



IMPACT OF EMPLOYEE BEHAVIOR TOWARDS TECHNOLOGICAL TRANSITION ON WORK PRODUCTIVITY

(A Case study on ESSU Main Campus)

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Chapter 1

INTRODUCTION

Background of the study

Our world is evolving at a very fast rate and technology has been the biggest part of it. From the daily routine of cooking meals, cleaning the house, doing laundry, making our way to work, chatting with people, until we went back to our homes, watch movie with the family and finally sleep for the day, we use technology in every step of the way. It has taken a part of our daily activity and proven its effectivity, reliability and efficiency. It makes work easier, it's cost effective, timely and gives accurate information. These technological advantages have given great advancement specially in office works and workers. Educational institutions that store a variety and immense amount of data needs the use of these technological advancement. To meet client's needs they have to adopt new practices and new technologies. They have to modify traditional way of doing work to remain competitive.

Eastern Samar State University (ESSU Main) a university that has been active on the field of education for years since its foundation as an agricultural college former Eastern Samar College of Agriculture (ESCA) to becoming Eastern Samar State college (ESSC) to now the prestigious University in Eastern Samar Province in which it is called Eastern Samar State University (ESSU). At the time of its foundation the school was using the traditional way of doing things from preparation of teaching materials to delivering and imparting the lesson to the students. The administrative and non-teaching staffs of the university use the manual way of storing data and information which was time consuming, energy draining, needs a lot of man power, and susceptible to errors. These disadvantages were the downsides of traditional way of doing work and they are also one of the main reasons for slow progress in educational development and the organization as a whole.

Through its evolution, the university has adopted to new technologies and practices. It has been implementing technology in delivering services to clients. The buildings are compacted with technological instruments that helps in delivering improved services to clients and students. The teaching staffs uses modern way of teaching by imparting technology on their methods of teaching. The administrative and non-teaching staffs do their work using technological instruments. Employees of the university attend seminars and trainings to better understand and use these technological instruments that will provide them with the opportuneness of technological advancement.

This transition of doing work from traditional ways to implementing technology was a big step on advancing to the modern world. It is convenient and effective, productive and efficient. However, in the process of transition there is an adjusting period. During this period, employee's behavior towards the transition will greatly affect the organizational improvements, process and operational efficiencies, delivery capabilities, staff productivity, and profitability. Whether the impact is positive or negative, it greatly depends on the employee's willingness to embrace the change. Employees who was adamant to traditional way may find the transition challenging, particularly employees with old age. Some may succumb to the new ways while others may find it difficult to understand and implement. Employees who were used to traditional ways may find it easier to continue doing work the traditional way than to try and understand the conflicting ways of modern technologies. Other employees however, will look to the change as a means of improvement to personal progress and to the organization.

Employees Performance are highly valued in all kinds of organization. It is the basic backbone of a workplace. Poor performance will lead to low productivity, poor services rendered and it will gain negative effect on the institution.



These negatives effects raised to the concern of employee's behavior towards technological transition on work productivity. In order to achieve the objectives of study on the Impact of employees' behavior towards technological transition on work productivity, the study aimed to identify the most affecting dimension of technological changes among the employees of Eastern Samar State University Main Campus and to find out the impact of technological changes on Employees' Work Performances.

Statement of the problem

The study aimed to determine the impact of employees' behavior towards technological transition on work productivity on ESSU. Specifically, the study sought to answer the following question:

1. What is the profile of employees in terms of:
 - a. Age
 - b. Sex
 - c. The nature of work
 - d. Length of time spent working each day
2. What is the employees' behavior towards technological transition in their work?
3. What is the employees' work productivity level when integrating technology?
4. Is there a significant impact of employees' behavior towards technological transition on their work productivity at ESSU?

Significance of the Study

The findings of this study will be beneficial to the university's administrators since it will provide them information that will serve as basis for implementing new programs and strategies. Likewise, it will be beneficial to employees who aims to be part of the university. Other industries or firms in the digital service industry would be beneficial.

The studies enrich the management with a choice of information pertaining to employee behavior, employee inter-personal relationship and their performance with regard to technology. This will facilitate the organization to make decision in adopting a fresh technology and helps to afford training to its employees in learning the technology. Just the trained employees can execute their duties well which will help the organization to accomplish its goal. This study will make the organization to realize about the techno-stress which will be helpful for them to aid their employees to prevail over the stress.

Scope and Delimitation of the Study

This study focused on one organization. It is limited to the teaching and non-teaching staffs of Eastern Samar State University Main Campus on Borongan City Eastern Samar.

Definition of Terms

To better understand this study, the following terms are defined:

Accurate information - The accuracy of information or measurements is their quality of being true or correct, even in small details.

Administrative staff - an employee who typically oversees office administration, construction, security or maintenance workers represented by another trade union. It includes those employees who share common interests with the supervisory staff.

Cost effective - producing good results without costing a lot of money.

Educational institution - institution that provides education as its main purpose, such as a school, college, university or training center. Such institutions are normally accredited or sanctioned by the relevant national education authorities or equivalent authorities.

Efficiency - the quality of being able to do a task successfully, without wasting time or energy.

Employee - a person who is hired to work for another or for a business, firm, etc., in return for payment.

Employees' Behavior - refers to how employees act, perform, and feel in the workplace. It includes how employees interact with their colleagues, clients, and superiors, and how well they adhere to company policies



Reliability - the degree of consistency of a measure. A test will be reliable when it gives the same repeated result under the same conditions.

Transition - a change or shift from one state or stage to another. also: a period or phase in which such a change or shift is happening.

Technology - Machinery and equipment developed from the application of scientific knowledge.

Technological advancement - a continuous process of innovation, improvement, and integration of new tools, techniques, and systems to enhance efficiency, productivity, and convenience in various fields.

Technological Transition - a collection of theories regarding how technological innovations occur, the driving forces behind them, and how they are incorporated into society.

Work productivity – the amount of work an individual or group accomplishes within a certain amount of time. Greater productivity means you complete more with less time or effort. You can measure accomplishments by the quality of the work, the number of tasks finished or the amount of product created.

Chapter II

REVIEW OF RELATED LITERATURE

A number of studies and research have been conducted with reference to information technology and its effects on employees of different industries, their performance, work-life balance and several other areas.

In Malaysia, Hasan and Nadzar (2010) has conducted research related to this issue and concluded that there is a strong relationship between all dimensions of technological changes and work performance. The fundamental proponent of growth and development within the workplace is the implementation of new technologies. Technology has negatively and positively impacted many organizations, primarily the retail industry. As goods and other services provided by retail firms become more modernized, it becomes imperative for employees to be more technologically aware and develop digital skills and competencies (Nubler, 2018; Hughes et al., 2019).

Kendra M. Turner (2017) studied on the effect of a system implementation upgrade on employees' job performance. It was found that employees initially felt positive about a change but after some period of time they felt that they are in the need of training and management also increased their job duties and responsibilities without salary hike.

Muhammad Imran., et. al (2014) studied the effect of technological advancement on employee performance in banking sector. It was found that technological advancement has significant impact on motivation and training of employees. Motivation has significant impact on employee performance but training has no significant impact on employee performance. The result reveals that there is significant relationship between technological advancement and employee performance.

Yan-Hong Yao et al (2014) explore the influences of leadership and work stress on employee behavior, and the moderating effects of transactional and transformational leadership on the relationship between work stress and employee negative behavior. The results showed that there is a positive correlation between work stress and employee negative behavior. Transformational leadership has negative impacts on work stress and employee behavior, whereas transactional leadership has positive influences.

Organizations can improve its employee's skills and efficiency through training and development. Research shows that investment on employees in the field of decision making, teamwork tasks and in problem solving results shows that organization's outcome level increases. In some organizations research proves that training is positively correlated with employee output. Training is not short-term process. It is nonstop and systematic process. Organizations have done employee's analysis and also asses the need of firm. Then specified training program is adapted after that analysis. Organization adapts that method of training which is consistent with employees and as well as fulfil the goals of organization (Singh & Mohanty, 2012).



Theoretical Framework

(Technological determinism) This theory suggests that technological advancements drive societal and organizational change. **(Resource-Based View RBV)** This theory suggests that technological capabilities can be a source of competitive advantage. **(Human Capital Theory)** This theory suggests that employees' skills, knowledge, and abilities contribute to an organization's competitive advantage. **(Technology overload)** This theory suggests that excessive use of technology in the workplace can lead to stress, burnout, and loss of productivity. Other factors that can impact the impact of technological advancements on employee performance includes, Employee motivation: Employee motivation has a direct influence on technological advancement. Employee training: Employees can acquire new knowledge and advancement competencies through training. Employee adaptation: Employees should be able to adapt to the changes of new technology in their organization.

Study suggests that the employees are willing to change when they have a sense of perceived control based on collaboration with management. Factors that have an impact on the willingness and ability to change include job function, age, years of job experience, knowledge of values, company background, understanding the current challenges, understating the urgency for change, positive attitude toward past changes and trust in leadership. (Assessment of employees’ attitudes toward ongoing organizational transformations by Irina Heim, Nibedita Sardar-Drenda Journal of Organizational Change Management).

Conceptual Framework

The conceptual framework of this study demonstrates the impact of employee behavior towards technological transition on work productivity on Eastern Samar State University Main Campus’s teaching and non-teaching staffs.

The conceptual framework is visually represented with two main components: the independent and dependent variables. The first box represents the independent variables, which are the employees’ related factors: Their age, The nature of their work, Length of time spent working each day, employee’s acceptance to technology, & work productivity. The second box represents the dependent variable, which is the impact of employees’ behavior towards work productivity. The connecting linen between these two boxes symbolizes the relationship between the independent and dependent variables.

INDEPENDENT VARIABLES

DEPENDENT VARIABLES

Profiles of employees:

- a. Age
- b. Sex
- c. The nature of work
- d. Length of time spent working each day

Employees’ behavior towards technological transition in their work.

Employees’ productivity level when integrating technology.

Significant impact of employees’ behavior towards technological transition on their work productivity at ESSU.

Impact of employees’ behavior on work productivity

Figure 1. Paradigm of the study

Null Hypothesis of the Study

There is no significant relationship between the characteristics of employees and the impact of employees' behavior on work productivity.

Chapter III METHODOLOGY

This chapter shows the method of the study, the research design, research instrument, research locale, respondents of the study, sampling method and statistical treatment of the data that were gathered in the study.

Research Design

This study employed the descriptive survey method to determine the respondents age, nature of their job, length of time spent working each day, reaction to technological change, employees' performance and productivity. Pearson's correlation coefficient was used to find out the relationship of employees' characteristics and their reactions to technological change to the impact of employees' behavior on work productivity.

Locale of the Study

This study was conducted in Eastern Samar State University Main Campus located in Brgy. Maypangdan, Borongan City, Eastern Samar.

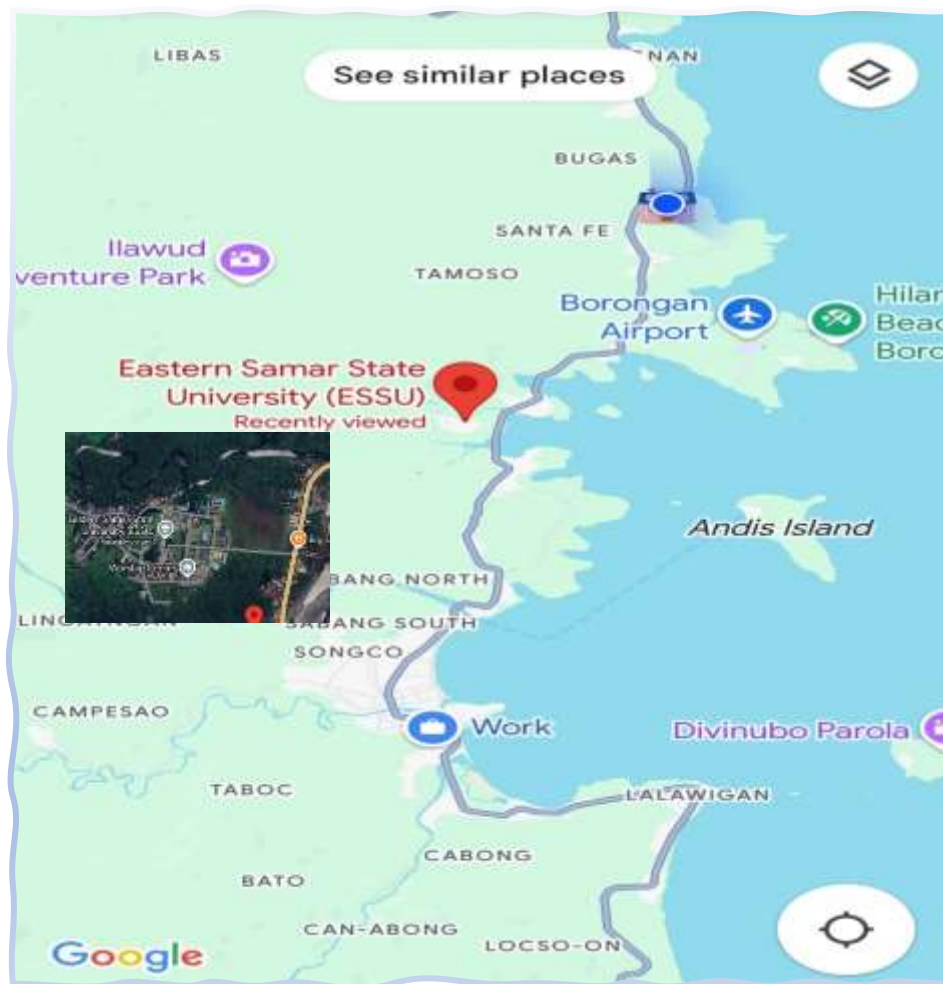


Figure 2. Geographical location, showing the research locales.



Respondents of the Study

All employee, teaching and non-teaching personnel of Eastern Samar State University who are actively working in the main campus during the execution of this study will serve as respondents of the study.

Sampling Procedure

Purposive sampling was applied in choosing the respondents. 20 respondents were taken as a sample from Eastern Samar State University employees in which 10 of it were from the administrative and non-teaching staffs. The other 10 respondents that compose the 20 samples were employees from the Instructions staffs.

Research Instrument

A check-list type questionnaire constructed by the researcher was utilized to gather the data. Respondents were to answer questions regarding their age, sex, the nature of their work, do they like technology, are they prepared for the technological changes, what are their thoughts about the transition and if it affected their work performance.

Data Gathering Procedure

The researcher utilized a survey questionnaire with an attached letter of request and consent to the respondents. The researcher conducts the survey by visiting Eastern Samar State University main campus faculty and staff office including the other administrative offices in the university. The researcher then disseminates the check-list type research questionnaire to the participants and gathered the same after they have finished answering the questionnaire. There were 20 participants present during the survey.

Measurement of Variables

To aid in data analysis, categorical variables were assigned arbitrary numbers as shown below.

<u>Variable</u>	<u>Arbitrary number</u>	<u>Interpretation</u>
Age	1	21-30 years old
	2	31-40 years old
	3	41-50 years old
	4	51-60 years old
	5	61-70 years old
Sex	1	Male
	2	Female
Years in Service	1	Less than 1 year
	2	1 year to 5 years
	3	6 years to 10 years
	4	11 years to 15 years
	5	More than 15 years
Nature of Job	1	Assisting Clients
	2	Clerical Works
	3	Managerial Tasks
	4	Instruction/Teaching
Feeling towards technological change	1	Lack of Acceptance
	2	Accepted w/o Problem
Knowledge using technological devices	1	Yes
	2	No
Hours spent using technological devices	1	1 to 4 hours
	2	5 to 8 hours
	3	More than 8 hours
Technological tools helped make job easier	1	Yes
	2	No
Technological Advancement effect on Work productivity	1	Increase
	2	Decrease
Continue using technological tools	1	Yes
	2	No



To evaluate work productivity levels, a systematic process was designed to ensure the accurate assessment of employees’ performance before and after specific interventions. This section outlines the approach used in measuring productivity levels among employees, focusing on pre- and post-assessment comparisons to determine any significant changes.

The first step in the process involved identifying measurable indicators of productivity. These indicators included task completion rate (number of tasks completed within a specified timeframe), quality of work (accuracy and error rate in outputs), timeliness (adherence to deadlines), and adaptability to technology (effective use of digital tools to improve performance). These metrics were chosen to provide a holistic view of work productivity and align with the specific roles of employees.

A productivity survey was developed to collect data from the respondents. The tool consisted of a set of statements rated on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The simplicity of the tool ensured that employees could easily provide accurate responses, minimizing survey fatigue and response bias.

Baseline data were collected during the pre-assessment phase. Respondents were asked to complete the productivity survey, and their performance metrics were recorded. The average scores for each respondent were calculated to establish their initial productivity levels.

Following the pre-assessment, interventions were introduced to improve productivity levels. These included technology training sessions, workflow optimization, and the provision of digital tools to enhance task efficiency. A period was allowed for employees to adapt to these changes before conducting the post-assessment.

After the intervention period, the same productivity survey was re-administered to the respondents. The post-assessment data were collected and analyzed to determine any changes in productivity levels. Average scores were again calculated for each respondent.

Calculation of Productivity Level Changes

To quantify the changes in productivity levels, the percentage difference between pre- and post-assessment scores was computed using the formula:

$$\text{Change (\%)} = ((\text{Post-Score} - \text{Pre-Score}) / \text{Pre-Score}) \times 100$$

For example, if an employee’s pre-assessment score was 70 and their post-assessment score increased to 80, the percentage change was calculated as:

$$((80 - 70) / 70) \times 100 = 14.3\% \text{ increase.}$$

The percentage changes were interpreted using a standardized scale:

- +16% or more: Significant Increase
- +6% to +15%: Moderate Increase
- 5% to +5%: No Significant Change
- 6% to -15%: Moderate Decrease
- 16% or more: Significant Decrease

Data Analysis

The data gathered were tabulated according to the response of the respondents. Descriptive statistics as well as measures of central tendency were used to utilized the data gathered. Frequency count in corresponds to its percentage were also used in determining the distribution of the independent variables. The chi-square test was used to test the significant relationship of employees’ behavior towards technological transition with their work productivity.

The following formula were used in the study:

Chi- square

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$



Mean

$$\bar{x} = \frac{\sum x_i}{n}$$

Standard Deviation

$$S = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n-1}}$$

Percentage

$$P = \frac{f}{n} \times 100$$

Ethical Considerations

To ensure the quality and integrity of this research, the researcher ensured the respondents were given informed consent that they voluntarily participated in this study, and that data gathered was treated confidentially. Contact information about the researcher was given if there were further inquiries or complaints. The reason for their participation in the study was also explained well.

Chapter IV

RESULT AND DISCUSSION

This chapter discusses the results of the study. It includes the personal profile of the respondents, and the relationship between this profile and the impact of employees' behavior towards technological transition on work productivity.

I. Demographic Profile of ESSU employees

Table 1. Frequency Distribution on personal profile of ESSU employees'

	Frequency (n=20)	Percentage (%)
Age		
21-30 years old	4	20
31-40 years old	6	30
41-50 years old	3	15
51-60 years old	6	30
61-70 years old	1	5
Sex		
Female	15	75
Male	5	25
Nature of Work		
Assisting Clients	3	15
Clerical Works	5	25
Managerial Tasks	2	10
Instruction	10	50
Length of time spent working each day		
1 to 4 hours	2	10
5 to 8 hours	15	75
More than 8 hours	3	15

The demographic profile of the employees at Eastern Samar State University (ESSU), as shown in Table 1, provides insight into the workforce's age distribution, gender, nature of work, and working hours, all of which are crucial to understanding their potential for technological adaptation and productivity. The age distribution reveals a relatively balanced workforce in terms of age diversity. Employees aged 31-40 and 51-60 years dominate, each group comprising 30% of the respondents, collectively representing 60% of the total. Younger employees (21-30 years old) account for 20%, while those aged 41-50 and 61-70 years contribute 15% and 5%, respectively. This mix of youthful familiarity with technology and the seasoned experience of older employees creates an environment where intergenerational collaboration can be leveraged for technological transitions (Venkatesh et al., 2003). Such diversity indicates a workforce capable of adapting to changes regardless of age.

In terms of sex, the data show a workforce predominantly composed of females (75%), while males represent only 25%. This significant gender disparity may influence the dynamics of technological adaptation. Previous studies suggest that technological acceptance can vary based on access, roles, or training opportunities (Gefen et al., 2000). Addressing gender-inclusive strategies will be crucial for successful transitions.

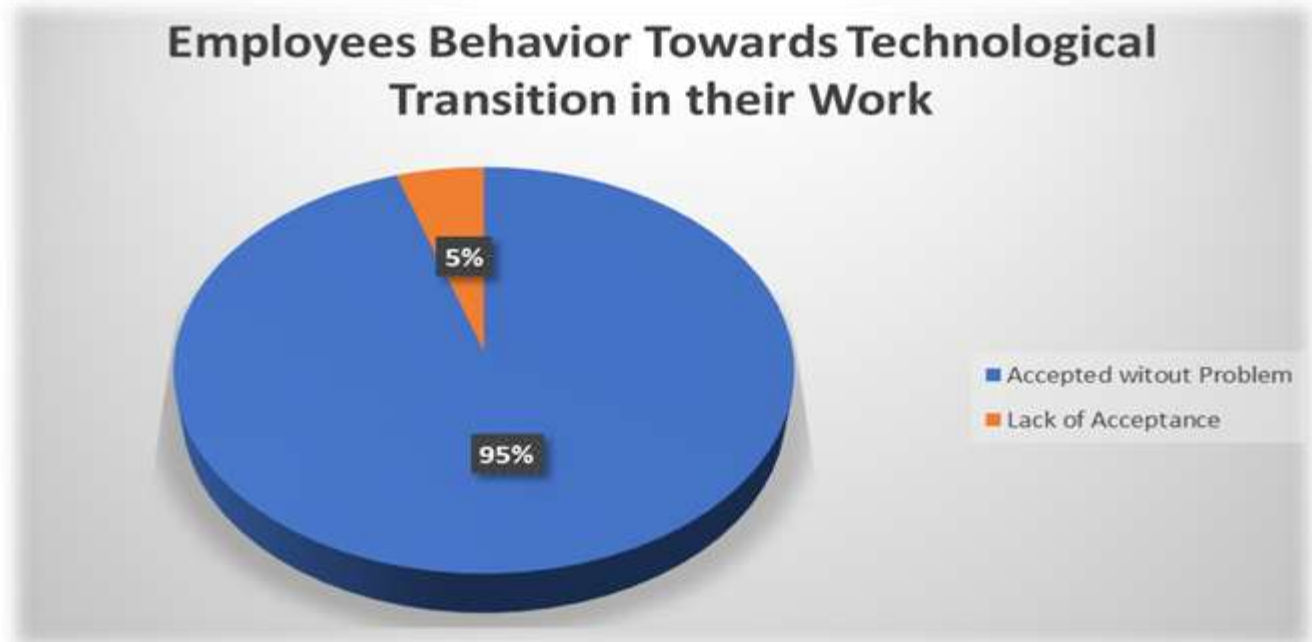
Meanwhile, the majority of employees (50%) are engaged in instructional tasks, highlighting the university's academic focus. Clerical workers account for 25%, followed by those assisting clients (15%) and those in managerial tasks (10%). Since teaching roles demand frequent interaction with students and digital tools, instructional employees are likely at the forefront of integrating technology into their workflows. Other roles, such as clerical and managerial, can also benefit significantly from digital solutions that enhance efficiency (Venkatesh et al., 2003).

Lastly, the table emphasizes the number of hours rendered by its employees. Most employees (75%) work 5 to 8 hours daily, with a smaller proportion working more than 8 hours (15%) or less than 4 hours (10%). The predominance of a standard workday indicates an established structure, where productivity-enhancing technologies can be introduced systematically to maximize efficiency during regular hours.

Figure 1. Frequency Distribution on employees' behavior towards technological transition in their work.

II. ESSU employees perceived behavior on work's technological transition

The data in Figure 1 highlights that 95% of the employees at Eastern Samar State University (ESSU) have embraced the transition to using technological tools in their work. This overwhelming majority reflects a positive reception to the integration of technology, underscoring its potential to improve work efficiency and adaptability within the institution.





The high acceptance rate suggests that most employees recognize the benefits of technological tools in simplifying their daily tasks, whether in teaching, administrative functions, or clerical roles. This aligns with findings by Salazar and Sarmiento (2021), who noted that Filipino public sector employees are generally receptive to technological change when supported by adequate resources and training. Similarly, Venkatesh et al. (2003) argue that perceived usefulness and ease of use are key factors in driving technology acceptance, both of which seem evident among the ESSU workforce.

The positive response can be attributed to several factors. Employees likely appreciate how technology streamlines workflows, enhances productivity, and simplifies routine tasks. For faculty members, for instance, digital tools like learning management systems enable efficient management of coursework and student assessments. Likewise, clerical staff benefit from automated processes that reduce redundancy. The availability of support systems, such as training programs and technical assistance, may also have contributed to this high acceptance rate. Garcia et al. (2020) emphasize that institutions providing professional development opportunities are more likely to foster technological readiness among their employees.

However, a small percentage of respondents (5%) expressed a lack of acceptance toward the technological transition. This minority could stem from several challenges. Older employees, who may have limited exposure to digital tools earlier in their careers, might find the transition more challenging, as observed in the studies of Venkatesh et al. (2012). Others may perceive certain technologies as complex or cumbersome, hindering their ability to integrate them into their workflows. Additionally, resource constraints such as inadequate infrastructure or unreliable internet connectivity, as highlighted by Garcia et al. (2020), could also contribute to their resistance.

This small group of non-adopters signals the need for targeted interventions. ESSU can address this by implementing tailored training programs to build employees' confidence in using technology and by ensuring that infrastructure is robust and accessible to all. By addressing these barriers, the university can foster a more inclusive environment that supports 100% acceptance of technological advancements. This is critical as it ensures that the entire workforce, regardless of age or prior experience, can fully benefit from the transition and contribute to enhanced productivity and innovation within the institution.

III. ESSU Employees' Work Productivity Level when Integrating Technology

This section provides an analysis of the productivity levels of Eastern Samar State University (ESSU) employees, based on the outlined methodology for measuring productivity. Data is presented through a table and discussed in detail, incorporating in-text citations from relevant literature.

Table 2. Productivity Levels of ESSU Employees Before and After Technological Integration

Metric	Pre-Assessment Score	Post-Assessment Score	Change (%)	Adjectival Interpretation
Task Completion Rate	70	82	+17.14	Significant Increase
Quality of Work	75	81	+8.00	Moderate Increase
Timeliness	68	70	+2.94	No Significant Change
Technology Adaptability	65	80	+23.08	Significant Increase

One of the most significant improvements was observed in the task completion rate, which increased by 17.14%. This improvement indicates that after the intervention, ESSU employees were more capable of completing their tasks within the required timeframes. This aligns with research by Nguyen & Nguyen (2022), which found that productivity increases when employees receive proper training and access to tools that streamline their workflows. The significant improvement suggests that the interventions, particularly those aimed at enhancing workflow processes and task management, were successful in making employees more efficient.

The quality of work improved moderately by 8.00%. While this increase indicates progress, it suggests that there is room for improvement. The moderate change may be attributed to several factors, including employees' familiarity with new tools and technologies, which might require time to fully master. Previous studies have highlighted that while technology can enhance task efficiency, the ability to produce consistently high-quality outputs requires ongoing support, skill development, and a work environment conducive to learning (Orbeta et al., 2018). Therefore, while the



intervention was effective in improving quality, a more sustained focus on training and resources could yield even higher quality results.

In contrast, the metric of timeliness showed only a marginal improvement of 2.94%, which is statistically insignificant. This finding suggests that despite the introduction of new tools and processes, employees continued to face challenges in meeting deadlines consistently. Factors such as workload, complexity of tasks, and time management may have played a role in this limited progress. Gonzalez et al. (2020) argue that time management and organizational culture significantly influence timeliness, which could explain why this area showed minimal improvement. Future interventions may need to address these external factors to have a more substantial impact on timeliness.

The most striking improvement occurred in the area of technology adaptability, which increased by 23.08%. This suggests that ESSU employees were highly responsive to the technological tools introduced during the intervention. This significant increase supports the findings of Davis (1989) and Venkatesh (1996), who highlighted the importance of perceived ease of use and usefulness in driving technology acceptance. The Technology Acceptance Model (TAM) posits that when employees perceive technology as easy to use and beneficial, they are more likely to adopt it and use it effectively. This improvement indicates that employees not only accepted the technological tools but also integrated them into their daily workflows, ultimately enhancing their productivity.

IV. Test of Relationship Between Employees Attitude on Technology Transition and their Work Productivity

This section presents the results of the statistical analysis on the significant impact of employees’ behavior towards technological transition on their work productivity at Eastern Samar State University (ESSU). The analysis also examines the relationship between demographic variables and employees’ attitudes towards technological transition. The findings are discussed in the context of existing literature to provide a comprehensive understanding of the observed relationships.

Table 2. The Significant impact of employees’ behavior towards technological transition on their work productivity at ESSU

Variables Correlated	Computed Chi-square	P Value	Decision	Interpretation
Age	2.46	0.653	Fail to Reject H_0	Not significant
Sex	3.16	0.076	Fail to Reject H_0	Not significant
Nature of work	1.05	0.789	Fail to Reject H_0	Not significant
Length of time spent working each day	5.96	0.051	Fail to Reject H_0	Not significant
Employees’ behavior towards technological transition in their work	20	< 0.001	Reject H_0	Significant
Employees’ work productivity when integrating technology	20	< 0.001	Reject H_0	Significant

Level of significance is 0.05

The relationship between demographic variables, such as age, sex, nature of work, and the length of time spent working each day, and work productivity was assessed using a chi-square test of independence. The results showed no significant relationship between any of the demographic variables and employees’ behavior towards technological transition. The chi-square value for age was computed as 2.46, with a p-value of 0.653. This result implies that the age of employees does not significantly influence their attitudes toward adopting technology. This aligns with the findings of Orbeta et al. (2018), which suggest that age-related differences in technology adoption can be minimized through effective training and organizational support. Similarly, for sex, the chi-square value was 3.16, with a p-value of 0.076, indicating no significant difference between male and female employees in their receptiveness to technology. This finding corroborates the work of Venkatesh et al. (2003), which posits that gender differences in technology use diminish in workplaces where training opportunities and resources are equitably distributed. The chi-square test for the nature of work yielded a value of 1.05, with a p-value of 0.789, signifying no significant relationship. Employees



engaged in various roles, including instructional, managerial, clerical, and client-assisting tasks, exhibited similar attitudes toward technological transitions. This result highlights ESSU's success in promoting a unified approach to technology adoption across all functional areas. Lastly, the chi-square value for the length of time spent working each day was 5.96, with a p-value of 0.051. While this result approaches statistical significance, it ultimately indicates that work hours do not significantly influence employees' attitudes toward technology. This finding supports the idea that ESSU's policies, which encourage work-life balance and equitable access to technological tools, contribute to consistent attitudes across different work schedules (Davis, 1989).

Meanwhile, a significant relationship was found between employees' behavior towards technological transition and their work productivity. The chi-square value was 20, with a p-value of less than 0.001, indicating that employees who demonstrate positive attitudes toward technology experience significantly higher productivity. This finding is consistent with the study of Gonzalez et al. (2020), which highlights the importance of fostering positive attitudes towards technology in enhancing workplace efficiency. The relationship between employees' productivity and the integration of technology into their work was also statistically significant, with a chi-square value of 20 and a p-value of less than 0.001. This result underscores the positive impact of technological tools on employee performance, as supported by the Technology Acceptance Model (TAM) proposed by Davis (1989). Employees who perceive technology as useful and easy to use are more likely to integrate it effectively into their workflows, leading to improved productivity.

Chapter V

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter presents the summary of the study, the findings and conclusions generated, and the recommendations based on the generated generalizations.

Summary

This study was conducted to determine the impact of employees' behavior towards technological transition on work productivity in Eastern Samar State University. Specifically, it aimed to determine using these factors; age, sex, nature of work, length of time spent working each day, employees' behavior towards technological transition in their work, and employees' work productivity when integrating technology.

The results of the study show that 30% of the respondents were of 31-40 years of age and another 30% composed of employees' ranging from 51-60 years old. However, 5% of the participating employee was ranging 61-70 years old and 15% were 41-50 years old. 20% of the result in age were ranging from 21-30 years old.

In terms of Sex of the respondents, majority were females which was 75 % in total and males were only 25% in total. The nature of work resulted in 15 % assisting clients, 25% clerical works, 10% of which are composed of managerial tasks and majority percentage on nature of work were on the field of instructions/teaching which consists 50% of the total respondents.

Seventy five percent of the time spent working each day were 5-8 hours a day. Moreover, 10% were confirmed to be working 1-4 hours each day and 15% says that they are working more than 8 hours each day.

In figure 1, the employees' behavior towards technological transition in their work shows results that majority of the respondents reacts positively to the transition. 95% of the respondents accepted the transition without problem and only 5% of the total respondent lack of acceptance to the change.

In terms of the work productivity of ESSU employees in relation to technological transition, a significant increase of 17.14% was observed, indicating that employees became more efficient in completing tasks within deadlines after the technological intervention. This aligns with Nguyen & Nguyen (2022), emphasizing the role of tools and training in improving efficiency. The quality of work has also improved moderately by 8.00%, suggesting progress but leaving room for further enhancement through continued training and resource allocation (Orbeta et al., 2018). In the timeliness, a marginal increase of 2.94%, deemed statistically insignificant, highlights ongoing challenges in time management and workload handling (Gonzalez et al., 2020). For Technology Adaptability, The most notable improvement, with a 23.08% increase, underscores employees' acceptance and effective integration of new technological tools, consistent with the Technology Acceptance Model (Davis, 1989; Venkatesh, 1996).



To determine the relationship of the profile of the respondents to the impact of employees' behavior towards technological transition on work productivity, data analysis was undertaken using the chi-square method with a 0.05 level of significance. The result confirms that the null hypothesis of the variables age, sex, nature of work and length of time spent working each day were accepted for they have no significant correlation to the impact of employee behavior towards technological transition on work productivity.

Contrary to the result shown on the profile of the respondents, the employees' behavior towards technological transition in their work and employees' work productivity level when integrating technology revealed to be significantly correlated with the impact of employee behavior towards technological transition on work productivity. Therefore the null hypothesis was rejected for the two variables were significantly related.

Conclusions

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

1. Most of the respondents were ranging from the age 31-40 and 51-60. Majority of them were females and only 5 of them were males. Furthermore, the nature of their works was mostly in the field of instruction/teaching and it was confirmed that 15 out of 20 respondents were working 5 to 8 hours each day using technological tools. Additionally, there is no significant relationship between the age, sex, nature of work and length of time spent working each day to the impact of employee behavior towards technological transition on work productivity.
2. It is notable that majority of the respondents highly accepted the technological transition in their work and were discovered to have fewer lack of acceptance among the respondents. The study revealed that there is a significant relationship of employees' behavior towards technological transition in their work to the impact of employee behavior towards technological transition on work productivity.
3. The employees' work productivity level when integrating technology was confirmed to have contributed to the increase in employees work output. It was shown in the study that the null hypothesis was rejected because employees' work productivity level when integrating technology revealed to have a significant relationship to the impact of employee behavior towards technological transition on work productivity.

Recommendations

In light of the above findings and conclusions the following are hereby recommended.

1. Eastern Samar State University employees should be more active in using technological tools since it helps makes their work easier and eventually improve their work output.
2. It is highly recommended that the university should procure and provide technology related tools and equipment to the employees since it greatly contributed to the increase in their work productivity.
3. This study was limited to Eastern Samar State University main campus employees, it is recommended that a more wide-ranging investigation be carried out to include the other ESSU campuses employees in Eastern Samar Province.

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APENDECES

Appendix A

A LETTER OF REQUEST TO RESPONDENTS OF THIS STUDY

Dear Respondent,

Greetings!

I am humbly asking your support to provide information which are needed for this research study a success. This is a requirement for my Master’s Degree at the Graduate School, Eastern Samar State University.

In this regard, I am asking for your precious time, and effort to answer all the question in the questionnaire that are important and helpful for the completion of the study. Rest assured that all data gathered from you will be kept in the highest level of confidentiality. Your positive response in this request will be valuable contribution for the success of the study and will highly appreciate. Thank you very much for your cooperation.

Gratefully yours,
JESSA P. ARAGO
Researcher

Appendix B
CONSENT FORM

Title: Impact of Employee Behavior Towards Technological Transition on Work Productivity

Research Description: This study surveyed the impact of employee behavior towards technological transition on work productivity in Eastern Samar State University main campus located in Brgy. Maypangdan, Borongan City, Eastern Samar.

Privacy and confidentiality: Private information collected in this study will not be shared in public. The names of the participants as well as where they live and work will not be disclosed to anyone during and after the completion of this study. All the information that can be reveal the identity of the research participants will systematically be removed from the data before data analysis starts. To do so, each research participant will be assigned an anonymous identifier or a number.

Voluntary Participation: Research participants freely volunteer to participate in this research study, without being forced. They have the freedom to share what they want to share or stop participating if they want to stop anytime.

Risk: There is no known emotional or physical harm that this research study can cause to the researchers and the research participants of this study.

Honesty: Both the researcher and the research participants agree to be honest in both data collection and reporting. No Dishonesty is allowed.

Informed Consent

I, _____, understand the purpose of this research study and voluntarily give my permission to participate freely.

Signature of the participant _____ Date: _____

Cellphone number (needed if there is any question): _____

Signature of the researcher _____
JESSA P. ARAGO

Cellphone number: _____

Email: _____



Appendix C

SURVEY QUESTIONNAIRE

Please put a check mark (/) to your corresponding answer.

1. Age

21-30 _____

31-40 _____

41-50 _____

51-60 _____

61-70 _____

2. Sex

Male _____

Female _____

3. How long have you been working?

Less than 1 year _____

1 year to 5 years _____

6 years to 10 years _____

11 years to 15 years _____

More than 15 years _____

4. What is the nature of your job?

Assisting Clients _____

Clerical Works _____

Managerial Tasks _____

5. How do you feel about technological change?

Lack of acceptance _____

Accepted without problem _____

6. Do you have knowledge using technological devices?

Yes _____

No _____

7. How many hours do you spend working each day using technology?

1 to 4 hours _____

5 to 8 hours _____

More than 8 hours _____



8. Do you think technological tools have helped you make your job easier?

Yes _____
No _____

9. Did technological advancement increase or decrease your work output daily?

Increase work output _____
Decrease work output _____

10. Do you think you will continue using technological tools as a means to carry out your daily work activity?

Yes _____
No _____

BIOGRAPHICAL SKETCH

Jessa P. Arago is a native of Eastern Samar Province. She was born on May 31, 1991 in Oras, Eastern Samar, Philippines. She is 2nd child and only daughter of Mr. Joel M. Pomida (Deceased) and Mrs. Dina P. Pomida.

Jessa went to San Eduardo Elementary school then later transferred to Tabunan Elementary School where she graduated her Elementary Education on 2003. In 2007, she then graduated her secondary education in St. Mary’s College of Borongan (former St. Joseph’s College) with special academic award. She pursued her college education in Holy Infants College in Tacloban City with a degree in Nursing but then later on transferred to Eastern Samar State University where she graduated her degree in bachelor of Science in Accountancy in the year 2016.

Jessa got married to Bryan C. Arago on 2012 and gave birth to 4 beautiful children. After graduating college, she immediately took and passed the Civil Service Commission Professional examination. On 2017, She got employed at Department of Public Works and Highways and worked for 5 years under the commission on audit internal office within DPWH.

During the year 2022, Jessa got pregnant with her 4th child and decided to leave her job and focused on her pregnancy and look after her children. After almost 2 years of being a full-time house wife she went back to work and got employed in Eastern Samar State University on the second half of year 2024.

Jessa then pursued her master’s degree in management and is currently enrolled in Eastern Samar State University (Main Campus), Borongan City, Eastern Samar.