

Organizational Agility and Instructional Technology Skills amidst the Pandemic at State Universities and Colleges in the Philippines

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Abstract

Organizations face challenges adapting their products and services to meet the changing demands amidst the pandemic. This study determined the organizational agility of the teaching force in terms of innovation/change, empowerment, tolerance, and instructional technology skills concerning planning and preparation, classroom environment, instruction, and professional responsibilities. The study used the quantitative and qualitative designs. The quantitative data was gathered from the 127 faculty respondents through survey instruments and the qualitative data was gathered through an online Focus Group Discussion (FGD) using Google Meet. Data were statistically treated using mean, correlation procedures, F test, and scheffee test.

Results of the study unveil that the university's organizational agility and instructional technology skills were very satisfactory. Findings further revealed no significant differences in the respondents' assessment of organizational agility among colleges while significant correlations existed in organizational agility with instructional technology skills. A webinar on organizational agility and instructional technology skills was developed as a management intervention to address the findings of the study.

Keywords: Organizational agility, Instructional technology skills

Introduction

Organizations worldwide face serious existential challenges amidst pandemics in keeping up with the pace of changes to respond to the concerns of diverse workforces. To survive and effectively compete in such dynamic conditions, organizations need to transform the existing frameworks to align their respective strategic goals. Organizations such as the State of Universities and Colleges (SUC) need to imbibe agility and technology skills to achieve higher degrees of responsiveness in dealing with demands dictated by different regions and cultures amidst pandemics.

Organizational agility is the capacity to respond flexibly to changes in the environment by quickly adjusting product and service offerings. It is increasingly becoming critical in achieving sustained competitive advantage (Singh et al., 2013). It is defined loosely as a combination of flexibility, quickness, and speed increasingly regarded as a source of competitive advantage in today's fiercely competitive and fast-changing markets (Singh et al., 2013).

Moreover, organizations in the Philippines, like other countries across the globe, are coping with the digital or technology surge and its implications for their structures, strategies, and people. Many are struggling to cope with the phenomenon, only a few have been able to embrace it, and almost none have been able to get ahead proactively.

Most organizations such SUCs failed to transcend the gap between knowing what is needed and doing what is required to combine emerging technology with new processes and skills to remain competitive. These present a significant risk to the organization, its operating model, and the talent it acquires and retains. While the presence of a contingent workforce and access to technology open doors to opportunities for academic organizations, it also stokes fears of redundancy amongst existing employees. (SMU, 2018)

Government policy and investments in information technology components promote ICT integration in today's schools. It has been suggested, to adequately motivate and prepare today's students for the twenty-first century that technology must be an essential component of their education.

The academic community is the learning environment within which the school operates (Senge, 2002). State Universities and Colleges of practice in today's changing world have evolved with the advent of technology. The employees communicate, plan meetings, disseminate information, provide resources, and provide assets through technologies.

To unlock the positive potential that technology brings requires fundamental shifts in the collective mindset to build a culture that fosters change and cultivates a spirit of continuous learning, un-learning, and re-learning (SMU, 2018). This shift entails willingness and flexibility to use or integrate technological resources in the workplace.

With the concerns on organizational agility and technological skills experienced by learning institutions, the researcher finds the same constructs associated with the observations in the workplace.

The university takes pride in its accomplishments along with the State Universities and Colleges (SUC) leveling, ISO, and commitment toward internationalization, vouching for its performance and establishing its name in various aspects. However, like in any other organization, it has its strengths and weaknesses. Its strengths contribute much where the university is now, along with the aforementioned accomplishments. Its weaknesses, however, have to be identified to make the organization more agile and technologically skilled with the changing times.

In terms of organizational agility, the university has yet to adapt and respond effectively to the opportunities and threats that may be encountered. The absence of operational plans that would address unforeseen events such as this pandemic or any threats remains a challenge.

While higher education institutions share almost the same goals and objectives in the academic arena, the university remains challenged by other institutions' edge, accomplishments, and quality of performance.

In terms of instructional technology skills, some faculty members are not that keen on adopting and responding effectively to the 21st Century Skills, especially in technology integration, since technology is at the forefront of the classroom and learning experience. Like any other institution, the university has yet to equip itself with technological resources such as skills to be competitive, especially in this pandemic, where technology adaptation and implementation are of paramount importance.

Premise on the abovementioned ideas, this study aimed at understanding how an academic organization such as Nueva Vizcaya State University would address the opportunities and challenges of organizational agility and instructional technology. The study further sought to gain a deeper understanding of how faculty members, an essential resource in an academic community, manage issues with flexibility and responsiveness in creating change necessary to propel the university forward.

The main objective of this study was to determine the organizational agility and the instructional technology skills of the faculty members of Nueva Vizcaya State University.

Specifically, this study sought an answer to the following questions:

1. How do the respondents assess their organizational agility along with innovation/ change, empowerment, and tolerance?
2. How do the respondents assess their instructional technology skills along with planning and preparation, classroom environment, instruction, and professional responsibilities?
3. Are there significant differences in organizational agility and instructional technology skills of the respondents when grouped according to colleges/departments?
4. Is there a significant relationship between organizational agility with instructional technology skills of the respondents?
5. Based on the findings of the study, what management intervention could evolve to address the salient findings of the study?

Methodology

Quantitative and qualitative research designs were employed in this study. Quantitative design made use of the descriptive method of research and a questionnaire to gather data from the 127 teaching staff from the four colleges of Nueva Vizcaya State University for the school year 2020-2021 using the google form. The qualitative design used the Focus Group Discussion (FGD), employed to validate quantitative data gathered through the survey instruments which were distributed and retrieved from the respondents. The researcher opted to use the online focus group discussion due to the current pandemic with the use of Google Meet.

The researcher employed the stratified random sampling technique to determine the 127 faculty respondents representing 80% of the total population from each group of the respondents. The researcher used codes to represent the group of respondents A for the College of Teacher Education (CTE), B for the College of Arts and Sciences (CAS), C for the College of Industrial Technology (CIT), and D for the College of Engineering (COE). Mean, F-test, Scheffé Test, and correlation procedures were used to analyze and interpret the data gathered.

Results and Discussion

Problem 1. How do the respondents assess their organizational agility along with innovation/ change, empowerment, and tolerance?

In order to illustrate the respondents' assessment of organizational agility, the mean was computed. Results are reflected in table 1.

Table 1

Respondent's assessment on their organizational agility

Organizational Agility	Weighted Mean	Qualitative Description
Innovation/Change	3.84	Very Satisfactory
Empowerment	3.58	Very Satisfactory
Tolerance	3.47	Satisfactory
Overall Mean	3.63	Very Satisfactory

Data in Table 1 show that the respondents had a “very satisfactory” assessment of the organizational agility as shown by the computed overall mean of 3.63. Innovation garnered the highest area mean of 3.84 with a qualitative description of “very satisfactory”, followed by empowerment with an area mean of 3.58 and a qualitative description of “very satisfactory”, and tolerance garnered the lowest area mean score of 3.47 and a qualitative description of “satisfactory”.

The above results only show that the respondents assessed the university with a vision, mission, goal, and objectives that were widely shared and carried out for institutional achievement and advancement which encouraged faculty members to share their knowledge and ideas for its betterment while it upheld strong reputation in the community with its ability to adapt to change.

Sambamurthy et al., (2003); Tallon & Pinsonneault, (2011), and Zelbst et al. (2011), state that organizational agility as a dynamic capability promotes effective integration and assimilation of organizational resources, such as knowledge and technological assets, and can boost up firm's performance for a longer time. While, Slagt (2018), states that a culture of agility is a learning culture

rather than a protective culture, one that is open to change, open to possibilities, and not protective of what people have, their status or level, but really strives to create the best results for the company, customers, employers, and shareholders.

Innovation

The respondents had a “very satisfactory” organizational agility along the dimension of innovation as shown in the computed area mean of 3.85. This finding could be interpreted to mean that the respondents “strongly agree” that the vision, mission, goal, and objectives of the university were widely shared and carried out for institutional achievement and advancement; had core values that reflect a change-ready learning institution; developed new strategies with flexibility and effects that managed change, and widely adopt new ways and practices as well as establishes and shares “best practices.”

On the other hand, the participants in the Focus Group Discussion on organizational agility, stated that:

“Probably we have a very good mark in number 1.” has a vision, mission, goal, and objectives that are widely shared and carried out for instructional achievement and advancement”, because the vision and mission of the university are clearly laid down or clearly offered or clearly crafted. When we said agility, I think this would refer to the ability of employees to think and understand quickly. Because of the set vision and mission, we are able to direct our thinking and our understanding and therefore our strategies when we teach our activities with our co-workers depending on the set vision and mission of our university. We all know that the administration and set vision and mission towards internationalization and therefore our professional activities our learning activities have been shaped up or molded based on our university vision and mission. That’s why we are very strong on that particular matter”.

The participants of FGD confirmed the results of the data gathered from the survey questionnaire on the “very satisfactory” performance of the university’s vision, mission, goals, and objectives through their manifestations of how vision, mission, goals, and objectives were carried out in the university. As one of the participants claimed these (VGMO) direct and guide employees’ thinking and activities.

According to Schneckenberg et al., (2015), operationally, innovation capability implies a team of motivated staff to build processes, products, and services that could be valued by customers and suppliers, bringing evidence to the company and conditions of competitive advantage in the long term.

Empowerment

The respondents had a “very satisfactory” organizational agility along the dimension of empowerment as shown in the computed area mean of 3.58. The finding could be interpreted to mean that the respondents “strongly agreed” that employees were encouraged to share their knowledge and ideas for its betterment; the university encouraged the development of leadership skills of faculty supported individuals (faculty, staff, and students) in developing new ideas, knowledge and skills; strong commitment to developing its employees personally and professionally; and recognizes employee’s meritorious performances and encourages them to sustain these meritorious undertakings/ideas.

Participants of the Focus Group Discussion discussed the different components of empowerment. However, in spite of the “very satisfactory” result of the quantitative data, empowerment is described in the light of the need to develop self-esteem among employees and give value and recognition to employees’ performance. In particular, the development of potential by giving regard or recognition to one’s contribution or performance is a felt need. Details of this discussion were cited as follows:

Ang maicocomment ko lang with this part, kasi talaga CAS ang lahat mababa, typically based on my observation ko kasi, mababa ang self-esteem ng CAS people kasi mababa

rin ang pagtingin ng administration and other faculty members from other colleges kasi nakakaranig ako ng mga comment na CAS lang naman yan, CAS lang yan, so kaya nagkaroon ng mababang result pagdating sa empowerment. Though nakikita naman natin na marami ang taga CAS faculty members who are holding high designation, ilan ang director na nasa CAS, so pag dating sa designation hindi naman nahuhuli ang CAS, pag dating on this part sa empowerment talaga lalo sa encourages ideas although nagshare ka ng ideas kaya lang usually na tuturn down. That's my observation. (The feeling of self-esteem is needed to be developed in their college especially to those who have experiences)

In terms of empowerment, dito sa faculty namin, like what I've said while back, yung mga faculty naming ambabata, ang fresh, mga aggressive pa, 2 to 3 years from now yung iba mag magretire na sila, kami nalang ang maiiwan, so kung titignan natin in terms of empowerment even though ang skill namin dito, ang engineering ang pinakamalaki, we support all the policies na binibigay ng administration, we work and work for the betterment of the university yun lang sa amin, hindi lang sa amin yung recognition kundi sa whole university.

According to Rothman, L. et al., (2019), many leaders today often try to empower their employees by delegating authority and decision-making, sharing information, and asking for their input. This style of leadership works best in motivating certain types of performance and certain types of employees. "Empowering" leaders should know when they can be most effective.

Tolerance

The respondents had "satisfactory" organizational agility along the dimension of tolerance as shown in the computed area mean of 3.47. The above findings could be interpreted to mean that the respondents "moderately agree" that they upheld a strong reputation in the community for its ability to adapt to change; had a culture that responsibly embraces change as a normal thing/ situation; encouraged employees to apply learnings from past experience/s; had strategies that can openly adapt to changing time and situation/s, and reviewed regularly Program Projects and Activities (PPA's) to avoid nonconformities to rules and regulations.

On the other hand, during the Focus Group Discussion, tolerance was described as follows:

Think it to our tolerance, for certain items, nakikita ko po it has something with budget allocation and adjustment and of course the whole budget per se. Siguro it's high time to work for the campus to re-install or another term mam Gay for reinstallation, reinstall or re-establish a certain unit in the campus which looks into our funds as a campus. Okey, kasi let us accept the fact that an organization cannot operate without certain funds, kasi those are the resources that we have too. Siguro re-establish the certain unit a budget or a budget coordinator that looks into general funds, supplemental funds for the development of new products or new inventions from the CIT, or siguro the unit which looks into the further development of our faculty, especially in CAS papuntahin sila sa mga seminars for them to boost their morale, self-esteem, or values orientation siguro mga ganun. But somebody who looks into yung particular funds of the campus for example Fund 101, anyway mandated naman yung mga yun, travel, seminar, pero mayron tayong supplemental budget on fund 164 that we can plan ahead, kunwari sa planning for the next year para mainject natin ang mga eto. Or the budget unit that will

guide us into planning these things, and in utilizing these things, utilizing the funds for this purpose. Yun lang po siguro.

May I speak as a member of the panel, this is in relation to the suggestions of mam Geraldine on having recollection, wherein one of the topics perhaps to organize this time of situation of the pandemic, topics may be included such as resiliency of change, how to tempt our tolerance yung mga ganung topic since tolerance is one of the in need and it is the weakest, so reflections, training of value development activities kasama na rin yung mga interactions activities. Yun lang po.

As described in the discussion, tolerance is viewed in the context of the need for budget allocation and adjustment as well as reinstallation of a unit to oversee the budget of the campus and the needs of the employees along with developed innovations as well as training programs and recollections for values orientation and professional growth.

Azuara Alejandro Virchez (2015) stated that tolerance of uncertain and unexpected situations is related to being comfortable with the complexity that arise in moments of change; the agility that talked about was related to ambiguity. Not everything would be written all the time. They were capable of managing themselves with little information and a lot of ambiguity.

**Problem 2. How do the respondents assess their instructional technology skills along with
planning and preparation, classroom environment instruction, and professional responsibilities?**

Table 2 reveals the respondents' assessment of instructional technology skills as very satisfied with an overall mean of 4.36.

*Table 2
Respondents' assessment of their instructional technology skills*

Instructional Technology	Weighted Mean	Standard Deviation	Qualitative Description
Planning and Preparation	4.36	0.64	Very Satisfactory
Classroom Environment	4.34	0.69	Very Satisfactory
Instruction	4.34	0.66	Very Satisfactory
Professional Responsibilities	4.40	0.66	Very Satisfactory
Overall Mean	4.36	0.61	Very Satisfactory

As noticed, professional responsibilities surfaced with the highest mean of 4.40 which was followed by planning and preparation with a mean of 4.36. Classroom environment and instruction had similar means of 4.34. All of the components of instructional technology were assessed as "very satisfactory".

The data on the table implies that the knowledge and practice of using technology in teaching were generally "very satisfactory".

The findings on the table concurred with what experts widely agreed that instructional technology provides many benefits to the education process, including better access to information, more opportunities for collaboration, and better capabilities for meeting diverse learners' needs. The increasing

prevalence of technology in the classroom reflects a broader cultural shift. As the modern world becomes more digitized, tech literacy is becoming increasingly important. Teachers who use technology to support learning in meaningful ways can help prepare students for success in the digital era. (Thackaberry, 2020)

Francis (2017) claimed that Information Technology has become common place in the classroom, helping to elevate and replace outdated pedagogical techniques and offering teachers the ability to design curricula in advance with regard to differentiation (Mulrine, 2007).

Planning and Preparation. This dimension of instructional technology had an area mean of 4.36 qualitatively described as “very satisfactory”.

Markedly, among the various indicators in this component, the design of learning activities by making use of available technology, including laptops/ desktop or tablets arose with the highest mean of 4.44 while the assessment of technology production in student work when applicable arise with the lowest mean of 4.34, although both are qualitatively described as “very satisfactory”.

This implies that teachers assessed their planning and preparation as high considering their preparedness in making assignments and class activities, the use of digital resources, and the design of learning activities using technology.

It is important that technology integration be a school-wide effort reflected in teacher and administrator attitudes as well as school policies and links to the wider community (N. Law, M. W. Lee, and A. Chan, 2010). Research has repeatedly shown that a school's ICT vision is integral to effective, appropriate, and sustainable ICT integration.

Classroom Environment

This dimension of instructional technology had an area mean of 4.34 qualitatively described as “very satisfactory”. Demonstration of a positive attitude toward the use of educational technology obtained the highest mean of 4.47, qualitatively described as “very satisfactory” while monitoring student technology use and responses to misuse of it arose with the lowest mean of 4.28, qualitatively described as “very satisfactory”.

It can be inferred that the respondents found their classroom environment with the use of technology “very satisfactory” with teachers' positive attitude toward the use of technology, teachers' initiative to facilitate students for collaborative and creative learning, and their ability to monitor students' use of technology.

Many studies have identified and supported the claim that teacher beliefs and attitudes play a determining role in the integration of ICT into instructional methods (Polly & Hannafin, 2010). As cited by Cuban (2006) in the study of Faulter (2011), while government entities and school administrators can identify the importance of ICT integration into the classroom, ultimately it is the classroom teacher who determines the best way to implement the provided curriculum on a daily basis (Cuban, 2006). Though they should not be blamed as the sole reason for the lack of ICT integration in the classroom, classroom teachers are the determining factor when considering the practical implementation of ICT for instructional purposes.

It is noted however in the focus group discussion that problem with internet connectivity affects learning among students:

“Mam tulad po na sabi po ni mam vhie kanina that faculty should monitor their students in the classroom, kahit po yung teacher ay may connection at expert sya sa technology, kung yung studyante ay wala naman pong connection nagkakaroon ng problema talaga mam, kahit gusto naming gumamit ng technology para mag assess regularly sa mga learning activities, quizzes , etc, kung wala naman silang internet connection hindi parin natin magagamit yun mam, nagiging problema pa rin yun kasi mam, kaya hindi naman po nating pedeng sabihin na kung ang faculty ang may problema kundi pati na rin mga studyante.”

Research over the last ten years suggested that in order for technology integration to be fully accepted in the classroom, the teacher needed to be a key stakeholder in the adoption process and to help create the active learning process that will allow technology to take root and grow as an indispensable tool of education (e.g., Arrowood et al., 2010; Ertmer et al., 2012; Vannatta & Banister, 2009). Both theoretical and practical research has focused on teacher beliefs (Dexter & Anderson, 2002; Hadley & Sheingold, 1993) in order to pinpoint how technology is integrated effectively into the classroom

Instruction

This dimension of instructional technology had an area mean of 4.34 qualitatively described as “very satisfactory”. The highest indicator in this dimension is the use of Learning Management System (LMS) tools and application, or other technological resources available in teaching with a mean of 4.40, qualitatively described as “very satisfactory” while the lowest was to encourage students to use technology and other online resources to answer class activities and explore concepts for learning with a mean of 4.33, qualitatively described as “very satisfactory.” The findings in this dimension imply that the use of technology is made available and used by teachers to explain contents and concepts and to engage students in learning to meet the instructional goals.

Teachers who believed that the process of technology integration was seamless described weaving technology tools into the curriculum using learning and teaching techniques to provide a scaffold. This finding was supported by what others have reported in the past (Hew & Brush, 2007; Vannatta & Banister, 2009). For example, Hew and Brush (2007) reported that teachers who were confident in their technology integration process were more likely to have developed procedures to facilitate technology seamlessly.

In spite of a very satisfactory rating on instruction with the use of technology, the results of the focus group discussion revealed that internet connectivity remains a problem in instruction with the use of technology.

There were major gains and gaps in the use of technology in schools (Tuck, 2004). Major findings of the study included the following (Tuck, 2004): most educators had access to computers, but student access in the classroom was limited; educators were involved in technology purchases, but still felt that upgrades and support were insufficient; educators were more familiar with educational technology, but were ill-prepared to use that technology for instructional purposes; training was inadequate to prepare and encourage integration in the classroom; gaps still existed based on demographics. Educator attitudes toward technology were variable over time (Faulter, 2011).

Professional Responsibilities

This dimension of instructional technology has an area mean of 4.40 with a qualitative description of very satisfactory. The highest indicator in this dimension is the use of technological gadgets as well as emails and social networking sites as tools for communication to update/ inform students of upcoming assignments, projects, and other forms of assessments with a mean of 4.51, qualitatively described as “very satisfactory.” On the other hand, the indicator that arose with the lowest mean was to monitor and supervise students’ performance regularly through the use of technology extending assistance in their lesson difficulties and encouraging the sustenance of their good academic performance with a mean of 4.37, although qualitatively described as “very satisfactory”. It can be inferred that teachers generally engaged themselves with the use of technology with their “very satisfactory” assessment of their professional responsibility, especially in the use of technology in teaching and in order to assist, supervise, and monitor students’ performance.

Professionals who have embraced the power of new technologies and embrace them will do much better than those who may be technically good at their work but have not understood that the world is doing things fundamentally differently (Shukla, 2018).

Sustainable and appropriate adoption and integration of technology were necessary for the engagement and success of the 21st century, school policies and the attitudes of administrators and teachers must allow for the new technology paradigm shift to take place. This shift requires teachers to have appropriate professional development and continued support necessary to increase relevant knowledge and self-efficacy which is integral to technology integration (P. A. Ertmer and A. T. Ottenbrei, 2010.)

Markedly, however, there were some teachers who were not much engaged in the use of technology-based on the quantitative data which was then discussed in the FGD as follows:

I think hindi kami ang least kasi I used technology as an aid in my grading system I used Excel and I used SIAS record, the MS Teams, or google classroom, I do not know kung sino dito ang nagrate ng mababa, although hindi naman masyado compared sa rating ng other colleges, baka nga wala namang significant difference eh with other colleges, I even make use of my excel to rate my students' performance, so yung result po ng rating, this would not personally affect with my experience, siguro yung mga senior na sa college

Research has shown that teachers were hesitant to adopt curricular or instructional innovative changes. Technological changes present unique challenges due to their own constantly changing nature which leaves many teachers feeling uncomfortable with technology due to their own personal lack of knowledge, existing attitudes concerning technology, and low self-efficacy (P. A. Ertmer and A. T. Ottenbrei-leftwich, 2010).

Problem: 3. Is there a significant difference in their organizational agility and instructional technology skills among faculty of the different colleges of Nueva Vizcaya State University - Bambang Campus?

It can be seen in Table 3 that there was no significant difference in the respondents' assessment of organizational agility as shown in the computed F-value of 1.97 which was lower than the critical F value of 2.43. Hence, there was no significant difference in the organizational agility of B, C, D, and A. This led to the acceptance of the null hypothesis.

Table 3

Summary of F-Test computation on the respondents' assessment on organizational agility

Groups	Mean	Computed F-value	Critical F Value	Remarks
B	3.34	1.97	2.43	Not Significant
C	3.72			
D	3.76			
A	3.70			
Degree of freedom = 4+163		Level of significance: 0.05		

It can be inferred from Table 3 that the organizational agility of faculty members of the university was of the same level regardless of the college they belonged. This means that the ability of the faculty members grows and survive in a competitive environment in which changes were perpetual and unpredictable and require quick responses to volatile environments were the same.

Studies have shown that organizations with strong structure, governance, and process foundations can add dynamic capabilities like resource allocation, decision delegation, or collaborative team structures to increase their ability to be agile in the organization. (Aghina, De Smet, & Weerda, (2015).

As illustrated in Table 4, there was a significant difference in the respondents' assessment of instructional technology skills as shown in the computed F-value of 6.99 which is higher than the critical F value of 2.68. This indicates that there was a significant difference in the instructional technology skills of B, C, D, and A. Hence, the null hypothesis was rejected.

Table 4

Summary of F-Test computation on the respondents' assessment on instructional technology skills

Groups	Mean	Computed F-value	Critical F Value	Remarks
B	4.12			
C	4.47	6.99	2.68	Significant
D	4.74			
A	4.17			

Degrees of freedom = 4+163

Level of significance: 0.05

It could be inferred from the above table that the instructional technology skills of faculty of the university vary in colleges. This means that the practice/s of using technology in teaching differed among colleges and this encompassed their planning and preparation, classroom environment, instruction, and professional responsibilities.

Training of technology skills, new and old, has remained a strategic factor for the success of technology integration (Boud & Hager, 2011; Loveland, 2012; Potter & Rockinson-Szapkiw, 2012). Reigeluth (2011) emphasized the importance of supporting educators' technology integration needs with professional growth, training opportunities, and continuous support from technology specialists.

As Uslu and Bumen (2012) have consistently contended, integration does not occur overnight and it was through ongoing technology mentoring or coaching that educator were able to acquire the needed skills and ability for best practice (Hayes & Noonan, 2008; Sawchuk, 2010).

Table 5 unveils the respondents' assessment of instructional technology skills in pairwise comparison. Markedly, B and D, as well as D and A, surfaced as significant with the computed values of 16.14 and 12.93 respectively, which were higher than the critical value of 8.03. This denotes that there were significant differences in the assessment of instructional technology in the two paired comparisons of B and D as well as D and A. Thus, the null hypothesis was rejected in this regard.

Table 5

Summary of Scheffe Test pairwise computation on the respondents' assessment of instructional technology skills

Pairwise Comparison	Computed Value	Critical Value	Remarks
B and C	6.88		Not Significant
B and D	16.14		Significant
B and A	0.11	8.03	Not Significant
C and D	3.26		Not Significant
C and A	4.74		Not Significant
D and A	12.93		Significant

Degrees of freedom = 4+163

Level of significance: 0.05

The data on the table implies that D assessed themselves higher in instructional technology among other colleges, especially with B having the least assessment rating in all components of instructional technology. This further implies that D manifested a high extent in the utilization of technology in teaching compared to B.

It could be inferred that D offers programs where technological abilities and resources are a requisite. On the other hand, B as a service college assessed their instructional technology skills with the least mean considering the nature of its general education programs where it can be flexible in its pedagogical approaches. Besides, the college adapts its teaching and technological resources based on the availability, accessibility, and skills of students across courses.

Similarly, D also assessed their instructional technology skills higher than A. Closer scrutiny on the assessment of indicators on instructional technology skills indicated that apart from B, A assessed their instructional technology skills lower than other colleges. Details of the assessment on instructional technology of A further reveal that in all components of instructional technology such as planning and preparation, classroom environment, instruction, and professional responsibilities, assessment arises with the least mean next to B.

It could be inferred that A, known for their expertise in the field of teaching might have assumed that there was much yet to be learned to be effective with the use of technology in teaching.

On the other hand, other paired comparisons among other colleges in this dimension arose as not significant as shown in their computed values which were lower than the critical value of 8.03.

The disparity existed between the current availability and utilization of Information and Communication Technology resources for instructional purposes in the classrooms of United States schools. Despite evidence to identify the benefits of ICT integration in the classroom and significant investments in ICT for the classroom, integration currently occurred at limited rates. Understanding the integral role of the classroom teacher in the integration of ICT to support best practice teaching, it is critical that professional development be utilized in its most powerful and effective form to equip, empower, and encourage teachers to integrate ICT into their daily curriculum using best practice teaching methods (Faulter, 2011).

Problem 6. Is there a significant relationship between organizational agility with instructional technology skills?

Table 6 illustrates that the computed correlation coefficient of 0.3398 was higher than the critical r-value of 0.147 at a 0.05 level of confidence with 125 degrees of freedom. This led to the rejection of the null hypothesis. There existed a significant yet weak relationship between organizational agility and instructional technology skills.

Table 6

Summary of Correlation between the respondents' assessment on the relationship between organizational agility and instructional technology skills (n=127)

Variables	Correlation Coefficient	Critical r-value	Coefficient of Determination	Remarks
Organizational Agility	0.3398	0.147	11.55 %	Significant
VS	Weak Relationship			
Instructional				

Technology Skills

$\alpha = .05$

It could be deduced that organizational agility can predict instructional technology skills at about 11.55 %. The rest of the features of instructional technology skills could only be projected by factors other than organizational agility. This simply means that 11.55 % of the variance in instructional technology skills could be explained by the variance of organizational agility.

It could be construed that organizational agility and instructional technology skills interrelated with each other reflecting interaction of the university's ability to detect and respond to opportunities and threats with ease, speed, and dexterity and the faculty's practice of the use of technology in teaching in order to provide more opportunities for collaboration and better capabilities for its target clientele- the learners.

Research on the impact of Information Technology (IT) on agile adoption has been widely conducted, and almost all IT dimensions supported the achievement of Organizational Agility (OA), Leonhardt, D. et al. 2016).

The relationship between IT and organizational agility was examined by a number of authors, but the research seems scattered in several aspects: First, the impact of IT on organizational agility is a controversial issue (Lu and Ramamurthy, 2011). The majority of studies argued or found empirical evidence for a positive influence of IT on organizational agility (e.g., Lu and Ramamurthy 2011; Rai and Tang 2010; Roberts and Grover 2012), because IT should enable and facilitate flexible processes and innovation by building digital options (Chen et al. 2014; Sambamurthy et al. 2003; Tallon 2008). However, there were also arguments that IT impedes organizational agility, since information systems may introduce rigidity and inflexibility (van Oosterhout et al. 2006; Overby et al. 2006). Second, the concepts of IT largely differed from study to study. While some researchers examine IT capabilities (e.g., Lee et al. 2015), others include IT resources (e.g., Lu and Ramamurthy 2011). Third, the construct and definition of organizational agility were not consistent. It could be seen from a more strategic point of view on a firm level (e.g., Kharabe et al. 2013), but also from an operational viewpoint on a process level (e.g., Lee et al. 2009). Fourth, attributes of the study, such as the underlying methodology, might influence the results. Therefore, it would be beneficial to resolve that contradiction by a summary of existing research on the relationship. Moreover, since organizational agility is ever more important during the digitization of products, services, and business processes, what is sought to be enhanced is the understanding of the relationship between IT and organizational agility while contributing to future research and theory development.

Organizational agility is typically conceptualized as a higher-order dynamic capability, and therefore as an immediate antecedent of business performance (Lee et al. 2015; Sambamurthy et al. 2003). IT capabilities are widely characterized as lower-order capabilities which shape the development of higher-order capabilities, thus being an enabler for organizational agility (Chakravarty et al. 2013; Lu and Ramamurthy 2011).

Based on the results of the study by Heydarabadi (2018), information technology infrastructure and information technology human resources have a positive and significant impact on organizational agility. Findings further indicate that information technology resources through organizational agility have a positive and significant impact on competitive advantage,

In another study, findings in relation to organizational readiness were interesting, since this variable was found to be highly correlated with most other variables such as Digitalization, Need for Change, Leader Effectiveness, and Expectations from Leaders. This means that "readiness" was perceived to transcend well beyond technological readiness into the realm of organizational culture and new mindsets and leader behaviors. The "readier" the organization was perceived to be for digital transformation, the greater was the need felt for cultural change and for embracing conducive leadership behaviors. This is good news for leaders at the top who are driving change. (SMU, 2018)

Results of this study derived from quantitative and qualitative data revealed that the respondents assessed the university's strengths along with organizational agility and instructional technology skills with a very satisfactory rating. Various colleges generally share similar assessments of organizational agility. A correlation existed between organizational agility and instructional technology skills. With these findings, a webinar was designed along with organizational agility and instructional technology skills as a management intervention to address the findings of the study.

Conclusions

In view of the findings, the following conclusions were drawn:

1. The respondents assessed organizational agility as "very satisfactory".
2. The respondents assessed instructional technology skills as "very satisfactory".
3. There were no significant differences in the respondents' assessment on organizational agility among colleges, while there existed significant differences in instructional technology.
4. There was a significant relationship between organizational agility with instructional technology skills.
5. Based on the salient findings, a webinar on organizational agility and instructional technology skills was offered as a management intervention.

Recommendations

Based from the findings and conclusions of the study the following recommendations are offered:

1. University faculty members have to strengthen their organizational agility in terms of tolerance through the creation of an organizational culture manifesting strong family ties where the spirit of cooperation is in place. As the university establishes the spirit of oneness regardless of one's college or department, then tolerance to face changes within the organization is no longer a problem because employees are being supported by the administration and their colleagues.

2. In this time of pandemic situation, the use of instructional technology is very important most especially on the part of students. It is a fact that there were some students in the institution who were not so well versed with the new platform of instruction. To address this concern, the student council may conduct online seminar training for students in relation to the use of new technology (online resources) in the delivery of instruction and submission of activities. Moreover, on the part of the professors, they may provide challenging yet interesting student activities with detailed instructions on how to accomplish tasks through the use of online resources within the reach of their students.

4. It is highly recommended that deans and program chairs, through the ICD had to initiate a seminar workshop on the technology literacy of faculty. The faculty's practice of the use of technology in teaching is encouraged since this would provide more opportunities for collaboration and developed abilities for its target clientele. Furthermore, mentoring of faculty in this aspect may be considered.

5. It is recommended that the proposed webinar on organizational agility and instructional technology would be implemented for faculty members to respond to opportunities and threats with ease, speed, and dexterity. This would also develop their commitment to shifting the organization's culture to shape policies, processes, behaviors, values, and beliefs.

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