

Readiness and Competence of Public and Private Employees in the Philippines Under the Fourth Industrial Revolution

¹Dr. John Michael M. Dela, ²Dr. Catherine E. Dela

¹Dost-Neust Tbi i-Metal,

College Instructor-College of Management and Business Technology,

²Nueva Ecija University of Science and Technology

¹delacruzjohnmichael97@gmail.com, ²cathymedelacruz@gmail.com

Received: 16- June -2023

Revised: 13- July -2023

Accepted: 01- August -2023

Abstract— The Philippines as it is recognized as the developing country in Asia Pacific region has continually resurfacing its political, social, economic and cultural programs to abide with the prevailing international standards, norms and trends. Hence, the study described and examined public and private employees' readiness and competence under the Fourth Industrial Revolution. The study utilized mixed method and was participated by private and public employees who were randomly selected throughout the country. Findings revealed that private and public employees were highly prepared as they work under the prevailing utilization of advanced technology in terms of adoption of organization's goals, participation to healthy working environment, behavioral work interest and behavioral control. Apparently, the study also revealed that private and public employees were highly competent as they perform their functions and responsibilities dependent on the nature of their work. As such, they were highly competent in terms of technological knowledge, general digital literacy and interpersonal skills. Results also showed that private and public employees' educational attainment and number of years in working in the organization have significantly influenced their readiness and competence in working under the Fourth Industrial Revolution.

Keywords—Asia Pacific Region, Political, Social, Economic, Cultural Programs, Fourth Industrial Revolution

I. INTRODUCTION

In the advent of technology in the global spheres, establishment of new structural forms of society in all sectors have paralleled the prevailing systems of civilization. Rapid and continuous technological developments surfaced social, political, economic and cultural dimensions of the countries around the world. At present, individuals are strongly fascinated with the use of advanced technology in their daily living, from their normal acquaintances to highly intricate dealings and transactions which are demanded by either employment or business transactions. Along this line, every fiber of business transaction and among others are maneuvered and powered by highly advanced technologies tantamount to the discharge of their regular functions as employees in private and public sectors. Utilization of advanced technology proceeds through an evolutionary process that invites strong competition in terms of economy, education, politics and cultural aspects around the society's functional system. Highly advanced technologies also serve as one of the determinants of economically developed countries (Nelson, 2019). Meanwhile, continued advancement in the creation of technology and innovation of ideas, works and outputs produced by human intelligence are characterized under the Fourth Industrial Revolution. It consists technological frontiers which caused the opening of new business opportunities, formulation of new market avenues for potential entrepreneurs and resurfacing both private and public transactions among private organizations and government institutions.

Notably, at the dawn of Fourth Industrial Revolution as highly advanced technology are explored and utilized tremendously attached in a very singular reason which is to increase work productivity and efficiency, it is precisely observed that employees in the public and private sectors are still adjusting in the demands and scope of their functions and responsibilities in their respective organizations or institutions. Hence, they are apparently exhibiting confusions which hampered their work performances. Employees as individuals possessed distinct characteristics who based on their capacities also showed differences in work performances, abilities and capacities to meeting both individual and collective targets set forth by the organizations or institutions they belong. Attached in this prevailing condition objectively observed by the researchers, is an increasing contention among institutional leaders, government officials, managers, supervisors and administrators that their employees experienced less digital exposure, lack of digital trainings and actual workshops and need of a continuing formal higher study in technology and development which may inflict their readiness and competence in discharging their functions as employees from private and public sectors.

Readiness is an operative mechanism of any organization which deals heavily on employees' innate capacities for the preparation of themselves towards the efficient performance of their functions (Teng et.al., 2019). In addition, implications of Fourth Industrial Revolution have significant positive influence to work readiness such as technology literacy and human literacy (Lestari and Santoso, 2019). On the other hand, while readiness becomes one of determinants of efficient and productive employees working under the Fourth Industrial Revolution, competence also comes into a significant interplay to which it significantly affects the total work performance of employees who are employed both in private and public sectors. Apparently, employees' competence is a major shifter towards the success and failure of an organization (Nguyen and Nguyen, 2019). The researchers are keen to comprehensively describe and examine the readiness and competence of public and private employees in the Philippines under the Fourth Industrial Revolution.

II. OBJECTIVES OF THE STUDY

The study intended to provide credence of scientific evidences and facts in consonance with the readiness and competence of public and private employees in the Philippines under the Fourth Industrial Revolution. Results of the study would provide a logical and pertinent basis for policy-makers in the Philippines as to formulate laws, rules, regulations or policies that can advance the labor force of the Philippines that put premium emphasis on readiness and competence to working under the conditions existing under the Fourth Industrial Revolution. In addition, results of the study may serve as reference points or relevant baseline for government agencies, private companies, organizations and other institutions which directly involved in the development of local and national economy by providing employment opportunities among citizens of the Philippines.

While the study may serve as the scientific basis in the formulation and development of policies among public and private institutions, it may also serve as scientifically-founded baseline for future researchers who would pursue similar nature or interest relating to the emerging economic issues, challenges and conditions encountered by employees in the Philippines. Moreover, the study was founded on its primal objective to describe and examine the readiness and competence of public and private employees in the Philippines under the Fourth Industrial Revolution for the Fiscal Year 2022-2023. Hence, it specifically aimed to:

- 1) *Identify the socio-demographic profile of the public and private employees*
- 2) *Describe public and private employees' readiness under the Fourth Industrial Revolution in terms of adoption of organizations' goals, collaborative working environment, behavior of interest and behavioral control*
- 3) *Describe public and private employees' competence in terms of technical knowledge, general digital literacy and interpersonal skills*
- 4) *Examine if there would be significant relationship between the socio-demographic profile of public and private employees and their readiness and competence to work under the Fourth Industrial Revolution*
- 5) *Describe the challenges encountered by the public and private employees under the Fourth Industrial Revolution*

III. THEORETICAL FRAMEWORK

This study was anchored on the Theory of Planned Behavior and Theory of Competence in the Digital Age. The former was introduced by Jimmerson, White and Peach (2003) while the latter was discussed by Kondratyuk (2019) in his own paper. Thus, readiness of employees was anchored on the theory of planned behavior while competence of employees was based on the theory of competence in digital age. Apparently, according to Jimmerson, White and Peach (2003), it stated that readiness for change was an extent to which employees held positive views about the need for organizational change as well as the extent to which employees believed that changes were likely to have positive implications for themselves and to widen the organization. It also suggested to have an understanding to process of attitude formation during times of organizational change. Further, through this theory conceptualized the over-all evaluation of performing the behavior of interest, social pressure to perform or meet to perform the behavior. Subsequently, there are three (3) perceived behavioral control which reflected the extent to which the behavior was under volitional control. Meanwhile, competence theory in the digital age stated that individuals possess scientific and technological understanding and technique that shaped efforts of those seeking to advance the technology. Thus, it encompassed the general skills of individuals under the discipline he/she had engaged such as emotional intelligence, creativity, skills to communicate and technical knowledge.

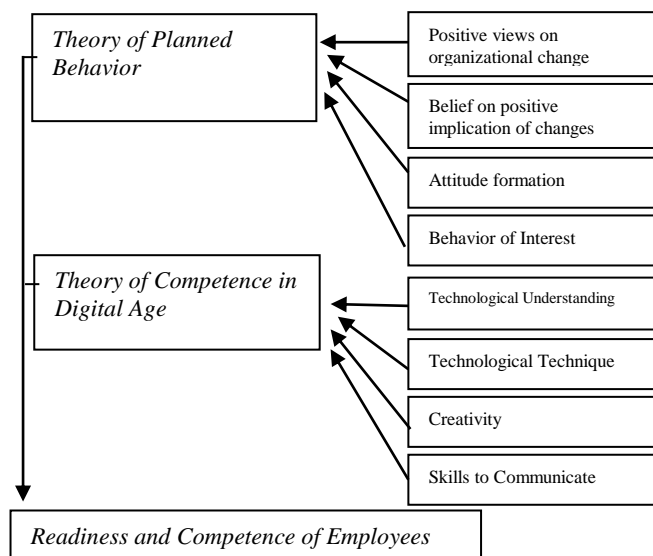


Fig.1 Theoretical Framework

(Theory of Planned Behavior, Jimmerson et.al., 2003 and Theory of Competence in Digital Age, Kondratyuk, 2019)

IV. METHODOLOGY

Mixed method of research was utilized in the study to describe and examine the readiness and competence of public and private employees in the Philippines under the Fourth Industrial Revolution. The Quantitative and Qualitative Research or commonly recognized as Quan-Quali Method was defined by Tashakkori and Creswell (2007) in which the investigator collects and analyses data, integrates the findings and draws inferences using the qualitative and quantitative approaches or methods in a single study or programme of inquiry. The study was participated by four hundred and thirty-five (435) employees coming from public and private organizations. Accordingly, three hundred and twelve (312) respondents were active private employees while one hundred and twenty-three (123) respondents were active public employees in the Philippines. All of them were working at the time when the study conducted throughout the Philippines. The study randomly selected the participants through social media invitation in the form of a call for participants. Apparently, their participation was secured by an informed consent which was formulated by the researchers. Further, the study utilized a survey-questionnaire as a primary instrument while guide questions were also formulated and served as a secondary instrument. The survey questionnaire was validated and tested in which it obtained a *Cronbach alpha* ($\alpha=.947$) which signified that the same was valid and reliable to measure the readiness and competence of the respondents. Thus, guide questions were validated by the expert validators whose expertise lies on business management and administration. Informed consents were distributed among the respondents upon expressing their intentions to participate in the study. The researchers reached each respondent through their professional email addresses so as to provide copies of their informed consents. Once all accomplished informed consents were received through the same email addresses of the researchers, they formally request the respondents to participate considering the availability of their time which led them to fill and profound their responses through the survey questionnaires. Thus, google form was utilized as a digital facility to transfer items from the survey-questionnaire. Also, unstructured interviews were administered through a video conferencing which was sent to the respondents' email addresses. Meanwhile, the process of data analysis used in this study was intensive and highly relevant in which both descriptive and inferential statistics were used. As such, *frequency and percentage* were used to identify the socio-demographic profile of the respondents while *mean, standard deviation and overall weighted mean* were used to describe the readiness and competence of the respondents.

Meanwhile, *Pearson r* was used to examine if there would be significant relationship between the socio-demographic profile and readiness and competence of the respondents. On the other hand, thematic analysis arriving to major themes and subthemes from the responses were used in order to describe the challenges encountered by the respondents under the Fourth Industrial Revolution.

V. RESULTS AND DISCUSSION

1. Socio-Demographic Profile

Table 1. Socio-Demographic Profile

Socio-Demographic Profile (n=435)	f	%
<i>Age</i>		
18-25	67	15.40
26-30	72	16.55
31-35	101	23.21
36-40	76	17.47
41-44	95	21.83
above 45	33	7.58
<i>Sex</i>		
Male	256	58.85
Female	179	41.14
<i>Educational Attainment</i>		
BS Degree Holder	324	74.48
MA Academic Units	44	10.11
MA Graduate	31	7.13
vzDoctorate Academic Units	24	5.52
Doctorate Graduate	12	2.76
Post-Graduate Completer	0	0.00
<i>Years in Working</i>		
Below 5 years	87	20.00
6-10 years	152	34.94
11-15 years	62	14.26
16-20 years	78	17.93
above 21 years	56	12.87

SOCIO-DEMOGRAPHIC PROFILE

Majority of the respondents were in the middle adulthood stage (23.21%) whose age ranged from 31-35 years old. This meant that at their age, they were at the height of their career path who possessed greater confidence in the workplace as they were already matured in terms of decision making and emotional stability. Thus, majority of them were male (58.85) while majority of them completed their bachelor degree (74.48). This showed that the respondents gained sufficient theoretical and practical knowledge as they formally learned basic and intricate concepts of business and management during their formal college studies. Apparently, majority of the respondents were employed for 6-10 years already (34.94). This showed that within the years of their employment, they were able to adapt organization's intricacies and diverse organizational environments. Also, this showed that they had already gained sufficient expertise in performing their work and enough exposure to gain additional technical knowledge arising from their work performances.

2. Readiness Under the Fourth Industrial Revolution

Table 2. Readiness under the Fourth Industrial Revolution

Readiness Under the	m	VI
Fourth Industrial Revolution		
<i>Adoption of Organization's Goals</i>		
Understand shared vision and goals	3.28	Highly Prepared
Execute plans and targets	3.47	Highly Prepared
Alignment with personal values	3.42	Highly

		Prepared
Total engagement in organization's activities	3.54	Highly Prepared
<i>Overall Mean</i>	3.43	Highly Prepared
<i>Participation to Healthy Working Environment</i>		
Active involvement to organization's procedures and processes of work	3.32	Highly Prepared
Building positive relationships among colleagues	3.48	Highly Prepared
Exhibit work-life balance	3.44	Highly Prepared
<i>Overall Mean</i>	3.41	Highly Prepared
<i>Behavioral Work Interest</i>		
Show pleasing personality traits	3.38	Highly Prepared
Show unhampered focus in the attainment of goals	3.54	Highly Prepared
Show work independence	3.62	Highly Prepared
<i>Overall Mean</i>	3.51	Highly Prepared
<i>Behavioral Control</i>		
Present consistent self-awareness in the workplace	3.62	Highly Prepared
Manage emotion objectively	3.54	Highly Prepared
Resist impulses rationally	3.51	Highly Prepared
<i>Overall Mean</i>	3.56	Highly Prepared

Legend: 3.25-4.00 Highly Prepared, 2.50-3.24 Prepared, 1.75-2.49 Less Prepared, 1.00-1.74 Not Prepared

Readiness Under the Fourth Industrial Revolution.

The respondents were highly prepared in the adoption of organizations' goals. This included their comprehensive understanding to shared visions which their organization established based on their nature of services provided for their clientele. Thus, they showed that they were fully equipped to adhere to the visions primarily set forth by their organization. Thus, part and parcel of their strong acceptance and readiness on adoption of organizations' goals was their means and methods of executing actions in the attainment of their plans and targets. Accordingly, based from the results, the respondents were highly ready to take relevant actions as they perform their duties and responsibilities in the workplace under the fourth industrial revolution. They kept grounded in the execution of their plans and targets which provide lateral positive effects to the organizations where they work. Further, the respondents profound greater sense of culturally acceptable personal values in the workplace. Accordingly, they were highly prepared in continually adopting changes transpired in the workplace by embracing the same with their positive values on working under the trends of the digital age. Apparently, private and public employees were highly prepared as they engage themselves working under the Fourth Industrial Revolution. They kept an active and uncompromised services attached to their functions within their organizations. Consequently, all activities and work engagements enjoined by public and private employees exhibited their strong desire to adopt with the emerging changes in the workplace. This was supported in the study of Rotatori et.al.

(2021) which they revealed that specific focus to organization's goals positively influenced the employees' adaptability skills thereby instituting efficiency and resiliency in the workplace.

Meanwhile, one of the critical roles in the successful performance of work leading to collective success was an active participation to healthy working environment. The study showed that employees in the public and private sectors in the Philippines were highly prepared when participating in a healthy working environment. They posed active engagement to comprehensively and properly abide the organization's work ethics, procedures and processes. Apparently, this led them to the small celebration of success as they fulfill their roles and responsibilities while relating with founded harmonious relationship among their colleagues. This was supported in the study of Makgato (2019) which he discussed that sustainability skills emerged when there was strong prevalence of positive relationships among employees in the workplace.

Further, public and private employees in the Philippines while religiously adjusting to the constant changes produced by rapid industrialization in the country, they were highly equipped with vigor to accomplishing their work targets and metrics at the same time. They showed work performances that were pleasing from the appreciations of their clienteles moreso, they provided services and other related tasks through exerting extreme amount of focus. Apparently, their foci were directly caused by their willingness to contribute in the attainment of organization's success. Their logical and pervasive manner of accomplishing their duties and responsibilities in the workplace established the condition that they were able to surpass the demands instituted by the fourth industrial revolution. They kept themselves independent while responsibly performing the work apart from considering collective interests of their organization. This was strongly supported by the study of Penprase (2018) which he concluded that employee's readiness as to behavioral work interest became an adjacent positive characteristic arising from their deeper appreciation to their work.

3. Competence Under the Fourth Industrial Revolution

Table 3. Competence under the Fourth Industrial Revolution

Competence Under the		m	VI
	Fourth Industrial Revolution		
<i>Technological Knowledge</i>			
Exhibit relevant technical skills in line with the performance standards of work		3.42	Highly Competent
Understand emerging technologies used in the workplace		3.54	Highly Competent
Functional in the adherence of cultural orientations in the workplace along technological use		3.35	Highly Competent
<i>Overall Mean</i>		3.43	Highly Competent
<i>General Digital Literacy</i>			
Show basic and advance computer skills in the performance of work		3.62	Highly Competent
Understand basic internet skills		3.73	Highly Competent
Mobilize mobile devices and social media accounts in the performance of work		3.82	Highly Competent
<i>Overall Mean</i>		3.72	Highly Competent
<i>Interpersonal Skills</i>			
Listen actively to work instructions and other orders relating to work performance		3.84	Highly Competent
Show greater emphatic understanding to colleagues		3.62	Highly Competent
Show constructive approach when conflict arises in the workplace		3.32	Highly Competent

Overall Mean

3.59 **Highly
Competent**

Legend: 3.25-4.00 Highly Competent, 2.50-3.24 Competent, 1.75-2.49 Less Competent, 1.00-1.74 Not Competent

Competence Under the Fourth Industrial Revolution

Competence of employees in every organization whether public or private sector was treated as a vital fabric in the development of an organization. Public and private employees in the Philippines under the Fourth Industrial Revolution expressed distinct characteristics, skills and intelligence as they were engaged in a diverse working environment. Fourth Industrial Revolution has provided extreme and wider opportunities among employees in the Philippines as growing economy in Asia Pacific region. As such, competence became an acid test of efficiency, effectiveness, resilience as well as sustainable growth among organizations. Thus, public and private employees were highly competent in terms of technological knowledge. This implied that they were intelligently exhibited relevant technical skills that were demanded by an industrialized society which they gradually embraced. They showed strong competence in using highly advanced technology in the discharge of their functions and roles in the organizations which in effect, provided efficient services for their clientele. This was supported by the study of Hirschi (2018) which he revealed that enormous impact was brought to organizations when competent employees under the surfacing fourth industrial revolution, were able to adjust to the strong needs and demands posed by the current business and working climates.

Further, under the Fourth Industrial Revolution, it is evident that prevailing utilization of modern technology has contributed to a large-scale success of the organization. Notably, public and private employees were highly competent in utilizing modern devices such as computers, tablets and mobile phones. Also, they were highly competent since they were able to efficiently perform their work through the use of advanced computer programs and softwares. These circumstances established the conditions that the employees were highly adaptive and competent in terms of general digital literacy. One of the advantages in terms of technical skills of public and private employees was their skills of which were being nurtured through experiences and exposures in their organizations under the fourth industrial revolution. Apparently, interpersonal skills in an organization was very essential because it directed the performance of an organization by providing clear and precise instructions either verbal or written. Thus, public and private employees were highly competent in actively participating in their organization's activities and dealings by which they dispensed active listening and precise obedience to instructions given. This surfaced one common performance because they were directed by precise tenor of instructions and active communicative means among themselves. Moreover, they were highly competent in expressing their constructive feedbacks and insights leading towards the enhancements of the organization's actual operations. On the other hand, attached to the public and private competence in terms of interpersonal skills was their objective appreciation to establish logical resolution to conflict. In other words, they were keen and critical in resolving conflict, they adhered more on realistic resolution of conflict by means of careful use of language and expressions rather than intuitions and subjective criticisms. This was supported by the study of Sangusit et.al. (2018) which concluded that organization's effective transformation leading to sustainable growth and excellence were brought by effective communications among employees and sensible utterances relating to the fulfillment of tasks and responsibilities.

4. Relationship between Socio-Demographic Profile and Readiness and Competence Under the Fourth Industrial Revolution

Table 4. Relationship Between Socio-Demographic Profile and Readiness Under the Fourth Industrial Revolution

		Adopt OrGoal	PartHealthy WrEnvi	BehWorInt	BehCntl
Age	Correlation	0.0007	-0.07	-0.017	0.014
	Coefficient				

	Sig. (2-tailed)	0.958	0.57	0.889	0.91
	N	435	435	435	435
	Correlation	0.0093	0.0015	-0.073	-0.105
	Coefficient				
	Sig. (2-tailed)	0.613	0.156	0.144	0.284
Sex	N	435	435	435	435
	Correlation	.305*	.338**	.240*	.248*
	Coefficient				
Educational Attainment	Sig. (2-tailed)	0.012	0.005	0.049	0.042
	N	435	435	435	435
	Correlation	.313*	.378*	.280*	.299*
	Coefficient				
Years in Working	Sig. (2-tailed)	0.009	0.001	0.021	0.013
	N	435	435	435	435
	Coefficient				

***Correlation is significant at the 0.01 level (2-tailed).*

**Correlation is significant at the 0.05 level (2-tailed).*

Relationship of Socio-Demographic Profile and Readiness of Public and Private Employees in the Philippines

Educational attainment of public and private employees was significantly correlated with the readiness of public and private employees in the Philippines in terms of adoption of organizational goals, participation to healthy working environment, behavioral interest and behavioral control. This implied that the higher the respondents obtained their level of education were more likely to obtain higher level of readiness in working under the fourth industrial revolution. This asserted that public and private employees gained substantial concepts, theories and principles in relation to their work as employees. Moreso, once they obtained higher level of education, they could harness their potentials in strategic management, leadership, organizational control, supervision and the like. Public and private employees as they continually adopting the demands and needs in the fourth industrial revolution, their practical knowledge and skills were strengthened, since their education and deeper comprehension as to the prevailing concepts and designs of industrialized society were taught. Thus, public and private employees' educational attainment more likely to provide them strong exposures to the concepts effective organizational engagements along with understanding the organization's working environment including their active involvement, their behavioral interest and control when fulfilling their tasks in the workplace. It had scientifically inferred that public and private employees' readiness in working under the fourth industrial revolution was dependent on the level of education they obtained. This was supported by the study of Teng et.al. (2019) which concluded that intensive skills and intricate concepts were learned through direct learning. Further, public and private employees' years in working in an organization was significantly correlated to their readiness in terms of adoption of organizational goals, participation to healthy working environment, behavioral working interest and behavioral control. This suggested that the longer the years served by the public and private employees in an organization, the higher the tendency that they could obtain competence in their work. Accordingly, public and private employees may periodically hone their skills and potentials as they have been at work for a longer time. This indicated that they understood and eventually, practiced technological skills since they were exposed in using technology as primary tools in dispensing their work obligations. Apparently, they showed competitive form of

labor and efficient practice of work performances. This was also evident in the study of Philbeck and Davis (2018) which they concluded that technological and social advances to work were brought by employees' readiness like the skills they nurtured and mindset they developed over the years of working in the organizations. In addition, fourth industrial revolution has tested the range of skills and potentials of employees since they dealt largely on digitalized form of transactions. This meant that the public and private employees under the fourth industrial revolution had advanced their skills and readiness while ensuring the sound execution of their obligations in the workplace until the successful attainment of their targets held. Verily, the higher use of technological revolution in the workplace also elevated their readiness into the higher forms of technological activities offered by the organizations they worked for.

Table 5. Relationship Between Socio-Demographic Profile and Competence Under the Fourth Industrial Revolution

		TechKn	GenDgLit	InTSkls
Age	Correlation	0.0022	0.092	-0.003
	Coefficient			
	Sig. (2-tailed)	0.787	0.263	0.972
	N	435	435	435
Sex	Correlation	-0.87	-0.077	-0.05
	Coefficient			
	Sig. (2-tailed)	0.287	0.351	0.542
	N	435	435	435
Educational Attainment	Correlation	.310*	.318**	.320*
	Coefficient			
	Sig. (2-tailed)	0.025	0.045	0.034
	N	435	435	435
Years in Working	Correlation	.331*	.312*	.292*
	Coefficient			
	Sig. (2-tailed)	0.045	0.019	0.001
	N	435	435	435

***Correlation is significant at the 0.01 level (2-tailed).*

**Correlation is significant at the 0.05 level (2-tailed).*

Relationship of Socio-Demographic Profile and Competence of Public and Private Employees in the Philippines

Readiness of employees was treated as primary element of success in any organization. Public and private employees' educational attainment was significantly correlated to their competence in working under the fourth industrial revolution. This suggested that the higher the level of education they attained were more likely to obtain competence in the workplace under the fourth industrial revolution. Thus, competence of public and private employees was comprehensively seen to have a linear trajectory towards unhampered developments in which

current working climates offered wider opportunities for them. The development of employees' competence was sharpened as they continuously discover knowledge and constructs of realities in the field of public service and private endeavors. On the other hand, their level of educational attainment was indicative of greater repertoire of skills considering that they have learned scientific procedures and scholarly-based approaches to utilizing an organization's resources most specially in responding with the society's technological growth and apparent needs. This is supported by the study of Topco (2020) which he concluded that characterization of employees' competence in the fourth industrial revolution were identical manifestations as to the digital transformation awareness and intensive technological inclination. The study also revealed that organization's allocation of resources and expedite processes in serving the clienteles became one of the major considerations of competence in the workplace as employees utilized highly advanced technology to deliver their daily targets and overall work obligations in a timely manner.

Further, years in working in the organization was significantly correlated to their competence in terms of technological knowledge, general digital literacy and interpersonal skills. This implied that public and private employees who have been working for a longer time were more likely to show greater competence as they deliver the tasks attached in their duties and responsibilities. Apparently, they have gained founded experiences since they were serving the organization and the clienteles for years already. Their service to their organizations had congruently shaped their potentials in technical know-how since fourth industrial revolution demanded the public and private organizations, a tremendous amount of digitalized dealings and transactions. Consequently, their prolonged employment also provided them wide working opportunities by which even at the range of their personal aspects were enhanced. Their competence helped the organization to mobilize its resources that led the same towards effective attainment of goals and targets. Meanwhile, public and private employees have also shown excellent use of digital platforms. They utilized digital spaces efficiently as to provide sound and reasonable form of services that satisfied their clients and the general public. This was supported in the study of Hanafi and Ibrahim (2017) which they concluded that years in working in the organization have a significant positive impact on service performance. Thus, the study revealed that employees' skills were honed as they were able to familiarize the organizations' operations and management.

5. Challenges Encountered by Public and Private Employees under the Fourth Industrial Revolution

Inconsistent Collaboration. While employees collectively shared visions and collaborate during the performance of their work, inconsistency of collaboration became the most challenging aspect they encountered. They failed to consistently collaborate among their co-employees because they were bombarded with individual targets that they needed to accomplish in their daily dealings or arrangements in their organizations. Thus, they commonly left the collective goals of the organizations that should have been obtained by the team.

Lack of Cybersecurity Features. While employees divulged their personal accounts such as their social media and email addresses, they encountered irrelevant and non-work-related messages. This circumstance occurred since employees in public and private organizations were directly exposed to serving their clients. Also, since they provided highly efficient communication systems, safety of employees in the digital spaces were compromised.

The challenges encountered by public and private employees evidently showed that while they efficiently delivered their tasks and performed work passionately in industrialized organizations, their safety in the cyber spaces still being compromised thereby experiencing trauma and stress. Apparent circumstances arise when they dealt among their clienteles, most of them experienced unnecessary remarks and comments through their social media accounts when clients seemed not be satisfied with their services. This likewise inflicted their mental health since their personalities were bragged negatively.

CONCLUSION

Readiness and competence of public and private employees were vital mechanisms for the success of every organization. They were highly equipped with skills to abide with the prevailing demands of fourth industrial revolution. Thus, they were able to adopt with heir organization's continuing goals that were congruent to the surfacing trends of business climates for private organizations and standards of excellent services for public institutions. Also, they were prepared to participate with the healthy working environment under the constraints of fourth industrial revolution which included their directed interests and behavioral control as they perform their work obligations. Additionally, they were highly competent in technical skills demanded by their nature of work, showed competence in basic and advanced digital knowledge. Thus, they were highly competent in providing clear and precise communication means including the establishment of harmonious relationship and logical ways in

solving conflict as they fulfil their tasks and responsibilities. Accordingly, their educational attainment and number of years working in the organization have significantly influenced their readiness and competence in working under the fourth industrial revolution.

IMPLICATIONS

The study had significantly proved that public and private employees in the Philippines possessed high level of readiness and competence in working under the demands of fourth industrial revolution. The study affirmed the contextual practical application of the Theory of Planned Behavior (Jimmerson, White and Peach, 2003) in the workplace since public and private employees adopted the changes in the workplace as their organization thrive to abide with the rapid demands of industrialized society. Their digital awareness and continued direction to utilize advanced technology in the performance of their work had significantly elevate their organizations' resources towards growth and development. Meanwhile, their highly competent skills in working had also affected a well-functional organization hence, the study affirmed the practical and contextual application of Theory of Competence in the Digital Age (Kondratyuk, 2019). Congruently, public and private employees were highly competent in using digital spaces so as to provide efficient services for their clientele. The findings had also proven that their practical utilization of modern technology advanced the operations and functionality of their organizations.

REFERENCES

- [1] Hunitie, M. (2017). The impact of servant leadership style on employee service quality, employee creativity, employee commitment and employee performance. *International Journal of Business Research*, 17(1), 43–50. <https://doi.org/10.18374/ijbr-17-1.4>
- [2] Hirschi, A. (2018). The fourth industrial revolution: Issues and implications for career research and practice. *The career development quarterly*, 66(3), 192-204. http://www.andreashirschi.org/s/Hirschi_2018_The-Fourth-Industrial-Revolution.pdf
- [3] Kondratyuk, T. V. (2018). Fourth Industrial Revolution: What Competences Are Necessary For Employees?. *Strategic decisions and risk management*, (3), 66-79. https://www.jsdrm.ru/jour/article/view/785?locale=en_US
- [4] Lestari, S., & Santoso, A. (2019). The roles of digital literacy, technology literacy, and human literacy to encourage work readiness of accounting education students in the fourth industrial revolution era. *KnE Social Sciences*, 513-527. <https://www.knepublishing.com/index.php/KnE-Social/article/view/4031/8299>
- [5] Makgato, M. (2019). STEM for Sustainable Skills for the Fourth Industrial Revolution: Snapshot at Some TVET Colleges in South Africa. *Theorizing STEM education in the 21st century*, 144-159. <https://www.intechopen.com/books/theorizing-stem-education-in-the-21st-century/stem-for-sustainable-skills-for-the-fourth-industrial-revolution-snapshot-at-some-tvet-colleges-in-s>
- [6] Penprase, B. E. (2018). The fourth industrial revolution and higher education. *Higher education in the era of the fourth industrial revolution*, 10, 978-981.
- [7] Philbeck, T., & Davis, N. (2018). The fourth industrial revolution. *Journal of International Affairs*, 72(1), 17-22. <https://europepmc.org/books/n/nap24699/?extid=28182367&src=med>
- [8] Rotatori, D., Lee, E. J., & Sleeva, S. (2021). The evolution of the workforce during the fourth industrial revolution. *Human Resource Development International*, 24(1), 92-103.
- [9] Sanquist, N. J., Karpook, D., & Guelen, F. (2018). Transforming corporate real estate for the Fourth Industrial Revolution. *Corporate Real Estate Journal*, 8(2), 165-179. <https://hstalks.com/article/2285/transforming-corporate-real-estate-for-the-fourth-/>
- [10] Topcu, M. K. (2020). Competency framework for the Fourth Industrial Revolution. *Advances in Human and Social Aspects of Technology*, 18–43. <https://doi.org/10.4018/978-1-5225-9810-7.ch002>
- [11] Teng, W., Ma, C., Pahlevansharif, S., & Turner, J. J. (2019). Graduate readiness for the employment market of the 4th industrial revolution: The development of soft employability skills. *Education+ Training*. https://www.tagtog.net/Jess/J/-orig/a1KYsNeqjnuC6yMQcI4C3MWU4SwS-Graduate_readiness_for_the_employment_ma_ket_o__the_4th_industrial_revolution.pdf
- [12] Van Nguyen, P., Nguyen, P. T., Nguyen, Q. L. H. T. T., & Huynh, V. D. B. (2019). Extended fuzzy analytical hierarchy process approach in determinants of employees' competencies in the fourth industrial revolution. <https://pdfs.semanticscholar.org/941c/3f1dfd5711af53cd40c465876937d66ea8ef.pdf>