



The Influence of Educational Relationship Management (4Cs) on Decision to be an Online Degree Student

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ABSTRACT

This study examines the influence of the 4Cs educational relationship management (communication, cost, convenience, customer or student centre) on the decision to be an online degree student. The research was analysed using a quantitative method from 211 online degree students through a convenience sampling (online questionnaire survey) from universities that provided online degrees. The statistical analysis employed the multiple regression analysis (MRA) to test the hypotheses. The results indicate that communication has the highest impact on the decision to be an online degree student, followed by cost, convenience and customer (student) centre, respectively. The programme directors and educational leaders should pay attention to educational relationship management (4Cs) because it influences people to decide to be online degree students.

Keywords: *educational relationship management (4Cs), communication, cost, convenience, customer (student) centre, decision to be an online degree student*

1. INTRODUCTION

1.1. Background of the Research

Online learning is becoming more popular due to its effectiveness, low cost, the rapid expansion of the internet, and rising demand for innovative educational systems (Anderson, 2004; Zhang et al., 2004). In 2009, nearly 12 million of the 20.4 million post-secondary students in the United States took at least one online course, with that figure expected to rise to 22 million by 2014. The proliferation of online learning systems has increased competition in higher education while also lowering exit barriers for students. Besides, this increases the emphasis for universities on student retention as an online degree student (Bejerano, 2008; Dehghan et al., 2014). A decision to be an online degree student is influenced by a variety of factors, including the educational relationship management (4Cs): communication, cost, convenience, customer or student centre (Raphael, 2006; Christie, 2007; Turistiati et al., 2018, Safdar et al., 2020; Limna & Siripipatthanakul, 2021). Educational relationship marketing effectively tracks student expectations and provides meaningful and relevant services to students (Shaik, 2005). An online education programme is a practical, adaptable, and cost-effective method of teaching and learning in educational institutions (Safdar et al., 2020). Thus, it is essential to communicate

about the success of an institution's alumni to increase student retention in an online programme (Turistiati et al., 2018). Besides, it is critical to provide an effective, professional, and good student service or centre to keep students motivated, satisfied, and enrolled in online learning courses and programmes (Raphael 2006). Thus, educational relationship management (4Cs) is critical in determining an individual's decision to be an online degree student.

1.2. Problem Statement

Colleges and universities are now increasingly embracing the internet as a new medium for instruction. As a result of this growing trend, an increasing number of students are receiving their education outside of the traditional classroom setting, and obtaining a degree online is becoming common (Bejerano, 2008; Limna & Siripipatthanakul, 2021). Numerous studies support the antecedents of students' decision to be an online degree student such as perceived ease of internet use for learning (Huang et al., 2022), student satisfaction (Herbert, 2006) and student loyalty (Dehghan et al., 2014). Still, few studies support the factors influencing students' decision to be an online degree program adopting the 4Cs educational relationship management. Therefore, this study explores the influence of educational relationship management (communication, cost, convenience, and customer or student centre) on deciding to be an online degree student. It may benefit educational leaders, institution presidents, program directors, and teachers to devise an appropriate strategy to respond to the needs and expectations of students wishing to be online degree students and beyond.

1.3. Research Objective

This study investigates the influence of educational relationship management (4Cs) on a decision to be an online degree student.

1.4. Research Question

How does educational relationship management (4Cs) influence a decision to be an online degree student?

2. LITERATURE REVIEW

2.1. Online Degree Programme

For decades, online education has been studied (Hodges et al., 2020). Online distance learning, also known as distributed learning via the internet and the World Wide Web, is widely considered one of the most practical and widely used instructional delivery systems and technologies in higher education (Chawinga & Zozie, 2016; Paolucci & Gambescia, 2007). With such a rapid introduction of a fundamentally new instructional innovation, major stakeholders quickly evaluated distance learning for its quality, academic standards, impact on accreditation, institutional strategic opportunities, pedagogical potential, and market value potential (Paolucci & Gambescia, 2007). In this digital era, an online degree is becoming increasingly prevalent. Because of accreditation standards and processes, online degree programme graduates earn the same rigorous level of education as traditional degree programme students. The degree represents a level of accomplishment (Braun, 2008; Limna & Siripipatthanakul, 2021). Several studies have been conducted to investigate online degree programs, such as the cost-effectiveness, performance-effectiveness of a programme, and other aspects (Prommer et al., 2020; Terras & Ramsay, 2015). Thus, an online degree programme is a critical topic to study.

2.2. Educational Relationship Management (4Cs)

It is abundantly evident that colleges and universities see online distance learning as an essential component of their strategic plans and initiatives (Paolucci & Gambescia, 2007). Besides,

higher-education marketing has grown significantly in recent years. Higher education has evolved from a non-marketized entity to a highly marketized one in a highly competitive environment. Relationship management, also known as the marketing mix (The 4Cs: communication, cost, convenience, and customer or student centre), is the most fundamental marketing concept. It is a collection of controllable marketing tools used by a company to elicit the desired response in the targeted market (Khan, 2014; Limna & Siripipatthanakul, 2021). The distinguishing feature of the relationship management or marketing mix will be a balanced emphasis on student recruitment and retention initiatives (Shaik, 2005). Thus, 4Cs educational relationship management is essential in higher education marketing (Khan, 2014; Shaik, 2005). In this study, the 4Cs educational relationship management (communication, cost, convenience, and customer or student centre) model is used to investigate an individual's decision to be an online degree student.

2.2.1. Communication

Communication has been broadly defined as the formal and informal exchange of purposefulness and relevance between firms. It is critical in marketing management, including in the educational management sector (Kalogiannidis, 2021; Limna & Siripipatthanakul, 2021). A well-developed communication management plan for students, faculty, and support staff is essential for the online learning model (Newberry, 2013). Social media has been identified as a critical platform for marketing communication. Many industries, including marketing, rely on social media communication. They recognize social media as a boon in communication (Dwivedi et al., 2015; Keegan & Rowley, 2017). Communication about the success of an institution's alumni is also essential for student retention (Turistiati et al., 2018). Moreover, positive word of mouth (WOM) can improve student retention. WOM is verbal communication between a customer and other people, and it plays a critical role in business development (Siripipatthanakul, 2021; Swani et al., 2021). Therefore, communication in educational relationship management is related to being an online degree student.

H1: Communication in educational relationship management significantly influences the decision to be an online degree student.

2.2.2. Cost

Considering the cost of online learning is not an entirely new concept. When deciding whether to take an online course, tuition, living expenses, and other educational expenses are considered (Bartley & Golek, 2004; Christie, 2007). The income of the student's immediate family influences higher education choice in terms of public-private institutions (Sidin et al., 2003). Furthermore, students choose a higher education institution based on the level of value it provides. The rough calculation is obtained by comparing the costs of a particular institution with the perceived benefits while considering the individual's tastes and preferences (Vrontis et al., 2007). Cost reduction is one of four distinct categories of online programme student benefits. Online learning reduced travel expenses and other physical facility costs such as classrooms and associated furniture. As a result, online courses generally cost less than traditional classroom courses (Kumar, 2010; Mukhtar et al., 2020). Therefore, educational relationship management of cost is related to being an online degree student.

H2: Cost in educational relationship management significantly influences the decision to be an online degree student.

2.2.3. Convenience

Convenience was defined as a student's perception of convenience in terms of study time freedom, ease of effort to study, accessibility of study materials and activities, and perceived potential study benefit from using a learning management system (LMS) platform (Hussein & Hilmi, 2021). Convenience is one of the four distinct advantages that attract students to online learning. This convenience relates to study location, time, course duration, and so on (Kumar, 2010). Moreover, online courses are not only convenient, but they also enable students to interact with other students and influential professors, both of which are strongly related to students' perceived learning, satisfaction, and loyalty, which may lead to a student's retention decision (Pham et al., 2019; Sanford et al., 2017). Also, online programs offer students flexibility, convenience, and access than traditional on-campus curricula (McCown, 2010; Welker & Berardino, 2005). Therefore, educational relationship management of convenience is related to the decision to be an online degree student.

H3: Convenience in educational relationship management significantly influences the decision to be an online degree student.

2.2.4. Customer (Student) Centre

A student service or student centre refers to the division or department that provides services and student support in higher education. Its goal is to ensure students' growth and development throughout their academic experience. Moreover, one of the critical roles of the student service advisor is to provide straightforward solutions to student problems. Advisors must have at least a basic understanding of academic, financial, and student service topics (Limna & Siripipatthanakul, 2021; Simpson, 2018). Thus, it is critical to ensure that support for all students is equally available and accessible across all a university's campuses (Dhillon et al., 2008). Students are encouraged by the university to learn and achieve based on their abilities. A student centre is critical as it can improve the student experience in higher education. Besides, if a student encounters a problem while attending university, they can seek advice from a university advisor (Ciobanu, 2013; Prateprangsee, 2004; Raphael, 2006). Therefore, educational relationship management of customer or student centre is related to the decision to be an online degree student.

H4: Customer (student) centre in educational relationship management significantly influences the decision to be an online degree student.

2.3. Decision to be an Online Degree Student

In the technological advancement era, online education allows students to engage in lifelong learning without time and space constraints (Gazza & Hunker, 2014). Also, it is critical to provide students with well-planned online learning experiences (Hodges et al., 2020). Many factors influence an individual's decision to be an online degree student, including technology adoption, learning outcomes, instructor characteristics, student characteristics, and other factors that contribute to effective online learning (Panigrahi et al., 2018; Volery & Lord, 2000). In addition, students enrolled in an online program because of its cost, schedule flexibility, convenience, and effectiveness of an online class, professional development, obtaining an advanced degree in the field, as well as the university's strong reputation (Willging & Johnson, 2009). In this study, the researchers investigate a decision to be an online degree program using the educational relationship management model.

2.4. Conceptual Framework

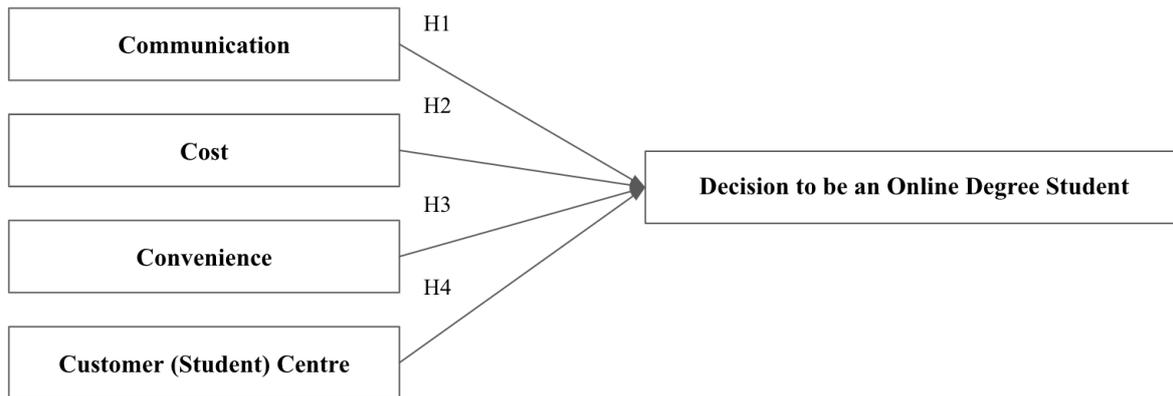


Figure 1. Conceptual Framework

3. RESEARCH METHODOLOGY

3.1. Population & Sample

The study's target population was an unknown number of online degree students. Three institutions' settings were from Thailand, other countries in Asia, and others outside Asia. Samples were online degree students from the three institutions' locations, and all respondents were over 18 years old. According to Hair et al. (2012), the general guideline is to have a minimum of ten respondents per one question item (10:1). Therefore, the researchers determined the sample size from 20 question items multiplied by 10 equal 200 required samples. The study's sample size was two hundred and eleven (211), over a minimal sample size of 200 through convenience sampling.

3.2. Research Instrumentation

The data was gathered through closed-ended questionnaires (Likert's Rating Scale). The collected data were determined for the reliability and validity of measuring instruments. The validity of a tool refers to how well it measures a concept developed by a researcher (Kanyama et al., 2022). The main variables in this study were evaluated according to a five-point Likert Scale ranging from 5 (strongly agree) to 1 (strongly disagree) for mean, standard deviation, Cronbach's Alpha and Factor Loadings (Kaewnaknaew et al., 2022). Also, the demographics of those who responded to the survey questions were analysed for frequency and percentage. Finally, the hypotheses were tested using the partial least square structural equation model (PLS-SEM). Demographic information was based on Jandawapee et al. (2022) and Si Dah et al. (2022). The questionnaire items in the communication construct were based on Su et al. (2005), Brown et al. (2007), Makrez (2011), and Turistiati et al. (2018). The questionnaire items in the cost construct were based on Christie (2007), Vrontis et al. (2007), Kumar (2010), and Mukhtar et al. (2020). The questionnaire items in the convenience construct were based on Kumar (2010), Casement (2013), Sanford et al. (2017), and Safdar et al. (2020). The questionnaire items in the customer (student) centre construct were based on Raphael (2006). The questionnaire items in the decision to be an online degree student were based on Raphael (2006), Christie (2007), Turistiati et al. (2018), and Safdar et al. (2020). The questionnaire was proved for content and criterion validity by five experts (three Ph.D. faculties in business, one Ph.D. faculty in Education and one faculty Ph.D. in public health).

3.3. Data Collection

The researchers processed data collection via online questionnaires by a self-administered answer adoption. The study's purpose was explained to the respondents before online questionnaire distribution to participate. Data collection duration was between November 10th, 2021 and January 5th, 2022.

3.4. Data Analysis

The completed data set was coded and analysed using multiple regression analysis (MRA). The respondents' demographics were analysed using descriptive statistics for frequency and percentage. The mean and standard deviation analyses were used to compute the results of each variable and questionnaire item. Cronbach's Alpha was used to determine the reliability of the measurements. The factor analysis method was used to test for validity. Following the recommendation of Limna et al. (2022), Cronbach's Alpha and factor loadings should be over 0.7 (Chana et al., 2021). Multiple regression analysis (MRA-inferential statistics) was used to analyse the data to confirm the model assumption statistically. Also, the SPSS Version 27 was employed in this study.

4. RESULTS

Table 1. General Data Characteristics of the Respondents (n=211).

General Information		Frequency	Percentage
Gender	Female	125	59.2%
	Male	86	40.8%
Age	18-25 years old	98	46.5%
	26-30 years old	55	26.1%
	31-35 years old	22	10.4%
	36-40 years old	16	7.6%
	41-45 years old	4	1.9%
	46-50 years old	10	4.7%
	51 years old or over	6	2.8%
Status	Single	182	86.3%
	Married	28	13.2%
	Divorced	1	0.5%
Educational Level	Diploma / Certificate	31	14.6%
	Bachelor's degree	63	29.9%
	Master's degree	93	44.1%
	Doctoral degree	24	11.4%
Major	Business	139	65.9%
	Healthcare	9	4.3%
	Education	20	9.5%
	Arts	16	7.6%
	Others	27	12.7%
Institution's Settings	Thailand	63	29.9%
	Other countries in Asia	78	37.0%
	Other countries outside Asia	70	33.1%
Salary	Less than 10,000 THB	51	24.2%

10,001- 20,000 THB	45	21.3%
20,001- 30,000 THB	23	10.9%
30,001- 40,000 THB	24	11.4%
40,001- 50,000 THB	25	11.8%
More than 50,000 THB	43	20.4%
Total	211	100%

Two hundred and eleven (211) participants who had decided to be online degree students completed online questionnaires. The findings revealed that most respondents were female (59.2%), single (86.3%), aged between 18 and 25 years old (46.5%) and earned a salary less than 10,000 baht (24.2%). Most respondents were online degree students with an education level of master's degree (44.1%) and had been an online degree student in a major of business (65.9%). The institutions' settings were from Thailand (29.9%), other countries in Asia (37.0%) and other countries outside Asia (33.1%). The demographics represented online degree students.

Table 2. Mean, Standard Deviation, Cronbach's Alpha and Factor Loadings (n=211).

Items	Cronbach's Alpha	Factor Loadings
Communication	0.848	
1. Communication about the success of an online degree program alumni is essential for me. (Mean=4.34, SD.=0.767)		0.817
2. Communication about the experiences and skills of an online degree program instructor is essential for me. (Mean=4.41, SD.=0.729)		0.842
3. Communication on social media about an online degree program is essential for me. (Mean=4.27, SD.=0.844)		0.874
4. Word of mouth communication is a significant component of online degree interactions. (Mean=4.30, SD.=0.774)		0.780
Cost	0.831	
5. Online degree programs are inexpensive compared to traditional classroom academics. (Mean=4.07, SD.=1.371)		0.780
6. Online degree programs can reduce the use of travel resources as well as other costs. (Mean=4.46, SD.=0.678)		0.790
7. Online degree students weigh the costs of an institution versus the perceived benefits when deciding to enrol. (Mean=4.27, SD.=0.865)		0.861
8. Tuition fees, expenses, and other education costs are considered when pursuing an online degree program. (Mean=4.40, SD.=0.775)		0.827
Convenience	0.889	
9. Convenience course attributes are addressed independently of course format in the online degree program. (Mean=4.30, SD.=0.765)		0.861
10. An online degree program is a convenient and easy way to learn from experts. (Mean=4.28, SD.=0.926)		0.884
11. Online degree program convenience relates to study location, time, course duration, etc. (Mean=4.38, SD.=0.685)		0.842
		0.878

12. An online degree program is a convenient, flexible, and efficient method of teaching and learning. (Mean=4.32, SD.=0.846)

Customer (Student) Centre	0.878	
13. Providing effective, professional, and sufficient student services is critical in keeping students motivated. (Mean=4.41, SD.=0.653)		0.844
14. Online degree program students will stumble if they do not have academic advising from the student centre. (Mean=4.24, SD.=0.822)		0.894
15. It is beneficial for an online degree program to have staff members monitor and assist students with their needs. (Mean=4.36, SD.=0.766)		0.825
16. The academic education advising service considers clear, complete, and timely information about curriculum requirements to online degree program students. (Mean=4.36, SD.=0.792)		0.856

The decision to be an Online Degree Student	0.899	
17. My online degree decision is based on the institution's communication. (Mean=4.18, SD.=0.986)		0.881
18. My online degree decision is based on the institution's cost. (Mean=4.23, SD.=1.024)		0.880
19. My online degree decision is based on the institution's convenience. (Mean=4.31, SD.=0.806)		0.872
20. My online degree decision is based on the institution that focuses on a student at the centre. (Mean=4.23, SD.=0.855)		0.873

Table 3. Model Summary (n=211).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.875 ^a	0.766	0.762	0.45639

Table 4. ANOVA (n=211).

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	108.070	4	27.017	139.925	0.000 ^b
Residual	39.775	206	0.193		
Total	147.845	210			

Table 5. Coefficients (n=211).

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-0.209	0.193		-1.078	0.282
Communication (X1)	0.271	0.071	0.236	3.836	0.000
Cost (X2)	0.261	0.085	0.241	3.089	0.002
Convenience (X3)	0.252	0.081	0.234	3.104	0.002
Customer Centre (X4)	0.244	0.085	0.217	2.863	0.005

- a. Dependent Variable: Decision to be an Online Degree Student (Y)
 b. Predictors: (Constant), Communication (X1), Cost (X2), Convenience (X3), Customer (Student) Centre (X4)

Communication, cost, convenience, and customer (student) centre can explain the decision to be an online degree student by 76.6% ($R^2=0.766$). A significant regression equation was found $F(4, 206) = 139.925$, at $p=0.000$ ($p < 0.001$), with $R^2=0.766$. The decision to be an online degree student increased by 0.271 units for each unit of change in communication construct, 0.261 units for each unit of change in cost, 0.252 units for each unit of change in convenience construct, and 0.244 units for each unit of change in customer (student) centre construct. Communication, cost, convenience, and customer (student) centre can predict the decision to be an online degree student. Seventy-six point six per cent (76.6%) of the variance of the decision to be an online degree student was explained by combining the predicting factors ($R^2=0.766$). If referring to the coefficient, the communication value has the most influence on the decision to be an online degree student ($\beta=0.271$), followed by cost ($\beta=0.261$), convenience ($\beta=0.252$), and customer (student) centre ($\beta=0.244$), respectively. Communication, cost, convenience, and customer (student) centre significantly influenced the decision to be an online degree student at p-values of 0.000, 0.002, 0.002, and 0.005, respectively.

Table 6. The Summary of Hypothesis Testing Results (n=211).

Hypotheses	Results	Actions
H1: Communication → Decision to be an Online Degree Student	p=0.000***	Supported
H2: Cost → Decision to be an Online Degree Student	p=0.002**	Supported
H3: Convenience → Decision to be an Online Degree Student	p=0.002**	Supported
H4: Customer Centre → Decision to be an Online Degree Student	p=0.005**	Supported

** Significance at $p < 0.01$ *** Significance at $p < 0.001$

- a. Dependent Variable: Decision to be an Online Degree Student
 b. Predictors: (Constant), Communication, Cost, Convenience, Customer (Student) Centre

5. DISCUSSION AND CONCLUSION

5.1. Discussion

The study's objective explores the influence of educational relationship management (4Cs) on a decision to be an online degree student. The study's hypothesis testing results confirmed the proposed conceptual framework. The findings indicated that the 4Cs of educational relationship management (communication, cost, convenience, customer or student centre) has an impact on the decision to be an online degree student. The findings supported the previous research of Dwivedi et al. (2015), Keegan & Rowley (2017), Siripipatthanakul (2021), and Swani et al. (2021) that positive communication influences an individual's decision. Thus, educational relationship management of communication significantly influences the decision to be an online degree student. The findings supported the previous research of Kumar (2010), Mukhtar et al. (2020), Sidin et al. (2003), and Vrontis et al. (2007) that an individual's decision is influenced by cost. Thus, educational relationship management of cost significantly influences the decision to be an online degree student. The findings supported the previous research of Mccown (2010), Pham et al. (2019), Sanford et al. (2017), and Welker & Berardino (2005) that convenience is a significant advantage that influences an individual's decision. Thus,

educational relationship management of convenience significantly influences the decision to be an online degree student. The findings supported the previous research of Ciobanu (2013), Prateerangsee (2004), and Raphael (2006) that an efficient customer or student centre has an impact on an individual's decision. Thus, educational relationship management of customer or student centre significantly influences the decision to be an online degree student.

5.2. Conclusions

The findings revealed that communication has the most significant influence on the decision to be an online degree student, followed by cost, convenience, and customer or student centre, respectively. Thus, programme directors, educational leaders, and teachers should pay attention to the 4Cs educational relationship management (communication, cost, convenience, customer or student centre) because it influences people to decide to be online degree students. The 4Cs educational relationship management can explain a decision to be an online degree student. These factors directly affect an individual's decision to be an online degree student. Programme directors and educational leaders can influence an individual's decision to be an online degree student through communication, such as positive word of mouth from alumni, and cost-cutting measures, such as reducing the use of travel resources and other educational expenses. Moreover, programme directors and educational leaders can improve educational relationship management of convenience by, for example, managing course work schedules in a way that is convenient for teachers and students, flexible, and efficient methods of learning. Plus, educational relationship management of a customer or student centre can be improved by, for example, having an online student centre, an online library, and so on. As a result, educational leaders, programme directors, and teachers can develop a strategy to meet the needs and expectations of students seeking an online degree programme and beyond. Finally, the appropriate academic programs will have been improved based on the 4Cs educational relationship management and customers' decision to be online degree students.

5.3. Research Contribution & Implication

The represented respondents explain the relationship phenomenon in the online education sector. The target consumers in this sector are both males and females aged between 18 and 25 years old and earning a salary of fewer than 10,000 baht because they are only online students and do not have an occupation. Most online degree students are in the master's degree in business administration from Thailand, other countries in Asia, and other countries outside Asia. The program directors and educators could imply the overview of target customers from these results. This study may benefit educational leaders, institution principles, programme directors, and teachers to implement appropriate strategies to meet the needs and expectations of students wishing to enrol in any online degree programme and beyond. Besides, the findings indicate that the 4Cs educational relationship management (communication, cost, convenience, customer or student centre) influences people to decide to be online degree students. Thus, the findings could be applied to all online degree institutions to develop strategic management using the 4Cs educational relationship management.

5.4. Limitations & Recommendations

The nature of this study is a self-administered online questionnaire. Qualitative research could provide more insight into future research, such as interviews, observations, and focus groups. Furthermore, numerous studies support the antecedents of students' decision to be online degree students. Other factors such as perceived university image (Irfan et al., 2020), perceived quality (Fazli-Salehi et al., 2019), perceived learning outcomes (Eom et al., 2006), and perceived ease of use (Huang et al., 2020) are recommended for further study.

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