VNU Journal of Science: Education Research, Vol. 38, No. 4 (2022) 31-43

VNU Journal of Science: Education Research

Journal homepage: https://js.vnu.edu.vn/ER

Review Article

Online Learning for Vietnamese Hospitality and Tourism University Students During a Time of Covid-19

Justin Matthew Pang[1], Wil Martens[2,*], Bui Ngoc Minh Chau[1]

[1]*Royal Melbourne Institute of Technology University, Handi Resco Building, 521P Kim Ma, Ngoc Khanh, Ba Dinh, Hanoi, Vietnam*
[2]*National Sun Yat-Sen University, 70 Lianhai Rd, Gushan, Kaohsiung, Taiwan*

Received 07 July 2022
Revised 15 November 2022; Accepted 15 November 2022

Abstract: Online learning increased in prominence during the Covid-19 pandemic. Hospitality education programs were not unique in their transition to online learning nor their incorporation of online instruction via learning management systems (LMS); there was, however, a pedagogical disconnect as hospitality and tourism education has historically been more task-oriented and centered on face-to-face interaction. This study aimed to identify Vietnamese hospitality and tourism students' perceptions of their engagement in the LMS. Survey evidence revealed that students in hospitality and tourism programs with prior internet experience adapted more quickly. Although the majority of students agreed that online education facilitated remote study, they still preferred engaging in face-to-face sessions. Results additionally revealed that students believed that online learning would become a vital part of the future hospitality and tourism curricula. Thus, satisfaction with online learning is contingent upon the topic matter and the lecturer's application and teaching talents. Findings herein have a variety of practical and theoretical consequences, notably through the theoretical distance theory, which demonstrates that results converge.

Keywords: Vietnam, Covid-19, Students, Online learning, Hospitality, Theoretical distance theory.

1. Introduction

1.1. Use of Technology Educational Institutions During Covid-19

Technology continues to evolve to accommodate the changing needs of students and the instructional environment [1]. One of the ways education is changing is through the use of learning platforms called 'Learning Management Systems (LMS). These platforms host numerous functions ranging from synchronous and asynchronous content, video creation, discussion boards, assessments and grading, and other features [1, 2] These platforms come across as a one-stop teaching tool; hence they have been readily adopted by institutions of higher learning. With the onset of

* Corresponding author.
E-mail address: wilmartens@cm.nsysu.edu.tw

https://doi.org/10.25073/2588-1159/vnuer.4692

the Covid-19 pandemic, there has been a greater need for online education. Educational institutions have to close their physical campuses and move learning to an online mode.

1.2. Online Learning in Vietnam

The Vietnamese government has acknowledged that technology is the way forward for the country and is the priority on their national agenda. Since the introduction of "Doi Moi", a series of economic and political reforms, the country has become a "socialist-oriented market economy" [3]. Part of their effort is to raise the nation's citizens' educational levels via technology in their pedagogy systems [4].

Currently, Vietnam is undergoing the "Fourth Industrial Revolution", and the southeast Asian nation's government is preparing its people to adapt to the global economic changes, especially in the area of tourism, which is one of the key strategic thrusts of the country [5]. In educational institutions offering hospitality, authentic and real-live learning is often supported by the internet - which the government has made affordable for the country so that the people can access information and build a knowledge-driven economy and workforce [3]. According to [4], universities in Vietnam are increasing their use of online learning platforms. One case study highlighting this increased use of online learning was Ho Chi Minh City Open University, where students spend 90 percent of their studies online and 10 percent on campus. Research has shown inter alia, that the usage of a variety of learning models can result in increased academic achievement, desirable behavioral changes, and engagement and motivation [6].

To support the government's aim to prepare the country for the future, colleges offering hospitality and tourism pro-grams have increased their online learning modules. RMIT University - Vietnam is an example of this. Students enrolled in the university's Bachelor of Tourism and Hospitality program are required to complete two mandatory online courses as part of their curriculum. However, the hospitality industry is usually seen as manual intensive and skilled-based with verbal interaction between staff and customers. Moreover, having had a late adaption to technology, the younger generation has viewed the hospitality industry as technologically adverse [7]. Therefore, this study inves- tigates Vietnamese hospitality and tourism students' view of their online experience when the Vietnamese government mandated all subjects to be delivered through an LMS during the Covid-19 pandemic lockdown in 2020.

1.3. Purpose of the Study

This study aims to understand the views and perceptions of Hospitality and Tourism Vietnamese university students toward online learning through an LMS platform during the Covid-19 pandemic. This study will grant insight into the use of online teaching in relation to hospitality and tourism subjects, which are generally seen as being hands-on, team-based, and associated with being sociable. Moreover, learning online during the Covid-19 pandemic reinforces the solo nature of online learning, where students cannot physically meet fellow peers face-to-face. Lastly, this study will also give educational institutions a sense of whether they should continue to pursue an online teaching mode, especially in the best interest of their hospitality students' learning when the pandemic ends.

The remainder of this paper is organized as follows. Section 2 introduces fundamental concepts from transactional distance theory and their application to learning platforms. Section 3 reviews the literature and discusses the study's design. Results and discussion then follow. This study concludes with a discussion on research limitations and direc-tions for future research, as well as theoretical and practical contributions.

2. Theoretical Framework and Literature Review

2.1. Transactional Distance Theory

The use of learning management systems is examined through the theoretical lens of transactional distance theory [8]. Transactional distance theory (TDT) is well known and widely accepted theory in education [9]. In TD, a psychological and linguistic gap and a possible gulf between the instructor's and the learner's inputs must be navigated [8].

Three components comprise TD: student-student, student-teacher, and student-content interaction. Transactional dis-tance reduces with the increased quantity and quality of these encounters [10]. The transactional gap between the teacher and the students shows how well the teacher engages the students. Disengaged students who are not en- couraged to become active learners build a substantial transactional gap, whether next to the teacher or across town. Instilling in students a feeling of responsibility for and dedication to their learning closes the transactional gap, and no one feels separated from each other or the source of knowledge. Students can benefit from more involved and successful learning experiences in the learning environment when their perception of transactional distance decreases [11].

Fostering a feeling of community in students who have difficulty accessing learning management systems reduced the TD they sensed. [12] state TD is the single most important predictor of satisfaction. TD in online distance learning will always depend on technologically mediated communication or interaction. We, therefore, suggest that learning management features be emphasized to grasp content and satisfaction.

2.2. Learning Management System (LMS)

Most institutions employ LMSs to help assist their online pedagogical delivery [13]. Most LMSs have common func- tions: course content availability, communications and student assessment tools, grade book, and the ability to manage course materials and activities. The course content allows faculty to upload content materials and syllabi. The com- munication tool includes emails, discussion boards, and chat rooms. In terms of assessments, the LMSs allow the faculty to upload and administer quizzes and examinations, enabling students to take these tests at any location. The system also allows the student to review their performance and information pertaining to the grades and comments given. This information can be done from virtually anywhere and at any time. Student access is similar to the posting and uploading process, where students can log onto LMS from any location or at any time [14].

2.2.21. Attributes of LMSs

Prior studies provide an understanding of how information is utilized [15]. A comparison of the benefits and drawbacks of online learning via an LMS system against traditional pedagogy for hospitality and tourism disciplines is provided to enhance comprehension. The following factors contribute to the advantages of online learning: i) Cost-effectiveness; ii) Productivity improvements; iii) Customized 24/7 learning; iv) Content being more timely; v) Reliable and scalable; vi) Risk-free environment; vii) Interactive and community building; viii) Traceability; ix) IT skills; and x) Storage of content and knowledge [16]. In terms of cost-effectiveness, it was cited by [17] that the University of North Carolina, Charlotte, managed to save US$5 million by investing in an online learning system rather than in a traditional brick- and-mortar business. Online learning is a constant stream of synchronous and asynchronous communication [18]. This enables feedback to be quicker and more efficient due to its customized 24/7 access, [19] cited that online learning enables students to obtain information from the LMS and learn at any time and anywhere. This form of learning is also credited with being self-paced and personalized. A student can choose as and when to study with greater control. The learning curve is also 60 percent faster, with retention rates of between 26 - 60 percent more than traditional methods of an educator-led course

[20]. Content being more timely, reliable, consistent, and scalable implies that content material can be updated quickly, making it more accurate and valuable over time. Furthermore, as all students across different classes and tutors have access to the same material, it is easier to ensure consistency and comply with teaching standards. According to [21], this adherence to standards enables traceability, maintaining regulations and standards. Given that most forms of online learning are delivered electronically with a pre-conceived set-up, the number of students can be increased at marginal cost without affecting the teaching quality and the need for added resources, i.e., classrooms. In terms of having a risk-free environment, students who take an online course are usually placed in a situation where they can better express themselves, thus increasing their confidence [20, 22].

In terms of having greater interactivity and community building, LMSs enable people to build communities where they can share knowledge and insights. A study by [23] found that students in an online learning community obtained better grades, had significantly higher peer contact, and had a greater understanding of the teaching material than in classes with traditional teaching. As for traceability, [22] noted that traceability gave educational administrators the ability to measure the effectiveness of online learning programs, thus enabling the evaluation of cost-effectiveness and being able to keep track of individual students' skills, competencies, and grades. As for IT skills, students who lack the necessary IT skills or are unfamiliar with standard IT knowledge will not find it challenging to handle the LMSs as most are simple to comprehend and straightforward in terms of navigation and use. This process will enable students to improve their computing skills' proficiency [19]. Electronic content can be stored, duplicated, and distributed in terms of storage of content and knowledge. This ability to accumulate knowledge, be it conversational threads through electronic means or discussions made online, can be used as a reference point for grading and learning in the future [24].

There are also disadvantages when educational institutions employ LMSs to assist in teaching. The weaknesses high- lighted are as follows: i) Heavily reliant on self-discipline; ii) High initial investment; iii) Difficulty and costly to support with content; iv) Suitability to training; v) Suitability to the student-subject type; vi) Cultural resistance; and vii) The lack of interaction. The need for self-discipline is an essential aspect of online learning as this process often takes place away from the institution, i.e., at home. It is heavily dependent on the motivation and self-discipline of the student. It has been noted that online courses had a higher dropout rate than face-to-face learning 25-27]. Another disadvantage would be that of the initial investment. Although online learning will be more cost-efficient in the long run, the initial cost is usually relatively high, as infrastructure would need to be installed. The build-up of an LMS and its content is also long and tedious. It has been cited by [28] that it takes considerably more time in the development process than in the contact-hours of technology-based teaching. There might also be hidden costs involved in the other aspects of technical support of online learning. [20] and [19] highlighted that online learning might not be suited for more hands-on subjects with a strong emphasis on peer review and collaboration, strategy, team-building, and com-munications training, presentation, and social skills. Students not conversant with the right IT skills might find online learning challenging. It has also been implied by [29] that online learning might be more suitable for students who already have the right skill-sets compared to students who are at a lower academic level and are uncomfortable with an LMS platform. [30] and [20] also note that students whose learning styles are either auditory or kinaesthetic might not benefit as much as those who learn more through visual means. It has also been noted that cultural resistance does play a part in the usefulness of LMSs. Cultures that are more susceptible to

technology and with a high internet penetration rate can cope with online learning compared to countries with lower technology usage and the internet [31]. Lastly, it has been highlighted by the [32] that online learning creates learning in silos. This implies that there is a lack of interaction amongst students.

2.3. Gen Z Students

The current students studying for a university degree are between 18 and 21 years old. They are usually born between 1997 - 2000 and are considered "Gen Z"[1]. The characteristics of "Gen Z" according to [33] are as follows. They are generally mindful, open to new ideas, and willing to try new experiences. They are also known as the generation with internet technology readily available at a young age [34]. Being very adept at technology, they are known to spend more than three hours per day using computers other than for schoolwork [35].

Investigating Gen Z's impressions makes various contributions. First, academics might use the findings to increase our understanding of generational differences [36]. Second, use of this knowledge to help students get a greater understanding, enthusiasm, and productivity [37]. Thirdly, a greater understanding of student perceptions enables academic institutions to market classes and majors more effectively, thereby increasing interest in specific programs [38].

3. Methodology

To better understand how Vietnamese hospitality students viewed online learning, a hybrid model of quantitative and qualitative questions was administered to 131 hospitality students from an international university in Vietnam. These students recently completed an online hospitality subject, i.e. "Service Management". The 15 quantitative questions follow [39] and use a 5-point Likert scale based on "Strongly Agree", "Agree", "Neutral" "Disagree", and "Strongly Disagree". The qualitative section, which is based on four questions, enabled students to give feedback on the subject offering in terms of its relevance to the industry and the difficulties in engaging and optimizing the LMS. The 4 quantitative questions were clustered two different sub-headers, in relation (1) their inclination toward the use of the LMS during the Covid-19 pandemic and (2) the applicability of the LMS in terms of its content and its relevance to the hospitality industry.

A total of 108 of the 131 students completed the survey, i.e., 82 percent of the cohort. The online survey was adminis-tered to sophomore and senior hospitality and tourism students who are well aware of the hospitality trade and have had at least one year of academic grounding. Therefore, this survey is relevant and valid, given the students' understanding of the needs of the industry. Survey questions and results are shown in Table 1.

4. Results and Findings

4.1. Quantitative Findings on LMS Use

Survey questions attempted to gauge the perceived receptiveness of the use of LMS. Students rated the LMS's ability to transmit the subject's content, its effectiveness as a teaching and assessment tool, and the ability to engage and stimulate student interaction during the Covid-19 pandemic. In terms of its manageability, all students could manage and navigate the system with few challenges. About 83 percent of the students agreed that remotely learning was an incentive. Most students also felt the LMS could support the illustration of examples and best practices from the industry. They could also participate in most activities, including postings, quizzes, voice-over videos, and other synchronous activities. They could also effectively download information from the LMS, i.e., files, videos, and other content material. However, despite the above, many students (88 percent) preferred face-to-face instruction, despite the system offering synchronous meetings via the internet with video functions. Regarding the ability to submit their assignments online, about 94

percent of students managed the plagiarism software system "Turnitin" to submit their assignments. In terms of the learning aspects, most students were highly adaptable. Eighty-eight percent of the students felt that the online subject allowed them to learn remotely and independently. This online learning process also reinforced students' ability to develop thinking skills and apply problem-based learning, with 89 percent of students acknowledging this. The ability to work in teams was not favorable, with only 29.6 percent agreeing to its usefulness.

Table 2 provides additional data on survey results by gender, specifically, question means scores and standard deviation for further analysis. Results are further illustrated via histograms in Figure 1. Gender-separated results showed that females felt greater positivity towards the use of the LMS. The mean female score was 3.9 with a standard deviation of 0.9, whereas male scores were 3.4 and 0.9, respectively. Questions four through seven scored the highest among female participants, which address the content presentation and the LMS's convenience. However, both female and male participants felt that the LMS was not pairwise well suited for teamwork (mean score of 2.6 for females and 2.0 for males). According to all participants, the *"ability to work in teams"* aspect of the LMS was particularly poorly designed, as the overall score for this question was 2.4, the lowest of any question in the survey.

Male participants felt the organization of information and the independence afforded them due to the LMS was the online platform's greatest strength, with each aspect scoring 3.9 on the Likert Scale.

Table 1. Likert scale rating of the use of the online platform, LMS by Vietnamese Hospitality and Tourism

Sample	size = 108	5-point Likert Scale				
		Strongly Agree	Agree	Neutral)	Disagree	Strongly Disagree
		(5)	(4)	(3)	(2)	(1)
Q1	Have a clear understanding of the aims of the subject through the online platform	26	60	8	9	5
		24.07%	55.56%	7.41%	8.33%	4.63%
Q2	Able to understand the sub-ject contents through the online platform	27	54	5	22	0
		25.00%	50.00%	4.63%	20.37%	0.00%
Q3	The online platform topics were organised to help the under-standing of the subject matter	24	72	4	8	0
		22.22%	66.67%	3.70%	7.41%	0.00%
Q4	The use of the through the on-line platform system was man-ageable	23	75	0	10	0
		21.30%	69.44%	0.00%	9.26%	0.00%
Q5	The online subject is able to align practical realism	14	56	13	21	4
		12.96%	51.85%	12.04%	19.44%	3.70%
Q6	The content of the through the online platform was presented clearly	33	53	0	8	14
		30.56%	49.07%	0.00%	7.41%	12.96%
Q7	Assessing the online platform from a geographical distance from campus was an added con-venience	27	65	4	8	4
		25.00%	60.19%	3.70%	7.41%	3.70%
Q8	The online platform allowed the use of examples and illustra-tions	23	59	0	26	0
		21.30%	54.63%	0.00%	24.07%	0.00%
Q9	In the online platform, there were opportunities to partici-pate in activities (blogs, discus-sions etc.) during this pandemic	18	64	0	22	4
		16.67%	59.26%	0.00%	20.37%	3.70%
Q10	There is a preference to have face-to-face instructions instead of using the online platform, even during the pandemic	48	32	23	5	0
		44.44%	29.63%	21.30%	4.63%	0.00%

Q11	The learning resources and pre-sentation on the online platform was useful	18	76	0	14	0
		-27.80%	-55.60%	-16.70%	0.00%	0.00%
Q12	The assessments were easy to use and submit on the online platform	20	62	17	9	0
		18.52%	57.41%	15.74%	8.33%	0.00%
Q13	The use of the online platform gave granted greater indepen-dence to learning	18	70	8	8	4
		16.67%	64.81%	7.41%	7.41%	3.70%
Q14	The use of the online platform allowed greater critical thinking	19	41	13	27	8
		17.59%	37.96%	12.04%	25.00%	7.41%
Q15	The use of the online platform allowed good team-work with fellow students	0	32	8	41	27
		0.00%	29.63%	7.41%	37.96%	25.00%

Table 2. Question scores by gender

	Female		Male		All	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Q1	4.1	0.8	3.3	1.3	3.9	1.0
Q2	4.1	1.0	3.2	1.0	3.8	1.0
Q3	4.1	0.7	3.9	0.8	4.0	0.7
Q4	4.2	0.7	3.7	0.7	4.0	0.8
Q5	4.2	0.7	3.7	0.7	3.5	1.1
Q6	4.2	0.7	3.7	0.7	3.8	1.3
Q7	4.2	0.7	3.7	0.7	4.0	1.0
Q8	3.7	1.0	3.2	1.2	3.7	1.1
Q9	4.1	1.1	3.0	1.4	3.6	1.1
Q10	3.8	0.9	3.2	1.3	4.1	0.9
Q11	4.0	0.9	3.7	0.7	3.9	0.8
Q12	3.9	1.0	3.9	0.4	3.9	0.8
Q13	4.0	0.7	3.4	1.2	3.8	0.9
Q14	3.5	1.3	2.9	1.1	3.3	1.2
Q15	2.6	1.2	2.0	1.0	2.4	1.2
Mean	3.9	0.9	3.4	0.9	3.7	1.0
Min	2.6	0.7	2.0	0.4	2.4	0.7
Max	4.2	1.3	3.9	1.4	4.1	1.3
Total participants in the study were 108. Female participants were 74 (68.52%), and male participants were 34 (31.48%).						

4.2. Qualitative Findings Relating to the use of the LMS

From the answers given and derived, keywords findings reflected that the students generally found the content topic relating to the industry manageable, and they were able to cope with the use of technology. Examples of the answers cited were "Content was easy to comprehend", and "Not difficult to play with the system", etc. Considering that the change-over from face-to-face to remote learning was almost immediate, with little transition time due to the urgency of the pandemic, most students had little trouble in managing the LMS. Most students were able to download content materials from the LMS and view the media content, such as the embedded hyperlinks leading to youtube.com videos and external web links. The students could also chat and use various functions with their peers and faculty staff via the synchronous face-time function. From the answers, the most frequently cited value-add from the online lessons was the ability to participate in the lessons without being physically "in class". Some students also felt that using technology allowed them to share and participate in a discussion without having to switch on their videos. Most students found the ability to replay the video advantageous for asynchronous narrated lectures.

In terms of the dislikes garnered from the qualitative answers, some students felt that using an LMS was dry and difficult to constantly concentrate on the screen (screen fatigue) compared to using the traditional delivery process, i.e., whiteboards. Although most students found the subject content easy to manage, some highlighted certain difficulties. Examples from citations from students include *"Quite challenging to comprehend"*, *"The whole module was in fact quite dry"*, *"The voice-over function only allowed one person to chat at a time"* etc. The most frequently highlighted drawback was that the subject was taught online and had minimal personal contact between peers and the academic staff, which resulted in many students disliking this mode of delivery. It was also noted that many students were not keen to switch their video on, despite encouragement from their lecturer.

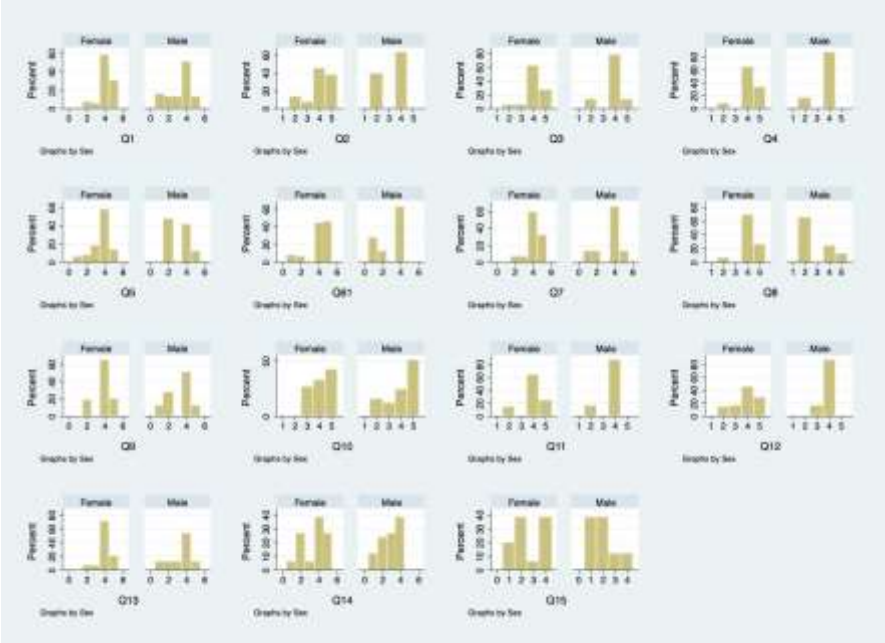

Figure 1. Histogram of responses by gender.
A score of 5 indicates "Strongly Agree", whereas a score of 1 indicates "Strongly Disagree".

5. Discussions

The collected data mixed attitudes among Vietnamese university students, commonly known as the Gen-Z generation, studying hospitality and tourism, to the use of technology in teaching hospitality during the Covid-19 epidemic. Ac-cording to [40], Vietnamese students in higher education lack computer and information literacy. Despite Vietnam's high internet penetration rate of 67 percent [41] and the government's attempt to integrate information literacy into school curricula [42], many Vietnamese hospitality students remain uneasy with online learning. Additionally, the rapid and abrupt transition from a classroom environment to an online teaching method in response to the pandemic may have added to the students' confusion and unease. Despite the LMS's simultaneous voice-over capabilities, up to 88 percent of survey respondents stated that they would prefer face-to-face connection with their instructors. Accord-ing to research by [43], students who interacted with instructors face-to-face reported higher levels of satisfaction than those who engaged in online learning. This finding is at odds with [23]'s findings.

This study additionally demon- strated that students were usually familiar with the LMS and considered it simple to operate the computer-assisted tool. One probable explanation for this contradiction is the nature of the students' studies. Soft skills and service are frequently connected with the hotel and tourist industries. According to [44], this business focuses on manual labour and is frequently referred to as semi-skilled [45]. As a result, many students believe that the hospitality business is unrelated to technology, resulting in an aversion to computer use. Another explanation might be the way the hospitality students' curriculum is structured. The majority of educational institutions in Vietnam that provide hospitality and tourism courses place a premium on traditional classroom and lecture sessions, with only a few online learning disci-plines. This lack of emphasis on online education may have detrimental effects on students' attitudes about technology.

From the data gathered, it is postulated that the students who felt that online learning was beneficial were the ones who received prior technological training resulting in the necessary competency and affinity [46]. In this current study, students who did not appreciate the online learning subject could be due to several reasons. They could either be "computerphobic" or they might not be interested in the content matter of this subject or the industry. As stated earlier, a high percentage of responses indicated that this online subject was not useful (16.7 percent). This response could be indicative that since the students were second- and third-year students, and have had some form of exposure to the hospitality line, resulted in them having negativity towards joining the hospitality industry [47-49] or they did not appreciate the general nature of this subject, i.e. "Service Quality Management" which is laden with theories and concepts of service as compared to one which is more practical and hands-on such as Food and Beverage Management. Moreover, due to the sudden change from a classroom setting to an online lesson, students have been affected by the overall circumstantial pandemic. This could have resulted in an already adverse outlook towards online lessons and the LMS, even prior to the commencement of online teaching.

6. Limitations and Future Research

The result of the research does have certain limitations. The sampling is done from one university and a particular program, so generalizing the findings can be limited. Another limitation could be the experience and preparation time allotted to the lecturer in teaching an online course. The experience of the lecturer does have a significant impact on the student satisfaction outcome of the course. An experienced lecturer would be able to design better content and assessment suited for online delivery. One must also consider the allotment time given in the preparation of the

program and whether the online subject is a newly created or a re-run subject. Another limitation of this research would be the subject matter. The survey was based on a subject entitled "Service Quality Management. Being a relatively generic subject could have impacted the students" perceived understanding and satisfaction. Should the course have been a more "specific" hospitality subject, such as "Food and Beverage Management" there could have been different views and perceptions of using the LMS. Another limitation could be the level of study of the students. Students at different levels, i.e., first-year, sophomore, and senior, have different maturity levels and outlooks in the industry. Given that this subject is taken at the second and third year, the students have already undergone more than half of their required modules; hence their perception is different from that of freshmen students. Invariantly, this could also influence their outlook on the industry and the medium, i.e. the LMS by which the subject is taught.

There can be future exploration and study into the use of the LMSs and the perception of hospitality students. Firstly, this study can be applied to other universities and colleges offering hospitality and tourism programs. This will enable greater data robustness and confirm if there are similarities in the information collected. As highlighted, this study focused on a generic subject, Service Quality Management. If research could be conducted for other hospitality and tourism modules offering online learning within the university, this would further clarify the subject matter and the perception of online learning. Moreover, future comparative studies can be achieved by: i) Researching Information Technology or/General Business university students; ii) Other Higher Education university students, e.g., associate degree students; iii) University students from other countries, and lastly; and iv) During non-pandemic times. The conduct of these researches would indirectly insolate and determine the variable factor in university hospitality students compared to different students and times.

7. Conclusion

More institutions are embracing technology and LMSs to facilitate learning and internationalization, as it is convenient and considerably cheaper [17, 50] Globalization and distance online learning have also increased the hospitality workforce, with more students joining and professionalizing the industry. The two factors have led to increased student intake at the university levels and the use of technology in Vietnam.

From the results gathered, it can be seen that technology through an LMS is a two-edged sword. It enables learning to be more effective and efficient in cost and time savings by using new offerings in content, delivery, and assessments. Students with technical competency tend to benefit from this, as cited by [51]. However, on the flip-side, some students have given negative feedback on its delivery, i.e., lacking a personal touch. Adding to the above, other factors such as the content material and the lecturer's experience and ability to facilitate have a meaningful impact [52]. However, given that the current times are unpredictable with the spread of more Covid variants, it would be prudent for educational institutions to leverage more on technology and such LMSs. In the future, when the pandemic is over, universities should continue to encourage blended learning, i.e., a mixture of traditional and technological teaching to remain agile and keep their students technologically astute [53].

7.1. Theoretical Contribution

The findings of our study support theoretical distance theory. The theory suggests disengaged students will not be active learners and thus need strong student-content interaction. While survey results strongly support the desire for face-to-face interactive lessons, results also showed that many students felt the LMS was manageable. The manageability of course content facilitates student-content interaction and maintains student engagement.

7.2. Practical Contribution

Our study makes three practical contributions. First, our findings do not support the idea that women's perspectives on LMS are more diverse than men's but demonstrate the contrary. According to the data, the mean and standard deviation of female and male survey replies are similar. Thus, the need for gender-specific studies becomes moot in the LMS domain, as while responses vary, the aggregated replies do not deviate much from gender-separated results. Second, hospitality and tourism students require early exposure to technology to aid in self-learning. While the *computer phobia* diminishes with increased usage, providing students with greater access at a younger age enables students to facilitate self-learning more easily. Third, the increased online learning, which was stimulated as a direct result of Covid-19, will enhance comfort for future generations' LMS. However, student engagement with their peers remains an area in need of improvement. As such, LMS platforms should strive to improve their collaborative capabilities to enhance peer-to-peer learning and engagement.

References

[1] C. Dale, Carry on Talking: the use of Online Discussion Groups as a Learning Yool, LINK 8-E-Learning, 2003.

[2] J. Batey, Web Page Implementation and Cultural Change within a First Year Undergraduate Module, Journal of Hospitality, Leisure, Sport and Tourism Education, Vol. 1, No. 1, 2002, pp. 51-60.

[3] P. Vanham, The Story of Vietnam's Economic Miracle, In World Economic Forum, 2018.

[4] N. T. Dung, Vn Universities Offer E-learning to more Students, 2018.

[5] N. X. Phung, Vietnam's Education in the Context of the Fourth Industrial Revolution, Mar, 2019.

[6] J. L. Meece, E. M. Anderman, L. H Anderman, Classroom Goal Structure, Student Motivation, and Academic Achievement, Annu, Rev, Psychol, Vol. 57, 2006, pp. 487-503.

[7] A. Bull, The Economics of Cruising: An Application to the Short Ocean Cruise Market, Journal of Tourism Studies, Vol. 7, No. 2, 1996, pp. 28-35.

[8] G. Morgan, Faculty use of Course Management Systems, Volume 2, ECAR, EDUCAUSE Center for Applied Research Colorado, 2003.

[9] P. Gorsky, A. Caspi. A Critical Analysis of Transactional Distance Theory, Quarterly Review of Distance Education, Vol. 6, No. 1, 2005.

[10] R. Yılmaz, H. Keser, The Impact of Interactive Environment and Metacognitive Support on Academic Achievement and Transac-tional Distance in Online Learning, Journal of Educational Computing Research, Vol. 55, No. 1, 2017, pp. 95-122.

[11] A. M. Zhang, Transactional Distance in web-based College Learning Environments: Toward Measurement and Theory Construction, Virginia Commonwealth University, 2003.

[12] J. Weidlich, T. J. Bastiaens, Technology Matters-the Impact of Transactional Distance on Satisfaction in Online Distance Learning International Review of Research in Open and Distributed Learning, Vol. 19, No. 3, 2018.

[13] C. F Harrington, S. A. Gordon, T. J. Schibik, Course Management System Utilization and Implications for Practice: A National Survey of Department Chairpersons, Online Journal of Distance Learning Administration, Vol. 7, No. 4, 2004.

[14] W. M. Costen, The Value of Staying Connected with Technology: An Analysis Exploring the Impact of Using a Course Management System on Student Learning, Journal of Hospitality, Leisure, Sports and Tourism Education (Pre-2012), Vol. 8, No. 2, 2009, pp. 47.

[15] W. Martens, P. W. S. Yapa, M. Safari, The Impact of Financial Statement Comparability on Earnings Management: Evidence from Frontier Markets, International Journal of Financial Studies, Vol. 8, No. 4, 2020, pp. 73.

[16] Y. Kathawala, A. Wilgen, E-learning: Evaluation from an Organization's Perspective, Training and Management Development Methods, Vol. 18, No. 4, 2004, pp. 501.

[17] M. R. Markovic´ et al., Advantages and Disadvantages of E-learning in Comparison to Traditional forms of Learning, Annals of the University of Petros¸ Ani, Economics, Vol. 10, No. 2, 2010, pp. 289-298.

[18] D. Keegan, The Future of Learning: From Elearning to Learning, 2002.

[19] E. Pollard, J. Hillage, Exploring E-learning, Institute for Employment Studies Brighton, 2001.

[20] T. A. Urdan, C. C. Weggen, Corporate Elearning: Exploring a New Frontier, 2000.

[21] S. Paling, Thresholds of Access: Paratextualily and Classification, Journal of Education for Library and Information Science, 2002, pp. 134-143.

[22] H. Block, B. Dobell, The E-bang Theory, Bank of America Securities Education, 1999.

[23] J. Schutte, Virtual Teaching in Higher Education, Recuperado en Marzo, Vol. 15, 1996.

[24] P. E Bierly, E. H. Kessler, E. Christensen, Organisational Learning, Knowledge and Wisdom, Journal of Organizational Change Management, 2000.

[25] F. B. King, A Virtual Student: Not an Ordinary Joe, The Internet and Higher Education, Vol. 5, No. 2, 2002, pp. 157-166.

[26] S. Y. Chyung, Systematic and Systemic Approaches to Reducing Attrition Rates in Online Higher Education, American Journal of Distance Education, Vol. 15, No. 3, 2001, pp. 36-49.

[27] C. K. Lim, Computer Self-efficacy, Academic Self-concept, and other Predictors of Satisfaction and Future Participation of Adult Distance Learners, American Journal of Distance Education, Vol. 15, No. 2, 2001, pp. 41-51.

[28] A. Sadik, S. Reisman, Design and Implementation of a Web-based Learning Environment, The Perfect Online Course: Best Practices for Designing and Teaching, Charlotte, NC: Information Age Publishing, 2009, pp. 179-200.

[29] T. M. Nisar, Organisational Determinants of E-learning, Industrial and Commercial Training, 2002.

[30] C. Beard, J. P. Wilson, R. McCarter et al., Towards a Theory of E-learning: Experiential E-learning, Journal of Hospitality, Leisure, Sport and Tourism Education, Vol. 6, No. 2, 2007, pp. 3-15.

[31] I. J. Ojeaga, V I. Igbinedion, Potentials of E-learning as a Study Tool in Business Education in Nigerian Schools, International Education Studies, Vol. 5, No. 5, 2012, pp. 218-225.

[32] T. Trust, J. P. Carpenter, D. G. Krutka, Moving Beyond Silos: Professional Learning Networks in Higher Education, The Internet and Higher Education, Vol. 35, 2017, pp. 1-11.

[33] C. Seemiller, M. Grace, Generation Z Goes to College, John Wiley and Sons, 2016.

[34] M. Prensky, Digital Natives, Digital Immigrants Part 2: Do they Really Think Differently? On the Horizon, 2001.

[35] S. Sladek, A. Grabinger, Z. Gen, Introducing the First Generation of the 21st Century Available, 2014.

[36] M. J. Urick, E. C Hollensbe, S. S Masterson, S. T. Lyons, Understanding and Managing Intergenerational Conflict: An Examination of Influences and Strategies, Work, Aging and Retirement, Vol. 3, No. 2, 2017, pp. 166-185.

[37] S. E. Sullivan, M. L. Forret, S. M. Carraher, L. A. Mainiero, Using the Kaleidoscope Career Model to Examine Generational Differences in Work Attitudes, Career Development International, 2009.

[38] M. Maloni, M. S. Hiatt, S. Campbell, Understanding the Work Values of Gen Z Business Students, The International Journal of Management Education, Vol. 17, No. 3, 2019, pp. 100320.

[39] A. Garad, A. M A. Ansi, I. N. Qamari, The Role of E-learning Infrastructure and Cognitive Competence in Distance Learning Effectiveness During the Covid-19 Pandemic, Jurnal Cakrawala Pendidikan, Vol. 40, No. 1, 2021, pp. 81-91.

[40] T. Q. Trung, F. W. Swierczek, Skills Development in Higher Education in Vietnam, Asia Pacific Business Review, Vol. 15, No. 4, 2009, pp. 565- 586.

[41] M. N. D. Tuan, N. N. Thanh, L. L. Tuan, Applying a Mindfulness-based Reliability Strategy to the Internet of Things in Healthcare-a Business Model in the Vietnamese Market, Technological Forecasting and Social Change, Vol. 140, 2019, pp. 54-68.

[42] P. X. Hoan, A Trend Towards Integrating Information Literacy Into the Curriculum and its Implications to Academic Settings in Vietnam, In International Association of School Librarianship, Selected Papers from the Annual Conference, International Association of School Librarianship, 2013, pp. 157.

[43] M. Allen, J. Bourhis, N. Burrell, E. Mabry, Comparing Student Satisfaction with Distance Education to Traditional Classrooms in Higher Education: A Meta-analysis, The American Journal of Distance Education, Vol. 16, No. 2, pp. 83-97.

[44] S. Kusluvan, Characteristics of Employment and Human Resource Management in the Tourism and Hospitality Industry, Managing Employee Attitudes and Behaviors in the Tourism and Hospitality Industry, 2003, pp. 3-24.

[45] M. Riley, Human Resource Management in the Hospitality and Tourism Industry, Routledge, 2014.

[46] K. Biscomb, T. J. Devonport, A. M. Lane, Evaluating the use of Computer-aided Assessment in Higher Education, Journal of Hospitality, Leisure, Sports and Tourism Education (Pre-2012), Vol. 7, No. 1, 2008, pp. 82.

[47] C. T. Chen, C. F. Chen et al., The Influence of Internship Experiences on the Behavioral Intentions of College Students in Taiwan, The Asia-Pacific Education Researcher, Vol. 20, No. 1, 2011, pp. 73-92.

[48] W. H. Ko, Training, Satisfaction with Internship Programs, and Confidence about Future Careers Among Hospitality Students: A Case Study of Universities in Taiwan, Journal of Teaching in Travel and Tourism, Vol. 7, No. 4, 2008, pp. 1-15.

[49] T. S. M. Tse, What do Hospitality Students Find Important about Internships? Journal of Teaching in Travel and Tourism, Vol. 10, No. 3, 2010, pp. 251-264.

[50] S. S. Hubbard, Teaching Courses Through Distance Education: A Personal Account, Cornell Hotel and Restaurant Administration Quarterly, Vol. 38, No. 4, 1997, pp. 82-86.

[51] W. Cho, C. D. Schmelzer, Just-in-time Education: Tools for Hospitality Managers of the Future? International Journal of Contempo-rary Hospitality Management, 2000.

[52] S. McDowall, L. C. Lin, A Comparison of Students' Attitudes Toward Two Teaching Methods: Traditional Versus Distance Learning, Journal of Hospitality and Tourism Education, Vol. 19, No. 1, 2007, pp. 20-26.

[53] C. A. Twigg, Improving Quality and Reducing Cost: Designs for Effective Learning, Change: The Magazine of Higher Learning, Vol. 35, No. 4, 2003, pp. 22-29.