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A Study on Google Classroom for Mobile Edification at University level by Using AHP Model for Initial Perceptions – A Case Study of Sankalchand Patel University

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ABSTRACT

In India, many online teaching platforms are being used in universities, colleges, and schools at all levels in the context of COVID-19. This research provides an online teaching platform evaluation system in order to systematically investigate the elements that influence the selection of online teaching platforms. Following a review of a series of factors that have significant influences on the selection of online teaching platforms, eight major factors are identified. Based on the Analytic Hierarchy Process, a hierarchical structure model for online teaching platform selection is constructed. Based on the questionnaire, the rank was the same with both methods for the most preferred question and the least important question, which were derived from Performance Expectancy (PE) and Use Behaviour, respectively (UB). These findings revealed that both techniques produced the same rank for the five likert scale alternatives, with "Agree" being the most important and "Strongly disagree" being the least important. In specifically, the weights of the indicators are calculated and evaluated for each layer in order to achieve the overall ranking and, as a result, the optimal scheme. The following is the order of priority for assessment indicators of online teaching platforms, according to the findings: Google Classroom is useful in this course since it is simple to use and has all of the materials that are required to participate in Google Classroom (internet, Smartphone, laptop, etc.).

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Keywords: COVID-19, Evaluation of Online Teaching Platform, Analytic Hierarchy Process

INTRODUCTION

Traditional methods of teaching and learning (i.e. face-to-face) in Albanian institutions have transitioned to e-learning technologies as a result of the Covid-19 scenario, which was achieved through the establishment of Learning Management Systems (LMSs). LMSs are online learning management systems that allow instructors and students to share information, submit and return assignments, and interact with one another (Lonn & Teasley, 2009). The number of teach management systems (LMS) has increased substantially in recent years, including the most popular Google Classroom service for higher education (Kumar & Bervell, 2019). The Google Classroom platform was launched in 2014 as part of the G suite for education. When it comes to teaching and learning activities, Google Classroom is simple and easy to use, and it integrates with other web-based programmes like Gmail, Google Drive, Google Docs, Google Calendar, and Google Hangout. Students prefer Google Classrooms to other LMS platforms because it is a free mobile app that is simple to learn and use, and they can log into courses, course materials, feedback, and movement application notifications from any computer or mobile device. Before adopting e-learning tools, each university must determine the user acceptability of the new technology, i.e., what the students require and accept.(Jakkaew & Hemrungrote, 2017).

Analytical Hierarchy Process (AHP), as a variety of criterion decision making tools, is particularly useful in situations of a spatial nature. (Kaplan & Norton, 1992) (Saaty, 1980) Furthermore, this inquiry focuses on the AHP phases. The goal of this study is to apply the Analytic Hierarchy Process (AHP) principles and methodologies to the prioritization and selection of criteria in Google Classroom. AHP is one of the fundamental mathematical models for carrying out decision theory that is now available. When looking into how organisations pick which components to deploy, we can see a consistent demand for precise, objective, and mathematical criteria. (Haas & Meixner, 2005) In any case, decision making is a psychological and mental procedure formed from the most conceivable sufficient determination based on Tangible and Intangible Criteria (Saaty, 2009), , which are chosen at random by people who make the decisions. (Jayakumar, Raju, Marriappan, & Ravivikram, 2010)

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Analytic Hierarchy Process (AHP) proposed by Satty (Satty, 1999), is an approach for decision making that involves structuring multiple choice criteria into a hierarchy, assessing the relative importance of these criteria, comparing alternatives for each criterion, and determining an overall ranking of the alternatives on the basis of measures (Bhushan & Rai, 2004). The output of the AHP is prioritized positioning demonstrating the general inclination for every one of the choice which is ultimately help the decision maker to select the best approach. This Study adopts AHP as the method for obtaining the weight relationship and degree of importance of different assessment criteria. It Introduced the Fuzzy theory into the AHP developed by (Satty, 1980) to assess the weight of various assessment criteria and sort the importance, by which more objective and reasonable KPI could be stimulated (Lee & Hsu, 2008). This Analytical Process merges the concepts of several scholars, including (Buckley, 1985), (Chen, Hsu, & Tzeng, 2011) and (Chang, Lin, & Northcott, 2002)

TRADITIONAL CLASSROOM

Since the rise of polytechnics, the educational system has expanded. Although students must use current technology to carry out activities on computer systems, the professor may use PowerPoint presentations in class, which may not expose students to the use of ICT in their learning. The presence of student ICT in the conventional setting can increase ICT literacy by utilising learning criteria like as cooperation, interactivity, authority, ownership, and textual malt-ability. (Clark, 2013)

Nevertheless, (Mason, et al., 2012) have indicated that there is no difference in knowledge between the round classroom and normal training. According to one study, online lectures are more effective than video lessons alone. According to one study, the conventional environment still demands practical carry out, even if students must change their learning environment due to a lack of facilities, education skills, and poor networking. According to research, there is no substantial difference in student achievement in either learning environment. (Triantaphyllou, 2002)

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FLIPPED CLASSROOM

A flipped classroom is a type of learning environment that is currently being used by teachers all over the world. It signifies that events that used to take place in class are now taking place outside of class, and vice versa (Snowden, 2012). While students listen and take notes, they can use their in-class time for dialogue and problem solving with other students. Furthermore, a study on flipped classrooms was conducted to examine motivation, perception, engagement, achievement, and active learning. It is (Bishop & Verleger, 2013)stated that the flipped classroom is the rearrangement of the school setting and activities at home. As a result, the lecturer can reduce the amount of time spent in the classroom lecturing, freeing up class time for students to use active learning tactics such as debate and problem-solving in the presence of the lecturer. (Kim & Kim, 2010)

Their findings, however, demonstrate that students who were trained through the online module made better ethical decisions than students who were taught in a traditional class. According to the findings, video lectures are the most popular pre-classroom learning material among students. The study also finds that the pre-classroom learning experience boosts students' learning interests and their understanding of the learning context. (Triantaphyllou & Manns, 1995)

REVIEW OF LITERATURE

- ***(Espinosa, Estira, & Ventayen, 2017)*** researched the functionality of the learning management system in Google classrooms (LMS). The survey indicated that the main factor for adoption was costs. Collaborative learning via work was seen as a highly successful approach to enhance student’s engagement.
- The Google Classroom active learning activities were evaluated by ***(Shaharanee, I, Jamil, & Rodzi, 2016)***. The TAM (Technology Acceptance Model) was used to study the effectiveness of platform activities. The comparative performance of Google Classroom was considerably better in the categories of communication, interaction, perceived utility, ease of use, and overall student happiness, according to the findings of 100 students.
- ***(Mohammed, Kasim, & Mohd Shaharanee, 2020)*** evaluated the flipped classroom learning activities in Iraqi schools through AHP model. The main aim of the study was to evaluate whether teaching flipped classroom affects the student’s achievement, motivation, and creative thinking. The study revealed that the students and teachers preferred flipped classroom learning

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to traditional cognitive learning, and that all of the criteria performed similarly well in the flipped classroom versus the traditional technique.

- ***(Rana & Mostafa, 2018)*** conducted a research on student's acceptance of Google Classrooms. The primary goal of the study was to examine the factors that affect the students' acceptance of Google classroom at Al Buraimi University College (BUC) in Oman. The Partial Least Square-Structural Equation Model (PLS-SEM) approach was used to assess both the measurement and structural models. The study's findings revealed that both perceived ease of use (PEOU) and perceived usefulness (PU) have a positive impact on behavioral intention, which in turn has an impact on real Google classroom usage.

RESEARCH GAP

From the above Review of Literature on topic on Analytical Hierarchy Process in various sector like Construction, Mathematics, Management, Finance, Environment, SEZ Units etc. but still no one has carried out research on Analytical Hierarchy Process in Flipped Classroom. So, here researcher has try out to fill the gap and present a paper on The Analytical Hierarchy Process (AHP) approach for assessment of usage of Google Classroom by Graduate Students of Sankalchand Patel University with reference to Balanced Scorecard Technique. (Allio, 2006)

OBJECTIVES

The research has focused on the following objectives:

1. To study the key performance indicators practiced in Google Classroom.
2. To examine the Key Performance Indicators of Balanced Scorecard in Performance Measurement in Google Classroom.

In order, to serve the AHP calculations for a prioritization, the development of invented decision model for the Flipped Classroom has been chosen (Hsu, 1998). The First Step to build the AHP model lies in the determination of the criteria that will be used. (Vargas, 1990)

HYPOTHETICAL CASE APPLICATION

In this section a detailed hypothetical example of how the AHP can be used in Balanced Scorecard Technique about selection in Key factors with reference to their criteria and sub – criteria. (www.balancescorecard.org) (www.bscol.com)

BUILDING THE AHP MODEL

To make a decision in Google Classroom way to generate priorities we need to divide the decision into the following objectives:

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i. Define the Criteria and Sub-Criteria for Determine the Requirement in Perspectives.

ii. Structure the Decision Hierarchy from the Top with the Goal of the Decision, then the objectives from a Perspective, through the Criteria on which subsequent elements depend to the set of the alternatives.

iii. Construct a set of pair-wise comparison matrices. Each element in an upper level is used to compare the elements in the level immediately below with respect to it.

iv. Use the Priorities obtained from the comparisons to weigh the priorities in the level immediately below. Do this for every element. Then for each element in the level below add its weighed values and obtain its overall or global priority.

I. RESEARCH METHODOLOGY

The challenging part of this research study has to construct an AHP model that included relevant to Google Classroom and give priority criteria and could be readily applied to a variety of economic applications. So, that here researcher has used the *questionnaire* method to analyze the respondent's data with using the AHP model & Balanced Scorecard Technique.

RESEARCH DESIGN

This Study adopts the opinion of (Kaplan & Norton, 1992) regarding the BSC, referring to the literature and suggestions from various scholars in the determination of the hierarchical structure of KPI of the Google Classroom. The ultimate goal of this structure is to identify KPI to improve the performance of usage of Google Classroom.

SAMPLING DESIGN

i. SAMPLING FRAME : Sankalchand Patel University, Visnagar

ii. SAMPLING UNIT: B.Com, B. Sc, M. Com and M. Sc students

iii. SAMPLING SIZE:

Faculty	No. of Actual Students	No. of Students taken as Sample
B. Com	180	20
B. Sc.	426	40
M. Com	52	10
M. Sc.	275	30
Total	**933**	**100**

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iv. SAMPLING METHOD: Convenience Sampling

DATA ANALYSIS & INTERPRETATION

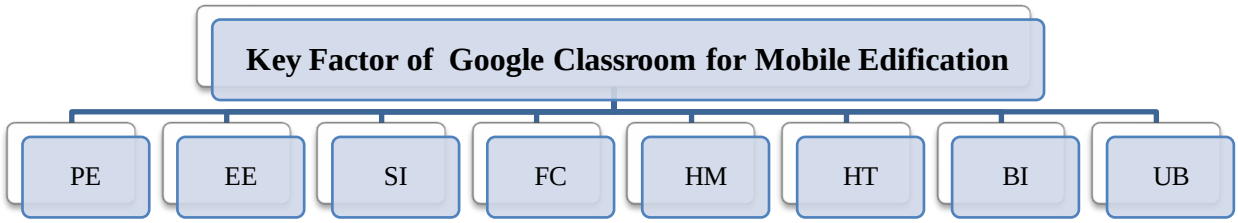

Figure 1.1: Kay Factors of Mobile Edification

After the Hierarchy has been perceived, the Attribute must be evaluated in pairs so as to determine the relative importance between them and their Relative Weight to the Global Goal. The Evaluation begins by determining the Relative Weight of the initial criteria groups of Attributes of Players **(Figure 1.1)**. **Table 1.1** shows the Relative Weight data between the attribute that have been determined by Respondents. (Ozceylan, 2016)

Table 1.1: Comparison for Key Factors of Google Classroom for Mobile Edification at University level (Layer 1)

Construct	BI	UB	FC	HM	HT	SI	EE	PE
BI	1	1	8	1	5	6	4	5
UB	1	1	9	2	4	9	8	7
FC	0.125	0.111111	1	2	1	3	6	7
HM	1	0.5	0.5	1	2	2	4	9
HT	0.2	0.25	1	0.5	1	1	2	5
SI	0.16667	0.111111	0.33333	0.5	1	1	6	4
EE	0.25	0.125	0.16667	0.25	0.5	0.16667	1	3
PE	0.2	0.142857	0.14286	0.11111	0.2	0.25	0.33333	1

Source: *Processed Data*

Table 1.2: Normalized Matrix Value of Google Classroom for Mobile Edification at University level (Layer 1)

Construct	BI	UB	FC	HM	HT	SI	EE	PE
BI	0.2537	0.3086	0.3971	0.0496	0.2482	0.2676	0.1276	0.1219
UB	0.2537	0.3086	0.4468	0.0992	0.1985	0.4014	0.2553	0.1707
FC	0.0317	0.0342	0.0496	0.0992	0.0496	0.1338	0.1914	0.1707
HM	0.2537	0.1543	0.0248	0.0496	0.0992	0.0892	0.1276	0.2195
HT	0.0507	0.0771	0.0496	0.0248	0.0496	0.0446	0.0638	0.1219
SI	0.0422	0.0342	0.0165	0.0248	0.0496	0.0446	0.1914	0.0975
EE	0.0634	0.0385	0.0082	0.0124	0.0248	0.0074	0.0319	0.0731
PE	0.0507	0.0440	0.0070	0.0055	0.0099	0.0111	0.0106	0.0243

Source: *Processed Data*

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Table 1.3: Eigen Vector Value of Google Classroom for Mobile Edification at University Level (Layer 1)

	BI	UB	FC	HM	HT	SI	EE	PE
BI	0.2218							
UB		0.2668						
FC			0.0603					
HM				0.0617				
HT					0.0591			
SI						0.061		
EE							0.07	
PE								0.0204

Source: *Processed Data*

Table 1.4: Eigen Vector Value max λ

Eigen Vector	0.2218	0.2668	0.0603	0.0617	0.0591	0.0610	0.0701	0.0204
Sum	3.9416	3.2401	20.1429	7.3611	14.7000	22.4167	31.3333	41.0000
1 * 2	0.8744	0.8645	1.2146	0.4534	0.8685	1.3668	2.1936	0.8381
Eigen Value max λ	***8.6745***							

Source: *Processed Data*

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Construct	Items		PE1	PE2	PE3	PE4	EE1	EE2	EE3	EE4	SI1	SI2	SI3	FC1	FC2	FC3	HM1	HM2	HM3	HT1	HT2	HT3	HT4	BI1	BI2	BI3	UB1	UB2
	Performance Expectancy(PE)	PE1	1	0.33	0.2	0.14																						
		PE2	3	1	0.25	0.33																						
		PE3	5	4	1	0.5																						
		PE4	7	3	2	1																						
	Effort Expectancy (EE)	EE1					1	2	4	7																		
		EE2					0.5	1	7	2																		
		EE3					0.25	0.14	1	1																		
		EE4					0.14	0.5	1	1																		
	Social Influence (SI)	SI1									1	4	9															
		SI2									0.25	1	4															
		SI3									0.11	0.25	1															
	Facilitating Conditions (FC)	FC1												1	0.25	0.14												
		FC2												4	1	0.33												
		FC3												7	3	1												
	Hedonic Motivation (HM)	HM1															1	4	0.33									
		HM2															0.25	1	0.11									
		HM3															3	9	1									
	Habit (HT)	HT1																		1	6	7	9					
		HT2																		0.17	1	1	4					
		HT3																		0.14	1	1	1					
		HT4																		0.11	0.25	1	1					
	Behavioural Intention (BI)	BI1																						1	6	7		
		BI2																						0.17	1	2		
		BI3																						0.14	0.5	1		
	Use Behaviour (UB)	UB1																									1	8
		UB2																									0.13	1

Source: *Processed Data*

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Table 1.5: Comparison for Key Factors of sub criteria of Google Classroom for Mobile Edification at University level (Layer 2)

Items			Performance Expectancy(PE)				Effort Expectancy (EE)				Social Influence (SI)			Facilitating Conditions (FC)			Hedonic Motivation (HM)			Habit (HT)				Behavioural Intention (BI)			Use Behaviour (UB)	
			PE1	PE2	PE3	PE4	EE1	EE2	EE3	EE4	SI1	SI2	SI3	FC1	FC2	FC3	HM1	HM2	HM3	HT1	HT2	HT3	HT4	BI1	BI2	BI3	UB1	UB2
Construct	Performance Expectancy(PE)	PE1	0.06	0.04	0.06	0.07																						
		PE2	0.19	0.12	0.07	0.17																						
		PE3	0.31	0.48	0.29	0.25																						
		PE4	0.44	0.36	0.58	0.51																						
	Effort Expectancy (EE)	EE1					0.53	0.55	0.31	0.64																		
		EE2					0.26	0.27	0.54	0.18																		
		EE3					0.13	0.04	0.08	0.09																		
		EE4					0.08	0.14	0.08	0.09																		
	Social Influence (SI)	SI1									0.73	0.76	0.64															
		SI2									0.18	0.19	0.29															
		SI3									0.08	0.05	0.07															
	Facilitating Conditions (FC)	FC1												0.08	0.06	0.1												
		FC2												0.33	0.24	0.23												
		FC3												0.58	0.71	0.68												
	Hedonic Motivation (HM)	HM1															0.24	0.29	0.23									
		HM2															0.06	0.07	0.08									
		HM3															0.71	0.64	0.69									
	Habit (HT)	HT1																		0.7	0.73	0.7	0.6					
		HT2																		0.12	0.12	0.1	0.27					
		HT3																		0.1	0.12	0.1	0.07					
		HT4																		0.08	0.03	0.1	0.07					
	Behavioural Intention (BI)	BI1																						0.76	0.8	0.7		
		BI2																						0.13	0.13	0.2		
		BI3																						0.11	0.07	0.1		
	Use Behaviour (UB)	UB1																									0.89	0.89
		UB2																									0.11	0.11

Source: *Processed Data*

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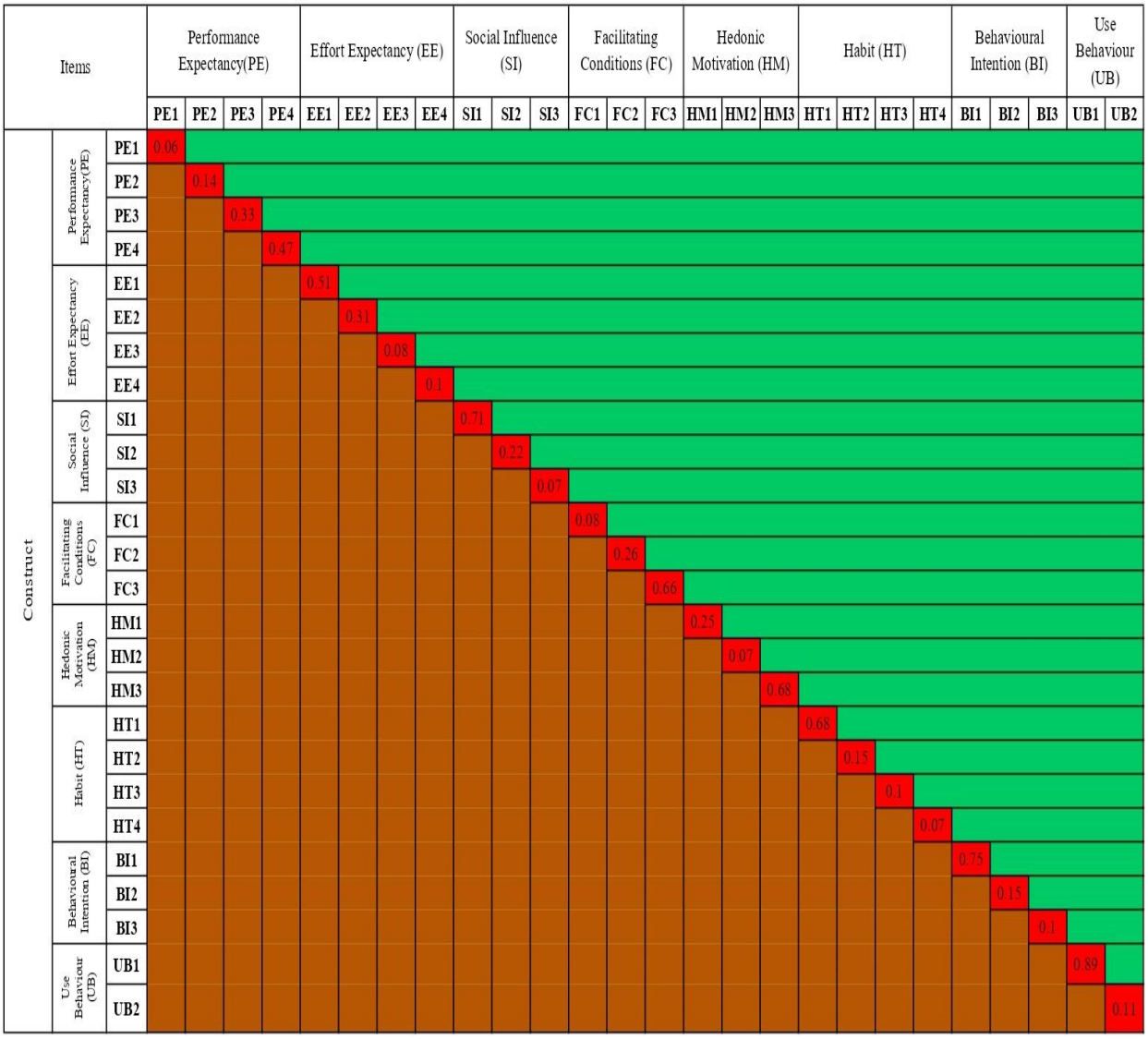
Table 1.6: Normalize Matrix Value for Key Factors of sub criteria of Google Classroom for Mobile Edification at University level (Layer 2)



Source: *Processed Data*

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Table 1.7: Eigen Vector Value for Key Factors of sub criteria of Google Classroom for Mobile Edification at University level (Layer 2)

		Performance Expectancy(PE)				Effort Expectancy (EE)				Social Influence (SI)			Facilitating Conditions (FC)			Hedonic Motivation (HM)			Habit (HT)				Behavioural Intention (BI)			Use Behaviour (UB)	
		PE1	PE2	PE3	PE4	EE1	EE2	EE3	EE4	SI1	SI2	SI3	FC1	FC2	FC3	HM1	HM2	HM3	HT1	HT2	HT3	HT4	BI1	BI2	BI3	UB1	UB2
1	Eigen Vector	0.06	0.14	0.33	0.47																						
2	Sum	16.00	8.33	3.45	1.98																						
3	1 * 2	*0.93*	*1.14*	*1.15*	*0.93*																						
		1.0000																									
4	Max. Value	***4.1562***																									
1	Eigen Vector					0.51	0.31	0.08	0.10																		
2	Sum					1.89	3.64	13.00	11.00																		
3	1 * 2					*0.96*	*1.15*	*1.10*	*1.05*																		
						1.0000																					
4	Max. Value					***4.2518***																					
1	Eigen Vector									0.71	0.22	0.07															
2	Sum									1.36	5.25	14.00															
3	1 * 2									*0.97*	*1.15*	*0.94*															
										1.0000																	
4	Max. Value									***3.0619***																	
1	Eigen Vector												0.08	0.26	0.66												
2	Sum												12.00	4.25	1.48												
3	1 * 2												*0.96*	*1.13*	*0.97*												
													1.0000														
4	Max. Value												***3.0488***														
1	Eigen Vector															0.25	0.07	0.68									
2	Sum															4.25	14.00	1.44									
3	1 * 2															*1.07*	*0.97*	*0.98*									
																1.0000											
4	Max. Value															***3.0145***											
1	Eigen Vector																		0.68	0.15	0.10	0.07					
2	Sum																		1.42	8.25	10.00	15.00					
3	1 * 2																		*0.97*	*1.25*	*0.97*	*1.08*					
																			1.0000								
4	Max. Value																		***4.2212***								
1	Eigen Vector																						0.75	0.15	0.09		
2	Sum																						1.31	7.50	10.00		
3	1 * 2																						*0.99*	*1.13*	*0.92*		
																							1.0000				
4	Max. Value																						***3.0588***				
1	Eigen Vector																									0.89	0.11
2	Sum																									1.13	9.00
3	1 * 2																									*1.00*	*1.00*
																										1.0000	
4	Max. Value																									***2.0000***	

Source: *Processed Data*

Table 1.8: Eigen Vector Value max λ

SUMMARY ON THE BASIS OF PRIORITY VECTOR VALUE

For this research the researcher has structured layer 1 and layer 2 for key performance indicators. The summary of these findings has been included here with this table.

Table 1.9: Summary on the basis of Priority Vector Value for Strategy Map

Layer		Eigen Value max λ from a Comparison Matrix	CI	CR	Accepted / Rejected	Remarks
1	Construct	8.6745	0.6746	**6.88%**	Accepted	
2	Performance Expectancy(PE)	4.1562	0.1562	**5.79%**	Accepted	
	Effort Expectancy (EE)	4.2518	0.2518	**9.33%**	Accepted	
	Social Influence (SI)	3.0619	0.0619	**3.56%**	Accepted	—

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Facilitating Conditions (FC)	3.0488	0.0488	**2.80%**	Accepted
Hedonic Motivation (HM)	3.0145	0.0145	**2.39%**	Accepted
Habit (HT)	4.2212	0.2212	**8.19%**	Accepted
Behavioral Intention (BI)	3.0588	0.0588	**3.38%**	Accepted
Use Behaviour (UB)	2.0000	0.0000	**0.00%**	Accepted

Source: *Processed Data*

Note: RI for n = 8 is 1.41, n = 4 is 0.90, n = 3 is 0.58 and n = 2 is 0, CI and CR is Consistency Index and Consistency Ratio.**CR < 10%, hence subjective evaluation about its importance is consistent and acceptable.**

The Global Priority for each Criterion is determined by the result of the multiplication of each priority on the first level by its respective priority on the second level. The results are shown on the hierarchy depicted on **Table 1.10**. It must be sum of the weights of all Twenty Six (26) factors is equal to 1.

Table 1.10 – AHP of criteria for of Google Classroom for Mobile Edification at University Level

Construct	Weighting	Statement	Relative Weighting	Global Weights	Ranks
Performance Expectancy (PE)	***0.2845***	I find Google Classroom useful in this course	0.53764	**0.1529**	***1***
		Using Google Classroom enables me to achieve course related tasks more quickly (downloading notes, assignment submission, etc.)	0.28003	**0.0797**	***6***
		Using Google Classroom increases my learning productivity	0.11593	**0.0330**	***11***
		If I use Google Classroom, I will increase my chances of passing the course	0.06640	**0.0189**	***16***
Effort Expectancy (EE)	***0.2174***	My interaction with Google Classroom is clear and understandable	0.06409	**0.0139**	***18***
		It is easy for me to become skilful at using Google Classroom	0.12334	**0.0268**	***13***
		I find Google Classroom easy to use	0.44015	**0.0957**	***3***
		Learning to operate Google Classroom is easy for me	0.37243	**0.0810**	***5***
Social Influence (SI)	***0.1555***	My friends who are important to me think that I should participate in Google Classroom	0.06604	**0.0103**	***22***
		My peers who influence my behaviour think that I should use Google Classroom	0.25472	**0.0396**	***8***
		Other people whose opinions I value prefer that I use Google Classroom	0.67925	**0.1056**	***2***
Facilitating	***0.1397***	I have the resources necessary to participate in Google Classroom	0.6769	**0.094**	***4***

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Conditions (FC)		(internet, Smartphone, laptop, etc.)	6	**6**	
		I have the knowledge necessary to participate in Google Classroom	0.23976	**0.0335**	***10***
		I can get help from others when I have difficulties while using Google Classroom	0.08328	**0.0116**	***19***
Hedonic Motivation (HM)	***0.0511***	Using Google Classroom is fun, compared to traditional classroom	0.21580	**0.0110**	***20***
		Using Google Classroom is enjoyable, compared to traditional classroom	0.71086	**0.0363**	***9***
		Using Google Classroom is entertaining, compared to traditional classroom	0.07334	**0.0037**	***24***
Habit (HT)	***0.1020***	Using Google Classroom has become a habit for me	0.04098	**0.0042**	***23***
		Using Google Classroom has become natural to me	0.23795	**0.0243**	***14***
		Using Google Classroom is addictive	0.28843	**0.0294**	***12***
		I feel that I must use Google Classroom	0.43264	**0.0441**	***7***
Behavioral Intention (BI)	***0.0273***	I intend to continue using Google Classroom in the future	0.06962	**0.0019**	***26***
		I will always try to use Google Classroom in this course	0.39873	**0.0109**	***21***
		I plan to continue to use Google Classroom frequently	0.53165	**0.0145**	***17***
Use Behaviour (UB)	***0.0225***	I use Google Classroom for writing quizzes and submitting assignments	0.11111	**0.0025**	***25***
		I use Google Classroom to interact with online materials, peers and instructor	0.88889	**0.0200**	***15***

Source: *Processed Data*

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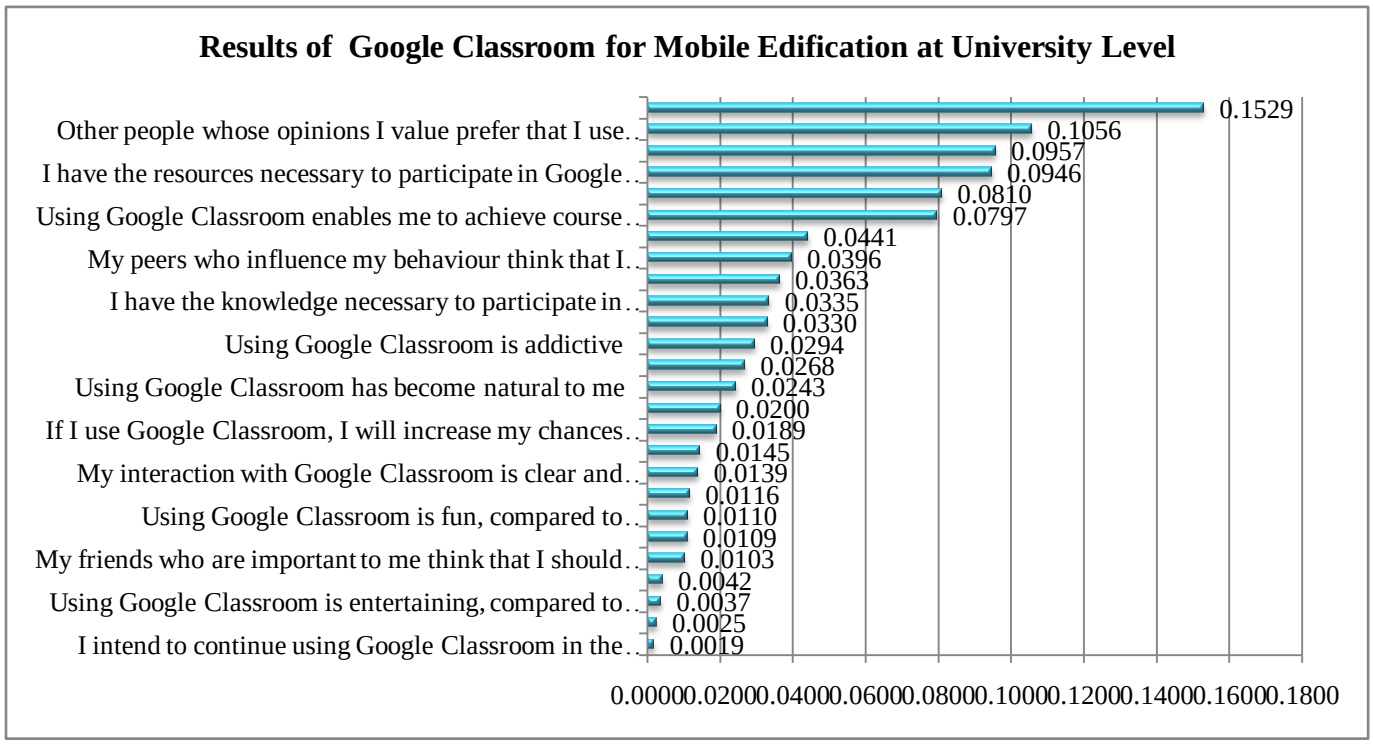

Source: *Processed Data*

Figure 1.1: Results of Google Classroom for Mobile Edification at University Level

CONCLUSION AND SUGGESTIONS

Due to the current COVID-19 epidemic, the use of Google Classroom in online teaching has become increasingly significant in higher education. The evaluations of Google Classroom usage were conducted using a questionnaire based on the UTAUT2 paradigm. The attributes for Google Classroom were ranked from most to least favoured in this study. Based on the hierarchy structure proposed in this article, there were three sorts of attributes: criteria, sub-criteria, and alternative. The AHP approach was used in order to make better decisions. AHP is utilised to identify and assess early perceptions of online teaching platforms for UG and PG students at the university level in this article. Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Habit (HT), Behavioral Intention (BI), and Use Behaviour (UB) are the different aspects that determine the performance of online education platforms.

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The most desired criteria or construct was PE (Performance Expectancy), the most preferred question was "I find Google Classroom useful in this course," and the most selected alternative was A5 "Strongly Agree," according to the results of AHP. Second, SI (Social Influence) was the most popular criteria or construct, the most popular question was "Other individuals whose opinions I value prefer that I utilise Google Classroom," and the most popular alternative was A4 "Agree." This research is meant to assist users in evaluating their use of Google Classroom, as well as policymakers in deciding whether or not to implement e-learning. These findings, in particular, help to better align the direction of higher education institutions. This study will be more comprehensive in the future research recommendations, taking into account other private universities as well as some public universities. Perhaps this will affect the study's findings. Other degree students beyond the age of 22, as well as lecturers/tutors, are assumed to be included to show different outcomes. On online teaching platforms, more emphasis or importance should be placed on the interaction impact between teachers and students. Not only may the interaction effect help students improve their learning performance, but it can also help teachers bridge the gap. In the context of COVID-19, it encourages teachers to develop novel teaching and interactive methods. To boost students' classroom involvement and excitement, case introduction, game interaction, tale appeal, and a variety of other interaction approaches are recommended.

Internet stability is a requirement for students' learning and professors' teaching in online classes. The amount of real-time online participants, which is difficult to govern, is also a factor in the stability of the internet. It is critical for the teachers to prepare the alternatives at this time.

The following recommendations are made to ensure that the internet is always stable. To begin, large-scale corporate platforms with consistent stability are recommended for reducing stutters, flashbacks, and black screens. Second, when using online teaching, teachers are advised to create a variety of options in accordance with the internet scenario. If a live prediction is unavailable, for example, audio, graphic, and other online teaching methods can be used. Finally, to meet the aims of staggered live broadcast and steady internet, an integrated platform of online education and high-quality MOOC video is recommended.

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APPENDICES

APPENDIX 1:

Table 1: Scales for Pair-Wise Comparison

Preferences Expressed in Numeric Variables	Preferences Expressed in Linguistic Variables
1	Equal Importance
3	Moderate Importance
5	Strong Importance
7	Very Strong Importance
9	Extreme Importance
2,4,6,8	Intermediate Values between Adjacent Scale Values

Source: (Satty, 1980)

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APPENDIX 2:

Table 2: Random Consistency Index Table (RI)

N	1	2	3	4	5	6	7	8	9	10
RI	0	0	0.58	0.90	1.12	1.24	1.32	1.41	1.45	1.49

APPENDIX 3:

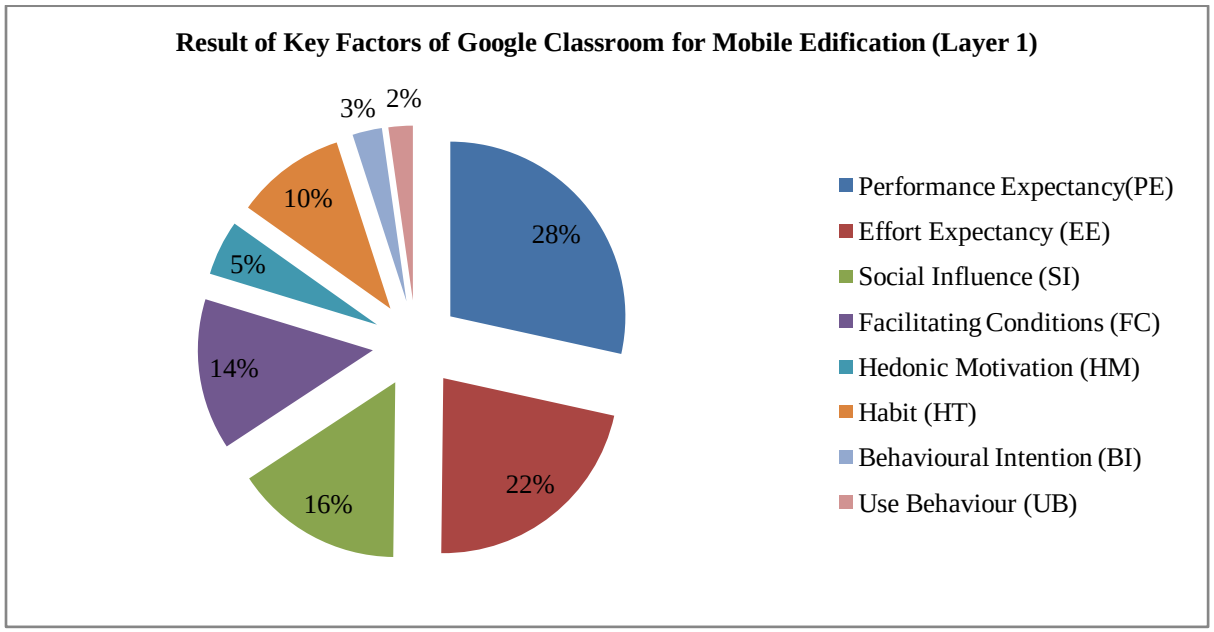

Figure 1: Result of Key Factors of Mobile Edification at University Level (Layer 1)