

Strategies of the Manado State Christian Institute in Implementing Christian Cyber University-Distance Learning

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ABSTRACT

Distance learning at state Christian higher education institutions is something new. Therefore, this research aims to determine the appropriate strategy for implementing distance learning at Manado State Christian Institute. This research method uses a mixed method design, mixed method research that combines qualitative and quantitative data collection and analysis methods in one study and is carried out from April to June 2023. The method used by the respondents was the purposive sampling method. Respondents were selected from internal and external stakeholders, consisting of information technology and database unit staff, lecturers and students, and experts in the field of implementing distance learning. The instruments are the researchers themselves, interview guidelines, and questionnaires. Data analysis in the study uses SWOT and QSPM analysis methods. The results showed that based on the results of the IE analysis, the Manado State Christian Institute's position is in Quadrant II Growth Strategy (concentration through horizontal integration) with coordinate values (2.84, 3.39), which means that Manado State Christian Institute can improve its performance with internal and external resources. While the results of the QSPM analysis show that the three priority strategies for implementing distance learning are 1) Conducting benchmarking studies for the distance learning team with accredited excellence universities that offer distance education, 2) Strengthening the authority and responsibilities of distance education managers, and 3) Enhancing digital/cyber-based governance. This strategy is a priority strategy that will be implemented.

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1. INTRODUCTION

Education is a human need that is always undergoing change, development and improvement in accordance with developments in all areas of life (Shintia et al., 2024). Education is one of the important aspects in the development of people's life and plays a role in improving the quality of life. Education is very important because it is the foundation for developing constructive and creative thinking patterns. Through adequate education, a person will be able to develop optimally both economically

and socially (Umasangadji, 2015). Education is an essential and crucial need in forming individuals and improving thinking abilities and a productive and innovative quality of life.

The development of education is still one of the government's focuses as an effort to improve the quality of human resources. The development of educational facilities in Indonesia still needs to be improved, one of which is by providing educational facilities that educate and meet the needs of the population. The success of the existence of a social facility can be seen from the interest and willingness of the population in an area to utilize these social facilities. Educational facilities are one of the social facilities that are a necessity for residents of a region to facilitate their daily life activities. Educational facilities are a priority in supporting social infrastructure needs in a settlement. With the development of an increasingly advanced era, education is a top priority in society. Therefore, to meet the needs of society, adequate educational facilities are needed. Adequate educational facilities can support the quality of student learning and compete with current technological developments (NORMATIKA, 2018).

One indicator of equal opportunity to obtain educational services is shown by the Gross Enrollment Rate (GER) and Net Participation Rate (NPR) in each education. GER shows the ratio between the number of people who attend school at a certain level of education with the total age population at that level (Safira & Wibowo, 2021). Meanwhile, the GER shows the ratio between the number of people attending school according to their level of education and the total school age at that level. Particularly for GER achievements at the higher education level, Indonesia is still lagging several neighboring countries. According to World Bank data for 2020, the GER or higher education in Singapore reaches 91 percent, Thailand 49 percent, and Malaysia 43, (Mutia, 2022). Based on data from several countries, it can be concluded that Indonesia's GER is still low compared to other countries in Southeast Asia.

Based on data from the Central Bureau of Statistics of the Republic of Indonesia (CBS), the GER of the higher education (GER-THE) in Indonesia is 31.16% in 2022. The result from 2020 shows that at the last 3 years, in 2020 it was 30.85% and 2021 it was 31.19%, respectively. The data shows it is constantly in general (BPS, 2023). In 2022 there are 15 provinces that have a (GER-THE) value above the national GER-THE score and 19 provinces that have an GER-THE core below the national score. In North Sulawesi Province, the APK-THE counted 34.62% in 2020, 34.43% in 2021, and 34.36 in 2022. The data shows that North Sulawesi's GER-THE value is above the national score, but it has decreased in three consecutive years.

Various solutions have been determined and planned by the government in improving GER-THE. Among the existing solutions, one of the alternative learning solutions that can be developed is implementing an e-learning based distance learning process, in which most or all the teaching materials are carried out online. Online learning is learning that utilizes internet networks with connectivity, accessibility, flexibility, and the ability to bring up various types of learning interactions (Irwansyah, 2018). In its implementation, the online learning process is very dependent on networks and skills in using technological devices, (Abad-Segura et al., 2020).

However, the current reality is that other than the open university is still dominated by public universities which have large capacities and are also of international standard. Specifically at the State Religious College, there is one higher education institution, namely the Cirebon State Islamic Institute. Therefore, to increase GER-THE, especially in religious higher education, the Manado State Christian Institute is preparing to become one of the universities that can provide distance education, in accordance with the mandate of the Ministry of Religion of the Republic of Indonesia.

Implementing of distance learning process requires policies or technical guidelines, IT support consisting of IT infrastructure, bandwidth capacity, applications/software, and IT personnel. Besides that, policies from the academic side require curriculum design, various learning processes and appropriate teaching materials and all of this requires the use of Information and Communication Technology (ICT) to support various learning activities including learning administration such as registration or enrollment, preparation of semester learning plans, preparation and distribution of

teaching materials, various forms of learning such as practical activities, tutorials, responses and exams as well as other services such as discussion forums and live chat (Chyan, 2021).

Previous similar research was conducted by (Taufik, 2019)(Masrurroh, 2020). This research explains perspectives and practices in long-distance implementation. Apart from that, there is a strategy to increase GRE at open universities in Gorontalo, (Gerungan et al., 2020). This research is not intended to repeat or answer the shortcomings of previous research, but to determine implementation strategies for developing distance learning for Manado State Christian Institute where previously learning was carried out face-to-face in class. This is something new for this institution, so according to the regulations of the Minister of Religion of the Republic of Indonesia, the Manado state Christian Institute as a pilot project was named Cyber Christian University as a pioneer of distance education on state Christian campuses in Indonesia. Therefore, this research focuses on how to implement strategies for developing distance education (Cyber Christian University) at the Manado State Christian Institute.

2. METHODS

This research method uses a mixed method designs. Mixed method research is research that combines qualitative and quantitative data collection and analysis methods in one study. This type of study allows policy researchers to understand complex phenomena qualitatively and explain these phenomena through numbers, graphs, and statistical analysis (Creswell, 1999). The type of research used in this study is a mixed method using a sequential exploratory design model. The purpose of an exploratory sequential mixed methods design involves the procedure of first gathering qualitative data to explore a phenomenon, and then collecting data to quantitative data (Creswell, 2013). The research was carried out from April to June 2023 at the Faculty of Christian Education, Manado State Christian Institute.

The study employed a purposive sampling technique to select respondents. Participants were drawn from both internal and external stakeholders, including staff from the information technology and database units, lecturers, students, and experts in the field of distance learning implementation. The research utilized multiple instruments: the researcher served as an instrument in qualitative data collection, supported by interview guidelines, while questionnaires were employed for quantitative data gathering. The interview guidelines were designed to explore the Strengths, Weaknesses, Opportunities, and Threats (SWOT) associated with distance learning. Specifically, interviews were conducted with three staff members from the information technology and database units, five lecturers, three students, and two subject-matter experts. The qualitative data were analyzed using the Miles and Huberman (1994) framework, which involves four key steps: data collection, data reduction, data display, and conclusion drawing.

The development of the questionnaire is the second stage of the instruments prepared in this study. The questionnaire was constructed based on the SWOT analysis results, compiled with the aid of experts. The list of statements in the questionnaire represents the best strategies to be selected from various alternative strategies obtained from the SWOT analysis stage. The questionnaire was designed using a Likert scale ranging from 1 to 5.

The data and information obtained were then processed and analyzed descriptively and quantitatively. Descriptive analysis is used to explain the factual conditions encountered in the field, identify, and analyze external and internal environmental factors of the institution. Data processing is done using the Microsoft Excel program.

Quantitative analysis using weighted averages and ratings is used in evaluating the formulation of the strategy for implementing distance learning at Manado State Christian Institute. The strategy formulations use the SWOT and QSPM methods. SWOT analysis is a qualitative analysis tool to generate alternative strategies by considering external and internal institutional factors. QSPM is used to determine the alternative strategies that are generated in the SWOT matrix.

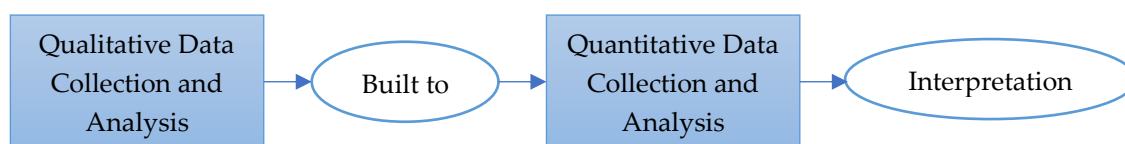


Figure 1. Exploratory Sequential Design (Creswell, 1999)

The analysis phase with SWOT and QSPM is as follows: 1) determining the EFEM (The External Factor Evaluation Matrix). At this stage, the determination and evaluation of external factors are carried out. 2) Determine the IFEM (The Internal Factor Evaluation Matrix). At this stage, the determination and evaluation of internal factors is carried out. 3) Determine the SWOT Matrix. At this stage, an analysis of the strengths, weaknesses, opportunities, and threat factors for alternative strategies is carried out. 4) Determine the alternative strategies that have been generated from the SWOT analysis with QSPM analysis (Budihardjo et al., 2021)

3. FINDINGS AND DISCUSSION

Every educational institution, especially at Manado State Christian Institute, has an institutional development program to achieve various improvements in access to education services and quality of education. Because of this, one of the educational programs planned is the implementation of a Cyber Christian University-based distance learning program. This program adapts the distance education system implemented by Universitas Terbuka in Indonesia. All administration is conducted online, and the learning system is fully online as well. In terms of determining the priority of the strategy to be carried out by Manado State Christian Institute, it is necessary to make an internal matrix and an external matrix of the implementation strategy. The steps begin with an interview, followed by an analysis to identify strengths, weaknesses, opportunities, and threats, which are then analyzed for strategy implementation using a SWOT analysis. The results of the SWOT analysis become a questionnaire instrument to be analyzed using QSPM analysis.

3.1. Findings

3.1.2 IFEM (The Internal Factor Evaluation Matrix)

After obtaining the internal strategic factors of Manado State Christian Institute, include strengths and weaknesses, a questionnaire was given regarding the weighting and rating of the strengths and weaknesses variables. The respondents for the questionnaire are internal stakeholders, including faculty members, staff from the information technology and data center unit, as well as computer operators. Furthermore, weighting was done using the paired comparison matrix method. The ranking and weighting results can be seen in Table 1.

Table 1. IFEM Matrix Analysis Result

	Strength	Weight	Score	Score Weight
1	There is a Decree of the Minister of Religion on Manado State Christian Institute as a cyber-based Christian Religious College pilot project	0.15	3.5	0.51
2	There is a cyber-based distance learning work team to handle IT support for the implementation of the distance learning	0.15	3.25	0.50
3	The only State Christian Religious College that has a server that is used independently	0.15	3.25	0.47
	Weakness	Weight	Score	Score

				Weight
1	There is no study program that meets the requirements for implementing the distance learning program	0.14	2.50	0.34
2	Utilization of LMS applications that are not yet optimal	0.14	2.50	0.34
3	Server capacities are still low	0.15	2.50	0.36
4	The bandwidth capacity is still low	0.14	2.25	0.31
Total		1.00		2.84

Based on Table 1, it was found that the main strength is the Decree of the Minister of Religion on Manado State Christian Institute as a cyber-based Christian Religious College pilot project, while the most prominent weakness is the low bandwidth capacity at Manado State Christian Institute.

3.1.2 EFEM (The External Factor Evaluation Matrix)

After obtaining the external strategy factors of Manado State Christian Institute, which include opportunities and threats, a questionnaire was given regarding the weighting and rating of the variables of opportunities and threats. Furthermore, the weighting is done by using the paired comparison matrix method. The ranking and weighting results can be seen in Table 2.

Table 2. EFEM Matrix Analysis Result

Opportunities		Weight	Score	Score Weight
1	There is no State Christian Religious College that has implemented cyber-based distance learning	0.17	3.5	0.61
2	Collaboration with public university organizers of excellent accredited distance learning	0.17	3.25	0.54
3	There is cooperation with Telkom Indonesia	0.17	3.75	0.66
4	Many prospective students outside the Manado area	0.17	3.5	0.61
Threats		Weight	Score	Score Weight
1	Massive and rapid adaptation of distance learning to tertiary institutions	0.15	3.00	0.44
2	Massive technological and information advances require high costs	0.17	3.25	0.54
Total		1.0		3.39

Table 2 shows that the collaboration between Manado State Christian Institute and Telkom Indonesia represents the greatest opportunity, while the biggest threat is the substantial financial requirement to successfully implement this program.

3.1.3 IE Matrix Analysis

From the results of the IFEM and EFEM analysis, Manado State Christian Institute is in the second quadrant, namely Growth Strategy (concentration through horizontal integration

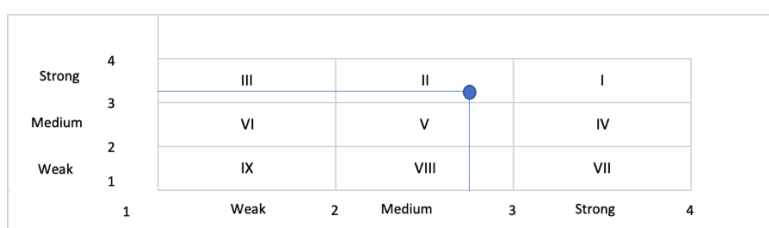


Figure 2. IE Matrix Analysis

3.1.4 SWOT Analysis

SWOT analysis is used to analyze strengths, weaknesses, opportunities, and threats to determine alternative strategies for implementing distance learning based on Cyber Christian University at Manado State Christian Institute. SWOT analysis is the formulation of a strategy that underlies the formation of strategies that are adjusted to the position of the institution. Based on the IE matrix analysis, IAKN Manado is a university in a growth position. Then, a suitable strategy is based on the following table:

Table 3. SWOT Analysis

Internal Factor	Strength	Weakness
	<ol style="list-style-type: none"> 1) There is a Decree of the Minister of Religion on Manado State Christian Institute as a cyber-based Christian Religious College pilot project 2) There is a cyber-based PPJ work team to handle IT support for the implementation of distance learning 3) The only State Christian Religious College that has a server that is used independently 	<ol style="list-style-type: none"> 1) There is no study program that meets the requirements Implementation of the distance learning program 2) Implementation of the distance learning program 3) Utilization of the LMS application is not optimal 4) Bandwidth capacity is low
External Factor	Opportunities	Threats
	Strategy (S-O)	Strategy (W-O)
	<ol style="list-style-type: none"> 1) Enhancing digital/cyber-based governance 2) Conducting benchmarking studies for the distance learning team with accredited excellence universities that offer distance education 3) Strengthening the authority and responsibilities of distance education managers 4) Conducting outreach in the form of online digital literacy and motivation seminars for prospective students 	<ol style="list-style-type: none"> 1) Improving the accreditation rank of study programs 2) Holding workshops for the preparation/development of teaching materials and learning assessments with partners 3) Increasing bandwidth capacity with partners
	Strategy (S-T)	Strategy (W-T)
	<ol style="list-style-type: none"> 1) Conducting regular and consistent evaluations of the curriculum's alignment with the needs of graduates' users 2) Planning finances appropriately 	<ol style="list-style-type: none"> 1) Designing LMS applications according to the institution's and graduates' needs. 2) Increasing the number of human resources as IT operators and maintainers.

3.1.5 QSPM Analysis

After carrying out the input stages of internal and external environmental analysis through the IFEM and EFEM matrices, as well as the matching stage with the IE and SWOT matrices, the next stage is the decision stage using the QSPM. This technique objectively indicates which strategic alternative is the best. QSPM uses the input from the first stage and matching from the second stage to objectively determine the strategic alternatives.

Several alternative strategies analyzed using QSPM are as follows:

- a. Enhancing digital/cyber-based governance
- b. Conducting benchmarking studies for the distance learning team with accredited excellence universities that offer distance education
- c. Strengthening the authority and responsibilities of distance education managers
- d. Conducting outreach in the form of online digital literacy and motivation seminars for prospective students
- e. Improving the accreditation rank of study programs
- f. Holding workshops for the preparation/development of teaching materials and learning assessments with partners
- g. Increasing bandwidth capacity with partners
- h. Conducting regular and consistent evaluations of the curriculum's alignment with the needs of graduates' users
- i. Planning finances appropriately
- j. Designing LMS applications according to the institution's and graduates' needs
- k. Increasing the number of human resources as IT operators and maintainers

Based on the results of the QSPM assessment, the highest to the lowest Total Attractiveness Score (TAS) value is obtained. From this sequence, priority strategies can be generated that can be implemented by Manado State Christian Institute in the context of implementing distance learning. Alternative priorities are obtained from the results of the QSPM analysis.

Table 4. Alternative Strategies

No	Alternative Strategies	TAS Score
1	Conducting benchmarking studies for the distance learning team with accredited excellence universities that offer distance education	8,62
2	Strengthening the authority and responsibilities of distance education managers	8,38
3	Enhancing digital/cyber-based governance	8,12
4	Increasing bandwidth capacity with partners	8,07
5	Designing LMS applications according to the institution's and graduates' needs	8,05
6	Planning finances appropriately	8,03
7	Improving the accreditation rank of study programs	8,02
8	Holding workshops for the preparation/development of teaching materials and learning assessments with partners	8,01
9	Conducting regular and consistent evaluations of the curriculum's alignment with the needs of graduates' users	8,00
10	Conducting outreach in the form of online digital literacy and motivation seminars for prospective students	7,94
11	Increasing the number of human resources as IT operators and maintainers	7,89

3.2. Discussion

The establishment of the distance education program at the Manado State Christian Institute aims to provide wider and more inclusive educational opportunities for individuals who have geographical or time limitations to attend conventional education. This program also allows students who work or have other responsibilities to continue to attend quality religious education, (Mula et al., 2017).

Besides that, distance education also allows Manado State Christian Institute to reach students who are in remote or scattered areas, which previously were difficult to reach by formal education. For students, the distance education program provides flexibility in arranging study time according to their availability. They can access learning materials anytime and anywhere, without having to be physically present in campus. Thus, it is hoped that it can increase the high education Gross Enrollment Rate (GER) in Indonesia. This program allows them to continue working, caring for a family, or pursuing other commitments while still pursuing the Christian religious education. In addition, distance education also reduces transportation and accommodation costs, making it more affordable for students with financial limitations (Nhi, 2023). Thus, this program aims to increase the accessibility of Christian religious education in Indonesia.

However, improving access to education is not easy; there are challenges that must be faced. One of the main challenges is the need to ensure the quality of learning is equal with conventional education. Educational institutions need to develop effective teaching strategies and ensure that students get an optimal learning experience through digital platforms (Bratitsis et al., 2023), (Mashile et al., 2023).

In addition, distance education also requires adequate technological readiness. The availability of stable internet access, computer infrastructure, and digital literacy are important factors for the success of distance education (Alokla et al., 2023). Educational institutions need to invest in adequate supporting technology and provide technical support to students so they can follow their studies well.

With the establishment of the Distance Education program at the Manado Christian Religious Institute, it is hoped that it will increase access to quality Christian religious education throughout Indonesia. This program is expected to reach students who were previously difficult to reach and provide opportunities for them to get the religious education they need, (Castro, 2019); (Tchamyou, 2020).

According to the needs and conditions above, the development strategy carried out in accordance with the results of the research ultimately boils down to:

- a. Manado State Christian Institute focuses on developing interactive and user-friendly online learning platforms. The platform is designed to provide an interesting and interactive learning experience for students. Features such as discussion forums, online assignments, and learning materials that can be accessed flexibly enable students to participate actively in the learning process.
- b. Manado State Christian Institute also seeks to develop relevant and quality learning content. Through collaboration with experienced lecturers and Christian religious experts, Manado State Christian Institute ensures that learning materials delivered through distance learning still meet academic and in-depth standards in the field of Christianity.
- c. The development of distance learning at Manado State Christian Institute also leads to the use of the latest technology to support learning. The use of multimedia, simulations, and interactive content is an integral part of the student learning experience. Manado State Christian Institute is also exploring the potential of technologies such as virtual reality (VR) and augmented reality (AR) to enhance a more immersive and realistic learning experience.
- d. Manado State Christian Institute also pays attention to evaluation and assessment aspects in distance learning. In developing distance learning, Manado State Christian Institute integrates an objective and transparent assessment system. Students will be evaluated through various methods, including online assignments, online exams, and active participation in discussion forums. This ensures that the assessment process remains fair and accurate in measuring students' understanding and abilities.

- e. Furthermore, Manado State Christian Institute directs the development of distance learning on strengthening interactions between lecturers and students. Even though learning is carried out online, Manado State Christian Institute pays special attention to maintaining good relations between lecturers and students through intensive and supportive communication. Lecturers can provide academic guidance online, provide constructive feedback, and respond responsively to student questions.
- f. Manado State Christian Institute has also developed a program of coaching and competence development for lecturers in teaching distance learning. Lecturers at Manado State Christian Institute are trained to master distance learning technology and methodologies so that they can provide an effective and interesting learning experience for students.

Similar research has yielded comparable results. For instance, Supradono's (2009) study on the development of distance learning systems highlighted the importance of establishing robust e-learning governance frameworks and management systems as foundational components. In a related vein, Irwansyah (2018) investigated the implementation of distance higher education systems in private universities, emphasizing the need for an initial analysis of key management and policy components. His research further explored the operational aspects, including the management of human and non-human resources, and the strategic selection of study programs suitable for delivery through distance learning.

The alignment of these studies underscores the critical role of comprehensive planning in successful distance learning implementation. Both Supradono and Irwansyah identify governance and management frameworks as essential elements, indicating that a lack of attention to these areas can hinder the effectiveness of such programs. Additionally, Irwansyah's focus on resource management highlights the importance of balancing both human expertise and technological infrastructure, which are equally necessary for smooth operations and learner support.

These findings also reflect broader trends in distance education research, which consistently emphasize the importance of context-specific analyses. Studies suggest that successful distance learning initiatives must align with institutional policies and learner needs while also taking into account the availability of resources and appropriate technologies. Furthermore, the selection of study programs plays a strategic role, ensuring that courses offered through distance learning meet the academic and market demands, ultimately enhancing student engagement and program sustainability. This holistic approach strengthens the foundation for effective distance education systems across diverse institutional settings.

4. CONCLUSION

The findings of this study indicate that the Manado State Christian Institute is positioned in the second quadrant of a Growth Strategy, specifically focusing on concentration through horizontal integration, in its efforts to develop distance learning. Three priority strategies were identified: conducting benchmarking studies with leading universities known for their excellence in distance education, strengthening the authority and responsibilities of distance education managers, and improving governance through digital and cyber-based systems. However, the study has several limitations. It primarily focuses on internal and managerial aspects, leaving room for further exploration of student perspectives and external factors such as regulatory challenges and technological infrastructure constraints. The research provides important implications for practice, emphasizing the need for robust governance structures, professional development for managers, and continuous learning through collaboration with other institutions. Future research could expand on these findings by exploring the long-term impact of the proposed strategies on student outcomes and engagement, as well as examining how emerging technologies, such as artificial intelligence, might enhance the distance learning experience.

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