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Lecturers' Strategies in Improving the Quality of Distance Learning (DL) on the Cadets of PIP Makassar Under Swot Analysis

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Abstract. Since the Covid-19 pandemic in Indonesia imposed changes in the educational system in the society, the government did an adjustment on learning policy based on to the decree of the Minister of Education and Culture of the Republic of Indonesia Number: 719/P/2020 on Guidelines for Curriculum Implementation in Educational Unit during Special Conditions, and Politeknik Ilmu Pelayaran (PIP) Makassar as a higher education institution in the field of merchant marine through the Regulation of the Head of BPSDM of Transportation Department Number: PK.01/BPSDMP-2021 on February 17, 2021 on Guidelines for the Implementation of Distance Learning in the field of Merchant Marine at Higher Institution, School, Training Centre, Institute of Education and Training, is required to adhere it in conducting the changes in the education system Even though the learning process experienced a variety of limitations in terms of capabilities, facilities, and infrastructures such as mobile phones, laptops, and internet networks both for lecturers and students (cadets) as well as the low skill of technology application, the learning process still needs to be carried out to ensure the process of science transformation of the learners is not disturbed. The data analysis technique employed was the SWOT analysis under a qualitative approach, consisting of Strengths, Weaknesses, Opportunities, and Threats. SWOT analysis aims to maximize the strengths and opportunities and minimize the weaknesses and the threat threats. There were 400 respondents from lecturers and cadets whose responses were tested in terms of validity and reliability, which was specified in the Gutman Scale (SPSS 26) which then obtained the results as follows: Strengths, the DL provides ease in learning; Weakness, the application of DL imposes the use of some learning apps; Opportunities, lecturers and cadets have more flexible and a maximum of learning time; and Threat, The lecturers and cadets have limited internet package and network in the specific region/area. Regarding the Strategy of PIP Makassar lecturers in increasing motivation of the cadets in distance learning, it is required for a lecturer to improve the knowledge, innovate with evolving technology, provide learning media that is easy to understand, and to be communicative in learning.

INTRODUCTION

The impact of the Covid-19 pandemic in Indonesia has become a serious threat to all sectors of human life. The community's economy and changes in the patterns of daily life become fundamental things, for example, no activities in gatherings, schools, markets, and even in worship places. Since the Indonesian government's main priorities are to prioritize the health and safety of students, educators, staff, families and the community in general, and considering the growth and psychosocial conditions of learners in satisfying Educational services during the Covid-19 pandemic, the government adjusts learning policy[1-2]. Based on the decree of the Minister of Education and Culture Republic of Indonesia Number: 719/P/2020 on Guidelines for Curriculum Implementation in Educational Unit during Special Conditions, that learning in special conditions was implemented in a contextual and meaningful way by using a variety of strategies following the needs and conditions of the learners, the education unit and the region as well as the learning principles. Politeknik Ilmu Pelayaran (PIP) Makassar is a higher education institution in the field of merchant marine through the Regulation of the Head of BPSDM of Transportation Department Number: PK.01/BPSDMP-2021 on February 17, 2021, on Guidelines for the Implementation of Distance Learning in the field

of Merchant Marine at Higher Institution, School, Training Centre, Institute of Education and Training, is required to adhere this in conducting the changes in the education system[3-4].

Even though the learning process experienced a variety of limitations in terms of capabilities, facilities, and infrastructures such as mobile phones, laptops, and internet networks both for lecturers and students (cadets) as well as the low skill of technology application, the learning process still needs to be carried out to ensure the process of science transformation of the learners is not disturbed. The application of distant learning forced both the lecturers and students to utilize technology as a learning medium[5]. As the tip of the spear in education, Lecturer has made various efforts such as implementing distance learning (DL) through the media such as Whatsapp Group, Google Classroom, Moodle, and other online learning applications. For synchronous learning, the lecturer also uses the media of Google Meet, Zoom Cloud Meetings, Cisco Webex, and so on. At this time, there are many online learning resources and science content found on the internet.

However, the results of direct observation of distance learning held in two (2) semesters at Politeknik Ilmu Pelayaran (PIP) Makassar, there were still some problems in learners, where the cadets were complaining about the number of learning materials that had not been mastered yet because of the limitations in elaboration or explanation mechanisms, while the assignments given by the lecturers for each subject making the task continues to accumulate. To overcome this problem, students rely on the internet to search for alternative explanations and answers that are not understood yet.

The material/lesson delivered by lecturers through YouTube videos and PowerPoint slides is considered difficult to comprehend and master, especially if it only relies on the PowerPoint slides. The other barrier during distance learning is the high number of independent tasks and limited time (short deadline). Therefore, it can be said that Distance Learning (DL) is not running optimally because the learners still feel difficulties in understanding the learning concepts, especially if the lecturer does not do live teaching.

RESEARCH METHOD

This study was conducted in 6 (six) months, from March to August 2021. The data collection was conducted at Politeknik Ilmu Pelayaran (PIP) Makassar. The data analysis technique used in this research was the SWOT analysis under a qualitative approach, which consists of Strengths, Weaknesses, Opportunities, and Threats. SWOT analysis aims to maximize the strengths and opportunities but to minimize the weaknesses and the threats. SWOT analysis is an identification of strategic factors systematically to formulate a strategy[6]. Strategy is a very important tool to achieve the goal (Porter: 1985). Strategy is a comprehensive master plan that explains the way to achieve all the goals that have been set previously[7]. From the definition of SWOT, it will be described as follows:

1. Evaluation of Internal factors
   1.1 Strengths are the strength that belongs to distance learning. By knowing the strength, distance learning can be developed into more formidable learning to be able to maintain the quality of education and to compete for the next development.
   1.2 Weaknesses are all factors that are not beneficial or detrimental for distance learning.
2. Evaluation of External Factors
   2.1 Opportunities are all the opportunity as a government policy, existing regulations, or economic conditions in the national or global which were expected to give the opportunity for distance learning to grow and develop in the future.
   2.2 Threats are the things that can bring harm to distance learning.
       For this analysis, the data were collected using observation, interview, and documentation guidelines. With the following stages :
       2.2.1 Classifying the data that have been obtained to be processed.
       2.2.2 Conducting a SWOT analysis.
       2.2.3 Putting the result into the SWOT matrix.
       2.2.4 Analyzing the strategies of the SWOT matrix.
       2.2.5 Recommending strategies that have been made to the Director of Politeknik Ilmu Pelayaran Makassar.

TABLE 1. Internal factors and External Factors

Factors	Parameters	Information
Internal Factors	The lecturers/a lecturer who is professional and has the skill of technology	Functional Lecturer Non-Functional Lecturers Academic Staff
	Information & Technology Infrastructure PIP Makassar	Multimedia Infrastructure (Computer/laptop/camera) Wifi Network Support
External Factors	Government Policy Support	Learning media (theoretical/practical learning) Non Android-Based Handphone Regulation of the Minister of Culture and Education No.719/P/2020 Regulation of the Head of BPSDM of Transportation Dept. No. PK.01/BPSDMP-2021
	Social	Regulation of The Governor of South Sulawesi No. 60 of 2020 Online lectures are something new and interesting to be tried The solutive policy to avoid the spread of Covid-19 Lecturer's Psychological Condition
	Economy	Cadet's Psychological Condition The purchasing power of the Internet package, both lecturers and cadets Need expensive cost Being Additional to Operational Cost for Community

ANALYSIS AND DISCUSSION

This study aims to identify the strengths, weaknesses, opportunities, and threats of distance learning for lecturers and cadets of PIP Makassar as well as to find out the strategies of lecturers at PIP Makassar in improving the quality of the cadets with distance learning through the SWOT analysis. In analyzing the data, the Author used a total of 400 respondents from both cadets and lecturers of PIP Makassar. Analysis of the total achievement of the respondents related to the respondents ' answers to the question posed using Gutman Scale[8] was as follow:

TABLE 2. Total Achievement of The Respondents to The Research Question

Interval	Category	Total
40-60	Medium	316
61-80	Good	71
81-100	Very Good	13
		400

Source: Primary Data, processed

Furthermore, it is important to test the validity of the data used in doing research. The validity test for the data consists of two tests, namely the validity and reliability test. The researchers employed the SPSS 26 to test the validity of the data, which can be described as follows:

Validity Testing

Validity testing is a test to measure the validity of an instrument. Thus, testing the validity refers to the extent to which an instrument in carrying out the functions

The table of the test results above is elaborated in the following table to see the validity of the data by comparing the value of the r count with the r table. The instrument testing in this research was the validity test which is used to test a questionnaire to produce the decision of whether or not the instruments is feasible to be used.

If the correlation coefficient >0.3 and the significant level of 5% (0.05), the instrument is declared valid. This validity test is performed by comparing the value of the r table and the value of the r count. In this study, the degree of freedom (df) = n-2. Where df is calculated by the operation of the number of samples 400-2 = 398 with a significance value of 5%, so it can be noted the value of the r table that acceptable is = 0.098.

TABLE 3. A Summary of Data Validity Testing Results

No	Questions	r Table	r Count	Criteria
1	P1	0.098	.667**	Valid
2	P2	0.098	.400**	Valid
3	P3	0.098	.402**	Valid
4	P4	0.098	.379**	Valid
5	P5	0.098	.364**	Valid
6	P6	0.098	.515**	Valid
7	P7	0.098	.330**	Valid
8	P8	0.098	.394**	Valid
9	P9	0.098	.293**	Valid
10	P10	0.098	.444**	Valid

Source: primary data, processed 2021

a. Reliability Testing

The next instrument testing is the reliability test. This test is a tool for measuring the consistency of the questionnaire used. The questionnaire is considered reliable if the value of the Cronbach's alpha is>0.60, and conversely, if the value of the Cronbach's alpha <0.60, then the questionnaire is not reliable [9].

TABLE 4. Case Processing Summary Reliability Statistics

		N	%
Cases	Valid	400	100,0
	Excluded[a]	0	.0
	Total	400	100,0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	N of Items
.655	11

Based on the testing results, it can be seen that the value of the Cronbach alpha by 0.655 > 0.60, the instrument in this research is reliable. The results of the descriptive analysis of respondents ' answers to the questions asked in the questionnaire, which were distributed using the Guttman Scale, are as follows:

TABLE 5. Respondents ' Answers Index

NO.	QUESTIONS.	INDEX
1.	Online lectures give ease for lecturers in teaching and learning proses	93
2.	In providing learning materials, the lecturers are capable and have the creativity to explain the material easily to learners	73.5
3.	Students can fully participate in the process of online learning	93.5
4.	Learners have attended the online lectures easily (network support)	90.25
5.	Lecturer in delivering the lesson is following the syllabus	91.25
6.	Distance learning requires students to be able to use a certain application such as Zoom, Google Meet, etc	87.25
7.	The limitation of the internet network in a specific region is being the obstacles in following DL	90.5
8.	Internet package becomes an obstacle in attending the distance learning	92
9.	In the learning process, the lecturers have the creativity in using the learning media	97.25
10.	In conducting the courses, lecturers have been on time	98.5

Source: Primary data, processed 2021

Strategic factors identified were grouped into four (4) groups of factors, namely Strengths, Weaknesses, Opportunities, and Threats. Strengths and weaknesses are identified from the analysis of the internal environment, while the opportunities and threats are identified from the analysis of the external environment, as shown in Table 6.

TABLE 6. The SWOT Factors and Sub-factors for Strategy Selection

Strength (S)	**Weaknesses (W)**
What kind of strength is to be considered?	(W1) In providing learning materials, the lecturers are capable and have the creativity to explain the material easily to learners.
(S1) Online Learning is providing ease for lecturers in the teaching and learning process	(W2) Distance learning requires students to be able to use a certain application such as Zoom, Google Meet, etc
(S2) Learners have attended the online lectures easily (network support)	
(S3) Lecturer in delivering the lesson is following the syllabus	
(S4) In the learning process, the lecturers have the creativity in using the learning media	
Opportunities (O)	**Threats (T)**
Can you take advantage of the opportunities?	**What threats should we be aware of?**
(O1) In conducting the lectures, lecturers have been on time	(T1) Internet package becomes an obstacle in attending distance learning.
(O2) Students can fully participate in the process of online learning	(T2) The limitation of the internet network in a specific region is being the obstacles in following DL

Source: Primary Data, Processed 2021

TABLE 7. External Strategy Factors

No	EXTERNAL STRATEGY FACTORS	WEIGHT	RATING	SCORE
	Opportunities			
1	(O1) In conducting the lectures, lecturers have been on time	0.25	3	0.75
2	(O2) Students can fully participate in the process of online learning	0.17	3	0.51
	Sub-total	0.37		1.26
	Threats			
1	(T1) Internet package becomes an obstacle in attending distance learning.	0.23	4	0.92
2	(T2) The limitation of the internet network in a specific region is being the obstacles in following DL	0.35	4	1.4
	Sub-total	0.6		2.32
	Total	1		3.58

TABLE 8. Internal Strategy Factors

NO	INTERNAL STRATEGY FACTORS	WEIGHT	RATING	SCORE
Strengths				
1	(S1) Online Learning is providing ease for lecturers in the teaching and learning process	0.12	3	0.36
2	(S2) Learners have attended the online lectures easily (network support)	0.18	3	0.54
3	(S3) Lecturer in delivering the lesson is following the syllabus	0.2	4	0.8
4	(S4) In the learning process, the lecturers have the creativity in using the learning media	0.18	3	0.54
Sub-total		0.68		2.24
Weaknesses				
1	(W1) In providing learning materials, the lecturers are capable and have the creativity to explain the material easily to learners.	0.12	3	0.36
2	(W2) Distance learning requires students to be able to use a certain application such as Zoom, Google Meet, etc	0.2	3	0.6
Sub-total		0.32		0.96
	Total	1		3.2

The results of SWOT diagram analysis can be seen as follows:

FIGURE 1. SWOT Diagram

These results illustrate the strategic position of the PIP Makassar based on the external factor analysis strategies (EFAS) and internal factor analysis strategies (IFAS), which can be seen in the SWOT diagram above, where the position is in quadrant III, which supports the Defensive. In this condition, the PIP Makassar has a great opportunity to increase the cadets' learning motivation by using Distance learning. On the other hand, PIP Makassar requires adequate infrastructure, such as a Learning Management System integrated with SPADADikti and web-based or Android-based, which PIP Makassar owns.

TABLE 9. The Calculation Results of SWOT Matrix Analysis

IFAS EFAS	Strengths	Weaknesses
Opportunities	SO strategy 1.26 + 2.24 = 3.5	WO strategies 0.96 + 1.26 = 2.22
Threats	ST strategy 2.24 + 2.32 = 4.56	WT strategy 0.96 + 2.32 = 4.19

The research and calculation result of the SWOT matrix indicates the ranking of strategic options that can be done: the first rank is the ST by 4.56. The second rank is the WT strategy at 4.19, and the third and fourth ranks respectively are the SO strategy by 3.5 and the WO strategy by 2.22.

TABLE 10. The analysis of the SWOT Matrix of Internal and External Environment

Internal factors		
	Strength (S) What kind of strength is to be considered? (S1) Online Learning is providing ease for lecturers in the teaching and learning process (S2) Learners have attended the online lectures easily (network support) (S3) Lecturer in delivering the lesson is following the syllabus (S4) In the learning process, the lecturers have the creativity in using the learning media	**Weaknesses (W)** Weaknesses that need to be recognized? (W1) In providing learning materials, the lecturers are capable and have the creativity to explain the material easily to learners. (W2) Distance learning requires students to be able to use a certain application such as Zoom, Google Meet, etc
External factor		
Opportunities (O) Can you take advantage of the opportunities? (O1) In conducting the lectures, lecturers have been on time (O2) Students can fully participate in the process of online learning	**SO strategy** Improve the ability of PIP Makassar lecturers' ability to provide online learning, improving the existing infrastructure so that all cadets can follow online learning at the maximum effort.	**WO strategies** Lecturers need to increase creativity in giving lectures, increase the maximum utilities of existing apps like Google Meet, Zoom, and Kahoot so that learning can always be implemented online

Alternative strategies based on the SWOT factors and sub-factors developed using the SWOT matrix are shown in the following table:

TABLE 11. Alternative Strategies of SWOT Factors and sub-factors which are developed

Threats (T)	(ST) Strategy	(WT) Strategy
What threats should we be aware of? (T1) Internet package becomes an obstacle in attending distance learning. (T2) The limitation of the internet network in a specific region is being the obstacles in following DL	In implementing online learning, PIP Makassar can make innovations in the **Learning Management System (LMS)** by making the learning app itself be applied on the campus of the PIP Makassar. Since it is web-based and android-based, the cadets can access them easily and save on the use of the internet package.	The lecturer is expected to increase the knowledge and innovation in online learning, complete the syllabus, and create learning media that is more easily understood by the cadets so that the learning process can be more optimal.

CONCLUSION AND SUGGESTION

The Author distributed the questionnaire to 400 respondents from lecturers and cadets whose responses were tested for validity and reliability, which was specified in the Gutman Scale (SPSS 26). The result obtain the following: Strengths, the DL provides ease in learning; Weakness, the application of DL imposes the use of some learning apps; Opportunities, lecturers and cadets have more flexible and a maximum of learning time; and Threats, The lecturers and cadets have limited internet package and network in the specific region/area. The strategy of PIP Makassar lecturers in increasing motivation of the cadets in distance learning is preferably by increasing their knowledge, doing innovation with the evolving technology, providing learning media that is easy to understand, and being communicative in the learning process.

Suggestions from the author are:

- The Lectures and Cadets must have an application that could support related infrastructure for distance learning, web-based, android based in Learning Management System (LMS) by making the learning application on the campus of the PIP Makassar, which is easy to access and can save on the internet packages.
- Lecturers should be provided with more knowledge and innovation related to learning technology advancement to support their ability in the distance learning process in the PIP Makassar.

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