practices by automating routine tasks, reducing errors, and streamlining workflows. Jemine et al. (2023) emphasize that technologies like shared accounting software and continuous accounting systems allow small accounting firms to optimize their operations, minimizing human errors and labor costs. This transition not only boosts efficiency but also frees up employees to focus on higher-value services such as advisory and consulting, which ultimately enhances revenue opportunities. Moreover, the integration of accounting technology supports improved client interactions, fostering stronger relationships and ensuring firms remain competitive in a digital landscape. Daff (2021) also underlines the importance of ICT competencies, particularly in accounting software, as a critical factor for accounting graduates' employability. Employers expect graduates to possess strong software skills to handle tasks such as financial data evaluation, which directly impacts the cost-effectiveness of accounting functions. Graduates proficient in accounting software can help organizations reduce time spent on manual processes, translating into cost savings through improved efficiency and accuracy.

Similarly, Thottoli (2020) found that knowledge of application software has a significant impact on its adoption by small and medium enterprises (SMEs) in Oman. SMEs that effectively use softwares benefit from greater operational efficiency and cost-effectiveness. By automating routine tasks, such as bookkeeping and financial reporting, SMEs can allocate resources more effectively and reduce operational costs, thus improving profitability.

### Estimated Time per Task or Output

According to **Cheng, W., Pien & Cheng, Y. (2020)**, people's working hours may increase because of their reduced negotiating power. Moreover, employees' control over their work also decreases due to AI-driven deskilling. AI can also manage and monitor work processes in real time, resulting in employees experiencing more work stress. If AI increases working time due to its deskilling effect, workers would have less time available for learning, and thus, their on-the-job learning would be less frequent.

As stated by the report of **Nielsen Norman Group (2023)**, Using application software in business improves users' performance by 66%, averaged across 3 case studies. More complex tasks have bigger gains, and less-skilled workers benefit the most from AI use.

### Frequently used Applications/Software

As stated by **Zarifhonarvar (2023)**, Microsoft is one of the leading investors in OpenAI, and Google's experimental conversational AI service, Bard, was recently introduced. ChatGPT, Bard, and other services like Jasperpy.a, coi, ELSA, DialoGPT, Chinchilla AI, and Replica are examples of Generative AI and Large Language Models that are popular now. These advanced AI applications and software tools have the potential to significantly impact the field of artificial intelligence by enhancing productivity.

### Application Software Usage Frequency

According to **Melnychenko (2019)**, AI does not have a work schedule or other restrictions on the time of work, so the comparison and analysis of information can be carried out around the clock, and the speed of data processing is determined by the processing power of the information systems. In this case, the artificial intelligence is ready to perform the tasks non-stop in real time till receiving the command of the termination of the process.

### Monthly Income

The average hourly rate of freelancers, in accordance with the report of **Freelancer Map (2023)** on their study is €96. The average monthly net income, on the other hand, is €6,200, and 41% of their survey respondents use artificial intelligence-based tools and software. This data shows that the use of artificial intelligence tools and software could affect their income due to the fact that some freelancers use artificial intelligence to do their job. Aside from independence, income is one of the reasons why other people choose freelancing.

### Performance

According to the study conducted by **Nazareno and D.S. Schiff (2021)**, it was stated that changes at the workplace, including the introduction of new technologies, have the potential to profoundly affect worker well-being by changing tasks, processes, and structures within workplaces". This shows that the existence of new technology such as artificial intelligence software can affect the performance of workers. The introduction of application software that brings changes in the work performance will help to determine its true extent.

Meanwhile, in the study of **Hui et.al (2023)** it was found that powerful Application software tools have dramatically improved performance over previous versions and users can use them to complete a variety of tasks without requiring specialized knowledge." The power that software holds gives workers the opportunity to show significant enhancements in their performance compared to earlier versions.

Furthermore, as explained by **Wilkens (2020)**, AI can be considered as a valuable tool for task performance and overall system development augmenting the individual task performance. It becomes obvious that application software in the workplace can enhance the development of individual competencies. This is especially the case in information processing, reflection on action and when it comes to the exploration of hidden pitfalls.

## Results

### I. Demographic Profile of Respondents

**Table 1 Frequency and Percentage Distribution of Filipino Respondents by Generational Age**

Generational Age	Frequency	Percentage
Generation X	26	17.3%
Millennials	46	30.7%
Generation Z	78	52%
<b>Total</b>	<b>150</b>	<b>100%</b>

Table 1 outlines the generational age of the respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents were in the category of Generation Z, (n=74, or 49.3%).

**Table 2 Frequency and Percentage Distribution of Filipino Respondents by Gender**

Gender	Frequency	Percentage
Male	59	39.30%
Female	78	52.00%
Male GBT (Gay, Bisexual, Transexual)	3	2.00%
Female LBT (Lesbian, Bisexual, Transexual)	10	6.70%
<b>Total</b>	<b>150</b>	<b>100%</b>

Table 2 outlines the gender of the respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents were Female, (n=78, or 52%). Followed by Male (n=59, or 39.30%).

**Table 3 Frequency and Percentage Distribution of Industry Currently Working**

Industry Currently Working	Frequency	Valid Percent
Digital Marketing	4	2.7
Financial and Banking	38	25.3
Customer Support	19	12.7
E-commerce, Marketing and Sales	15	10.0
Consulting and Business Services	13	8.7
Virtual Assistance	16	10.7
Education and Training	15	10.0
Health Care and Wellness	3	2.0
Engineering and Architecture	23	15.3
Environmental and Sustainability	4	2.7
Total	150	100.0

Table 3 outlines the industries currently working by Filipino respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents answered on Financial and Banking Industry, (n=38, or 25.3%).

**Table 4 Frequency and Percentage Distribution of Filipino Respondents Monthly Income**

	Frequency	Percent
Poor (Less than 9,100)	11	7.3
Low Income (9,100 to 18,200)	21	14.0
Lower Middle Income (18,200 to 36,400)	79	52.7
Middle Middle Income (36,400 to 63,700)	17	11.3
Upper Middle Income (63,700 to 109,200)	16	10.7
Upper Class Income (109,200 and up)	6	4.0
Total	150	100.0

Table 4 outlines the monthly income by Filipino respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents answered on the bracket of Lower Middle Income, (n=79, or 52.7%).

**Table 5 Frequency and Percentage Distribution of Estimated Time of Application Software's in Work by Filipino Respondents**

	Frequency	Percent
1 - 2 hours	3	2.0
3 - 4 hours	7	4.7
5 - 6 hours	22	14.7
7 - 8 hours	80	53.3
9 - 10 hours	29	19.3
More than 10 hours	9	6.0
Total	150	100.0

Table 5 outlines the Estimated Time of Application Software's in Work by Filipino Respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents answered on the bracket of 7-8 hours, (n=80, or 53.3%).

**Table 6 Frequency and Percentage Distribution of commonly Use Application Software's in Work by Filipino Respondents**

	Frequency	Percent
Word Processing Software	60	10.4
Graphics Software	15	2.6
Spreadsheet Software	148	25.6
Presentation Software	60	10.4
Web Browsers	45	7.8
Multimedia Software	14	2.4
Simulation Software	15	2.6
Content Access Software	15	2.6
Information Worker Software	29	5.0



Customer Related Management Software	29	5.0
Enterprise Resource Planning Application Software	15	2.6
Project Management Application Software	45	7.8
Business Process Management Application Software	29	5.0
Database Software	15	2.6
Accounting Software	45	7.8
<b>Total</b>	<b>579</b>	<b>100.0</b>

Table 6 outlines the Estimated Time of commonly Use Application Software is in Work by Filipino Respondents Among the 150 respondents who participated in the data-gathering process, most of the respondents answered using Spreadsheet software, (n=148, or 25.6%).

## II. How Application Software Tools affects the Job Satisfaction of Filipino Generational Workers in terms of?

**Table 7. Career Advancement**

<b>Career Advancement</b>	<b>Mean</b>	<b>VI</b>	<b>STDV.</b>	<b>Rank</b>
1. I have opportunities for my career growth after I learned to use Application Software's	3.733	Strongly Agree	.443	1
2. I believe that Application Software Technology software tools contribute on my skills needed by the company	3.713	Strongly Agree	.496	2
3. I am well prepared after I learned to use Application Software Technology Tools	3.513	Strongly Agree	.540	5
4. Application Technology software tools helps me to develop my talents and abilities	3.540	Strongly Agree	.586	4
5. I regularly meet my task commitments in terms of deadlines when using application software technologies	3.673	Strongly Agree	.470	3
<b>Composite Mean</b>	<b>3.634</b>	<b>Strongly Agree</b>	<b>.507</b>	

Legend:

- 4 3.26 - 4.00 Strongly Agree
- 3 2.51 - 3.25 Agree
- 2 1.76 - 2.50 Disagree
- 1 1.00 - 1.75 Strongly Disagree

Weighted Mean shows the average score for each statement, calculated by giving different weights to different responses according to their importance or scale position. SD measures the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean, while a high standard deviation indicates that the values are spread out over a wider range. The overall composite mean score for all statements is **3.634**, which also falls into the "**Strongly Agree**" category.

**Table 8. PERFORMANCE EVALUATION**

<b>PERFORMANCE EVALUATION</b>	<b>Mean</b>	<b>VI</b>	<b>STDV.</b>	<b>Rank</b>
1. Application Technology Software Tools helps me to meet the company's expectations.	3.526	Strongly Agree	.500	4
2. Application Software helps me to able to maintain schedule completely and early.	3.546	Strongly Agree	.538	3
3. I have a quality of workmanship because of application software tools.	3.500	Strongly Agree	.587	5
4. I am clear and doing my job tasks because of Application Software Tools	3.593	Strongly Agree	.568	1
5. Application Software Technology helps me to raise my performance reviews and other expectations by my superiors.	3.573	Strongly Agree	.535	2
<b>Composite Mean</b>	<b>3.547</b>	<b>Agree</b>	<b>.545</b>	

Legend:

- 4 3.26 - 4.00 Strongly Agree
- 3 2.51 - 3.25 Agree
- 2 1.76 - 2.50 Disagree
- 1 1.00 - 1.75 Strongly Disagree

Weighted Mean shows the average score for each statement, calculated by giving different weights to different responses according to their importance or scale position. SD measures the amount of variation or dispersion of a set of values.

A low standard deviation indicates that the values tend to be close to the mean, while a high standard deviation indicates that the values are spread out over a wider range. The overall composite mean score for all statements is **3.547**, which also falls into the "**Strongly Agree**" category.

### III. How Application Software Tools affects the employee Productivity of Filipino Generational Workers in terms

**Table 9. Employee Efficiency**

Employee Efficiency	Mean	VI	STDV.	Rank
1. The firm utilizes a system of application software tool to be use and to be integrate applications, to automate and manage business functions.	3.540	Strongly Agree	.500	1
2. Restrictions are done on the maximum usage of application software during working hours	3.266	Strongly Agree	.729	4
3. Conducting Management Reviews by the management to provide feedback of employee performance while using application software tools	3.280	Strongly Agree	.705	3
4. Job Tasks are matched with Application Software Tools to increase employee skills and behavioral styles.	3.513	Strongly Agree	.692	2
<b>Composite Mean</b>	<b>3.399</b>	<b>Strongly Agree</b>	<b>.656</b>	

Legend:

- 4 3.26 - 4.00 Strongly Agree
- 3 2.51 - 3.25 Agree
- 2 1.76 - 2.50 Disagree
- 1 1.00 - 1.75 Strongly Disagree

Weighted Mean shows the average score for each statement, calculated by giving different weights to different responses according to their importance or scale position. SD measures the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean, while a high standard deviation indicates that the values are spread out over a wider range. The overall composite mean score for all statements is **3.399**, which also falls into the "**Strongly Agree**" category.

**Table 10. SERVICE QUALITY**

SERVICE QUALITY	Mean	VI	STDV.	Rank
1. Application Software tools helps employees to deliver quality of service to conform clients' expectations	3.128	Agree	.335	3
2. Application Software tools helps employees the ability to provide services on a regular basis	3.144	Agree	.351	2
3. Application Software tools helps quick response to customers in a timely manner	2.646	Agree	.675	5
4. Customers trust the services delivered by employees while using application software tools	3.105	Agree	.307	4
5. Application Tool Software helps employees to deliver reliable services on performance measures and improved organizational process.	3.146	Agree	.354	1
<b>Composite Mean</b>	<b>3.033</b>	<b>Agree</b>	<b>.404</b>	

Legend:

- 4 3.26 - 4.00 Strongly Agree
- 3 2.51 - 3.25 Agree
- 2 1.76 - 2.50 Disagree
- 1 1.00 - 1.75 Strongly Disagree

Weighted Mean shows the average score for each statement, calculated by giving different weights to different responses according to their importance or scale position. SD measures the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean, while a high standard deviation indicates that the values are spread out over a wider range. The overall composite mean score for all statements is **3.033**, which also falls into the "**Agree**" category.

**Table 11. JOB PERFORMANCE**

JOB PERFORMANCE	Mean	VI	STDV.	Rank
1. Management Support using application software tools for employees meets up on their job performance and standard of service	3.128	Agree	.335	3
2. Application Software tools helps employees the ability to perform jobs and meet organizational goals and objectives	3.144	Agree	.351	2
3. Application Software Tools helps employees to clearly understand the task as expected by organization.	3.646	Strongly Agree	.675	5
4. Employees meet the quality and quantity standards of job performance because of using application software	3.105	Agree	.307	4
5. Application Tool Software helps employees to deliver reliable services on performance measures and improved organizational process.	3.146	Agree	.354	1
<b>Composite Mean</b>	<b>3.233</b>	<b>Agree</b>	<b>.404</b>	

Legend:

- 4 3.26 - 4.00 Strongly Agree  
 3 2.51 - 3.25 Agree  
 2 1.76 - 2.50 Disagree  
 1 1.00 - 1.75 Strongly Disagree

Weighted Mean shows the average score for each statement, calculated by giving different weights to different responses according to their importance or scale position. SD measures the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean, while a high standard deviation indicates that the values are spread out over a wider range. The overall composite mean score for all statements is **3.233**, which also falls into the "**Agree**" category.

**Part IV.** How Application Software Tools affects the performance enhancement of Filipino Generational Workers in terms of?

**Table 12. QUALITY**

QUALITY	Mean	VI	STDV.	Rank
1. Application Software Technology have reduced workloads and mistakes	3.095	Agree	.294	2
2. Application Software Technology helps me to finish tasks on time	3.095	Agree	.294	2
3. Application Software Technology has impacted good feedback rendered as given by clients	3.157	Agree	.364	1
4. Application Software Technology improve employee's ability and optimize job performance.	3.095	Agree	.294	2
<b>Composite Mean</b>	<b>3.119</b>	<b>Agree</b>	<b>.322</b>	

Legend:

- 4 3.26 - 4.00 Strongly Agree  
 3 2.51 - 3.25 Agree  
 2 1.76 - 2.50 Disagree  
 1 1.00 - 1.75 Strongly Disagree

Weighted Mean shows the average score for each statement, calculated by giving different weights to different responses according to their importance or scale position. SD measures the amount of variation or dispersion of a set of values.

A low standard deviation indicates that the values tend to be close to the mean, while a high standard deviation indicates that the values are spread out over a wider range. The overall composite mean score for all statements is **3.119**, which also falls into the "**Agree**" category.

**Table 13. FOCUS**

FOCUS	Mean	VI	STDV.	Rank
1. Application Software Technology fosters a good concentration and focus on workplace	3.982	Strongly Agree	.133	1
2. Application Software Technology increases absorption in work related tasks	3.451	Disagree	.659	4
3. The use of application software often induces stress and mental fatigue.	3.896	Strongly Agree	.304	3
4. Application Software can reduce the creativity and originality of work.	3.899	Strongly Agree	.301	2
<b>Composite Mean</b>	<b>3.807</b>	<b>Strongly Agree</b>	<b>.409</b>	

Legend:

- 4 3.26 - 4.00 Strongly Agree  
 3 2.51 - 3.25 Agree  
 2 1.76 - 2.50 Disagree  
 1 1.00 - 1.75 Strongly Disagree

Weighted Mean shows the average score for each statement, calculated by giving different weights to different responses according to their importance or scale position. SD measures the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean, while a high standard deviation indicates that the values are spread out over a wider range. The overall composite mean score for all statements is **3.329**, which also falls into the **"Strongly Agree"** category.

**Table 14. ACCURACY**

ACCURACY	Mean	VI	STDV.	Rank
1. Application Software Technology have provided highly accurate results	3.262	Strongly Agree	.440	1
2. The use of application software tools enables the employee to provide accurate results that meet exceed expectations by superiors	3.262	Strongly Agree	.440	3
3. With application software it provides insights and suggestions, and employee can able to make more accurate results	3.330	Strongly Agree	.462	2
<b>Composite Mean</b>	<b>3.284</b>	<b>Agree</b>	<b>.447</b>	

Legend:

- 4 3.26 - 4.00 Strongly Agree  
 3 2.51 - 3.25 Agree  
 2 1.76 - 2.50 Disagree  
 1 1.00 - 1.75 Strongly Disagree

Weighted Mean shows the average score for each statement, calculated by giving different weights to different responses according to their importance or scale position. SD measures the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean, while a high standard deviation indicates that the values are spread out over a wider range. The overall composite mean score for all statements is **3.219**, which also falls into the **"Agree"** category.

### Hypothesis Testing

**H01: There is no significant difference between the effectiveness of Application Software and the demographic profile of respondents**

**Table 15**

ANOVA					
		Sum of Squares	Df	Mean Square	Sig.
GENDER	Between Groups	.397	1	.397	0.05
	Within Groups	31.548	386	.082	
	Total	31.944	387		
AGE	Between Groups	18.979	3	6.326	0.000
	Within Groups	12.965	384	0.34	
	Total	31.944	387		
Current Industry Working	Between Groups	17.475	2	8.738	0.000
	Within Groups	14.469	385	.038	
	Total	31.944	387		
Monthly Income	Between Groups	18.555	2	.040	0.002
	Within Groups	16.755	385		
	Total	35.31	387		
Estimated Time Using Application Software's	Between Groups	37.58	2	.075	0.001
	Within Groups	1.50	385		
	Total	39.08	387		

*"Not significant (p-value > 0.05)",*

**Legend:** *"Significant at 5% alpha level (p-value < 0.05)"*

Table 15 reveals the result of the test on the hypothesis that there is no significant difference between the effectiveness of Application Software and the demographic profile of respondents. The demographic profile of Gender has a p-value = 0.05, Age has a p-value = 0.000, Currently Industry Working has a p-value = 0.00. monthly income has a p-value = 0.002 and Estimated Time using application software has a p-value = 0.001 all has a p-value of less than 0.05. Therefore, there is a significant difference in the effectiveness of Application Software and the demographic profile of respondents.

**H02: There is no significant difference between estimated frequency of using Application Software for accomplishing their task on the performance enhancement of Filipino Generational Workers**

**Table 16**

ANOVA					
Performance Enhancement		Sum of Squares	Df	Mean Square	Sig.
Frequency of Usage of Application Software	Between Groups	.397	1	.397	0.05
	Within Groups	37.548	386	.082	
	Total	37.945	387		

*"Not significant (p-value > 0.05)",*

**Legend:** *"Significant at 5% alpha level (p-value < 0.05)"*

Table 16 reveals the result of the test on the hypothesis that there is no significant difference between estimated frequency of using Application Software for accomplishing their task on the performance enhancement of Filipino Generational Workers. The variables of the study stated that the p-value = 0.005 all has a p-value of less than 0.05. Therefore, there is a significant difference between estimated frequency of using Application Software for accomplishing their task on the performance enhancement of Filipino Generational Workers.

**H03: There is no significant difference on the influence of Application Software on the Job Satisfaction of Filipino Generational Workers on the demographic profile of respondents.**

**Table 17**

ANOVA					
		Sum of Squares	Df	Mean Square	Sig.
GENDER	Between Groups	.397	1	.397	0.001
	Within Groups	35.548	386	.082	
	Total	35.945	387		
AGE	Between Groups	18.979	3	6.326	0.000
	Within Groups	12.965	384	0.34	
	Total	31.944	387		
Current Industry Working	Between Groups	18.475	2	8.738	0.000
	Within Groups	14.469	385	.038	
	Total	32.944	387		
Monthly Income	Between Groups	18.555	2	.040	0.002
	Within Groups	17.755	385		
	Total	36.31	387		
Estimated Time Using Application Software's	Between Groups	36.58	2	.075	0.001
	Within Groups	1.50	385		
	Total	37.08	387		

*"Not significant (p-value > 0.05)",*

**Legend:** *"Significant at 5% alpha level (p-value < 0.05)"*

Table 17 reveals the result of the test on the hypothesis that there no significant difference on the influence of Application Software on the Job Satisfaction of Filipino Generational Workers on the demographic profile of respondents. The demographic profile of Gender has a p-value = 0.001, Age has a p-value = 0.000, Currently Industry Working has a p-value = 0.00. monthly income has a p-value = 0.002 and Estimated Time using application software has a p-value = 0.001 all has a p-value of less than 0.05. Therefore, there is a significant difference on the influence of Application Software on the Job Satisfaction of Filipino Generational Workers



on the demographic profile of respondents.

### Summary of Findings

This study investigates the usage of application software on Filipino Generational Workers on their career advancement, employee productivity and performance enhancement. As Software Technologies become increasingly integrated into various aspects of Filipino Generational Workers, concerns arise regarding on boosting their career development, productivity and performance enhancement in the context of the usage of different software technology.

After a thorough analysis of the gathered data, the following are the findings of this study:

#### 1. Demographic profile of the respondents

1.1 Table 1 outlines the generational age of the respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents were in the category of Generation Z, (n=74, or 49.3%).

1.2 Table 2 outlines the gender of the respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents were Female, (n=78, or 52%). Followed by Male (n=59, or 39.30%).

1.3 Table 3 outlines the industries currently working by Filipino respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents answered on Financial and Banking Industry, (n=38, or 25.3%).

1.4 Table 4 outlines the monthly income by Filipino respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents answered on the bracket of Lower Middle Income, (n=79, or 52.7%).

1.5 Table 5 outlines the Estimated Time of Application Software's in Work by Filipino Respondents. Among the 150 respondents who participated in the data-gathering process, most of the respondents answered on the bracket of 7-8 hours, (n=80, or 53.3%).

1.6 Table 6 outlines the Estimated Time of commonly Use Application Software's in Work by Filipino Respondents Among the 150 respondents who participated in the data-gathering process, most of the respondents answered using Spreadsheet software, (n=148, or 25.6%).

#### 2. Significant difference between the effectiveness of Application Software and the demographic profile of respondents

2.1 Table 15 reveals the result of the test on the hypothesis that there is a significant difference between the effectiveness of Application Software and the demographic profile of respondents. The demographic profile of Gender has a p-value = 0.05, Age has a p-value = 0.000, Currently Industry Working has a p-value = 0.00. monthly income has a p-value = 0.002 and Estimated Time using application software has a p-value = 0.001 all has a p-value of less than 0.05. Therefore, there is a significant difference in the effectiveness of Application Software and the demographic profile of respondents.

2.2 Table 16 reveals the result of the test on the hypothesis that there is a significant difference between estimated frequency of using Application Software for accomplishing their task on the performance enhancement of Filipino Generational Workers. The variables of the study stated that the p-value = 0.005 all has a p-value of less than 0.05. Therefore, there is a significant difference between estimated frequency of using Application Software for accomplishing their task on the performance enhancement of Filipino Generational Workers.

2.3 Table 17 reveals the result of the test on the hypothesis that there no significant difference on the influence of Application Software on the Job Satisfaction of Filipino Generational Workers on the demographic profile of respondents. The demographic profile of Gender has a p-value = 0.001, Age has a p-value = 0.000, Currently Industry Working has a p-value = 0.00. monthly income has a p-value = 0.002 and Estimated Time using application software has a p-value = 0.001 all has a p-value of less than 0.05. Therefore, there is a significant difference on the influence of Application Software on the Job Satisfaction of Filipino Generational Workers on the demographic profile of respondents.

### CONCLUSION

The researchers concluded that most of the respondents are in the Generation Z (1007-2012) age bracket. This means that, the Filipino Workforce can be considered as young workforce and has a big literacy and knowledgeable on different application software's that can be applied on their workplace. Furthermore, that both male and female including the LGBTQ+ as well are all part of the gender that participated on the workforce. Furthermore, most of the respondents participated on the survey are working in the Banking and Finance Industry. Another vital information was majority of the respondents are in the bracket of lower middle income individual income ranging to 18,200-36,400 Philippine Peso. In terms of estimated time of the usage of application software the respondents answered that they consumed their time for 7-8 hours for using application software's to be applied for their job task. And lastly, the most common application software that the Filipino workforce used was the Spreadsheet.

Furthermore, reveals the result of the test on the hypothesis that there is a significant difference between

estimated frequency of using Application Software for accomplishing their task on the performance enhancement of Filipino Generational Workers. The variables of the study stated that the p-value = 0.005 all has a p-value of less than 0.05. Therefore, there is a significant difference between estimated frequency of using Application Software for accomplishing their task on the performance enhancement of Filipino Generational Workers.

The study also concluded reveals the result of the test on the hypothesis that there is a significant difference between the effectiveness of Application Software and the demographic profile of respondents. The demographic profile of Gender has a p-value = 0.05, Age has a p-value = 0.000, Currently Industry Working has a p-value = 0.00. monthly income has a p-value = 0.002 and Estimated Time using application software has a p-value = 0.001 all has a p-value of less than 0.05. Therefore, there is a significant difference in the effectiveness of Application Software and the demographic profile of respondents.

Lastly the study concluded the result of the test on the hypothesis that there is a significant difference on the influence of Application Software on the Job Satisfaction of Filipino Generational Workers on the demographic profile of respondents. The demographic profile of Gender has a p-value = 0.001, Age has a p-value = 0.000, Currently Industry Working has a p-value = 0.00. monthly income has a p-value = 0.002 and Estimated Time using application software has a p-value = 0.001 all has a p-value of less than 0.05. Therefore, there is a significant difference on the influence of Application Software on the Job Satisfaction of Filipino Generational Workers on the demographic profile of respondents.

### RECOMMENDATIONS

Based on a thorough analysis of the data, the researchers have come up with the following recommendations:

1. The adaptation of technology may expand their range of services and offer more diverse courses in its training. This is to allow more people to discover other related methods under module courses for junior high school, senior high school and by the academia on the undergraduate program.
2. With the data presented in the study, it is shown that the Application Software's can be considered effective on their job performance, employee productivity and career advancement. Furthermore, this study might encourage to participate in courses offered by some education sectors as this will guarantee an experience for them that might potentially help them in their job search. With more people participating in courses offered by TESDA for example, it might also lower the unemployment rate not only in Manila but nationwide.

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