# PASTORAL STRATEGIC PLANNING PRIORITIES FOR THE CHURCH: CASE STUDY OF THE VICARIATE EPISCOPAL OF TONSEA OF THE DIOCESE OF MANADO

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### ABSTRACT

Strategic planning is a commonly used tool in profit-oriented institutions. However, it is rarely applied to non-profit organizations such as churches. The Vicariate Episcopal of Tonsea of the Diocese of Manado, a local Catholic church community, served as a test case for the implementation of strategic planning methods to further the pastoral mission. The study used the Analytic Hierarchy Process to determine the ranking of key elements of the pastoral mission, which provided a methodology upon which to formulate strategic plans and best utilize the available, but limited, resources. This study demonstrates the importance of the Analytic Hierarchy Process in determining the priority of the programs identified by the church. The researchers recommend further and deeper research on other Vicariates of the Diocese of Manado.

**Keywords**: Analytic Hierarchy Process; strategic planning; management; Catholic; Vicariate Episcopal of Tonsea; Diocese of Manado

# 1. Introduction

Management science methodologies and strategic planning processes are routinely applied and relied upon in military and profit-oriented business institutions (Golden, Wasil, Harker, 1989). Such methodologies and processes are embraced because they ensure better performance of the institution and survival in today's world of fierce competition. However, such methodologies and processes are rather uncommon in faith-based organizations.

Recently, non-profit institutions, such as the Church, have begun to adopt the principles of management science and strategic planning in an effort to make their programs more structured, directed, contextual and efficient.

In an effort to fulfill its pastoral missions, the Vicariate Episcopal of Tonsea of the Diocese of Manado, a Catholic church community, concluded that it was in need of a strategic methodology to determine the priorities of each of its programs in order to fulfill the current needs of the parishioners in the most efficient and effective manner. Historically, formal strategic planning techniques have not been applied to the activities of the Vicariate Episcopal of Tonsea. As such, this study aims to determine the most appropriate priority program to assist the Vicariate Episcopal of Tonsea in ranking its large number of varied objectives. Simply stated, the study seeks to determine what the best method is to determine the priority of the dictates of the Vicariate.

The application of Analytic Hierarchy Process (AHP) to rank priorities was proposed to establish priorities. However, a review of the literature showed no academic papers regarding the use of the AHP in the strategic planning process of the Church. This study is considered pioneer research for strategic planning and the determination of priority programs within the Church environment using the AHP method.

The Vicariate implemented the AHP and the results were analyzed. The AHP proved to be a valuable method to assess the relative importance of the different priorities of the Vicariate. The AHP format also provided several benefits beyond establishing priorities. The AHP clarified the communication of goals and tracking of objectives and increased the prospect of meeting the short timeline dictated by the Bishop. In addition, the AHP process was relatively simple for participants to understand and easy to implement. It also provided a quantitative method of ranking, which reduced the amount of variation and arguments typically associated with qualitative analysis.

However, while the AHP was suitable and useful for the Vicariate's stated goals, it was not without limitation and required additional research and analysis. The primary limitation was that the AHP technique was not known by the user community. Even more, since there has never been an empirical study of Church programs that used strategic planning and AHP methods, researchers are encouraged to further investigate and utilize AHP as a valuable tool to determine priorities in unique and non-traditional applications.

This paper is organized into seven sections. First, the background, problems, objectives, and limitations of the research are explained. Second, a literature review is provided, which identifies previous studies on strategic planning in the Church context. The third

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section discusses the Vicariate of Episcopal of Tonsea case study. This is followed by a discussion of the methodology, the analysis, and results of the case study. Lastly, the conclusions and recommendations and proposals for additional research are detailed.

# 2. Literature review

### 2.1. Strategic planning overview

Management science is the broad interdisciplinary study of problem solving and decision making in human organizations and is focused on the development of techniques that enable decision makers to cope with the complexity of our world. Strategic planning is an organization's process of defining its strategy, or direction, and making decisions about allocating its resources to pursue this strategy.

The word 'strategy' comes from the Greek word '*strategos*' which means the art of managing troops and equipment to face and defeat enemies (Ahmed, Bwisa, & Otieno, 2014). The word was originally used to describe the planning process a military leader used to develop tactics and strategies to conquer their enemies. The term was adopted by the business sector to define the actions that its managers take to outperform their competitors and achieve superior profitability (Thompson, Peteraf, Gamble, Strickland, 2016).

Strategic management can be thought of in several ways. First, strategic management is a continuous effort by an organization or company to adjust and update itself to meet the market demand. Second, it is a process of overcoming problems that can disrupt future business objectives through continuous improvement of policies and plans (Wanyoike, J & Orwa, B, 2016). Third, strategic management develops a roadmap for how the organization can continue to exist in a highly competitive environment.

A critical part of business strategy is the planning process. The purpose of strategic planning is to set overall goals for the organization and develop a plan to achieve the organization's objectives. Strategic planning requires identifying potential alternative actions, evaluating the risks and benefits of each alternative and then selecting the best alternative actions. (Arasa & K'Obonyo, 2012). Athapaththu (2016) added that strategic planning assists managers in recognizing priorities and determining the actions that are needed.

Business organizations and non-profit institutions have long espoused the strategic planning process. Indeed, it has been shown that having a formal planning process is a key factor in focusing and motivating people to achieve their organizational goals and objectives (Bakhmutsky, 2013).

### 2.2. The Church's potential espousal of strategic planning processes

Not all of the historical evidence demonstrates the Church's reluctance to implement strategic planning processes. There is evidence in the Holy Scriptures, both in the Old and the New Testament, of the importance of strategic planning. It is mentioned in Genesis that God worked with a master plan, creating the world, the day and the night, the horizon, water and plants – and that all of these priorities were completed in only six days. After resting, God then built the nation of Israel and sent Jesus Christ.

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The text of the Bible repeatedly references "God's plan" as well. A non-exhaustive list of such references include: God has a plan since the early ages (2 Kings 19:25); God's plan stays forever (Psalm 33:10-11); Jesus was sent according to God's plan (Acts 2:23); and through Christ everything has been set up (Ephesians 1:11) (Bakhmutsky, 2013).

In addition, the societal structure of the Church seemingly exemplifies principles of organizational management. The Church has a structure, communities, rules, and employees. It regulates money, operates schools, and hospitals – all of which need to be managed and controlled using applied sciences, such as management or accounting. The Church, as do all successful organizations, requires an effective management plan in order to function (Kagumu, J. & Njuguna, 2016).

Furthermore, the current sexual issues that have negatively affected the Catholic Church have forced church officials and the hierarchy to look for a comprehensive solution from the administrative, education, management and disciplinary system of the Holy Church. It requires that the Church have a comprehensive strategic plan to organize itself more effectively and efficiently in order to be reestablished as a trusted institution to preach the salvation of human beings both on earth and in heaven. Church leadership has an important role in developing a strategic management process and a framework to achieve objectives of the Church (Oosthuizen & Lategan, 2016). The strategic planning process can provide an effective tool for the Church to undergo the changes that are needed in pastoral service and to regain the respect of the people.

The Church, as a social entity and a non-profit organization, was required to start considering strategic planning techniques in the planning of pastoral services. By utilizing strategic planning methodologies, it is anticipated that the Church's programs will be more focused, efficient, have specific targets, and can be evaluated and improved.

### 2.3. The potential benefits of strategic planning for the Church

There are several important benefits for the Church when implementing strategic planning. First, the Church is able to go on the offensive in carrying out its mission rather than remaining on the defensive and reacting to the culture. Second, the Church members will be able to focus on the mission and purpose of the Church, setting aside their personal agendas. Third, it encourages good stewardship as members are more likely to give talents, time and finances to the Church that exhibits a clear purpose and direction. Fourth, it allows the church the freedom to cull unproductive ministries and programs that drain limited resources. Fifth, a strategic plan gives the Church a means to effectively evaluate progress and efficiency. Sixth, it reveals the Church's strengths and weaknesses so that it may build on the strengths and overcome the weaknesses. Seventh, it helps the Church embrace change and accept new members and ideas.

A strategic plan allows the Church to control and reduce its operational cost, and at the same time improve the quality of services (Wanyoike, J & Orwa, B, 2016). Strategic planning helps the church have a clear direction so that it can build a systematic framework to sharpen its competitive focus, design program models and priorities and ensure customer-focused growth strategies. For this reason, all stakeholders must be actively involved in determining the strategic plan of the Church (Mutia, K'Aol, &

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Katuse, 2016). The church needs an effective strategic plan to foster growth in the future (Oosthuizen & Lategan, 2016). The Church's strategic plan entails three key elements: 1) the mission statement of the Church – its very reason for existence; 2) the activities, strategies, acceptable outcomes and fundamental calling; and 3) a vision of the ideal and unique 'image' of the future Church including guiding values principles (Mutia et al., 2016).

# 3. Case study: the Vicariate Episcopal of Tonsea

The Vicariate Episcopal of Tonsea is located in North Sulawesi Indonesia (Appendix, Figure 1). covers the government area of North Minahasa Regency and Bitung City and has a total of 21,996 Catholics out of 182,619 local residents in that area. This Vicariate has 9 parishes and is served by 12 priests. The ratio of a priest to his flock is 1:1,833.

Under the leadership of Bishop Benedictus Untu, the Diocese of Manado conducted a Diocesan Synod in 2018 to commemorate the 150<sup>th</sup> year of the Catholic mission in North Sulawesi. The Synod produced a strategic plan for 2019-2023, which consisted of 6 strategic programs with 38 elements to be implemented in the pastoral service of the Diocese. The six strategic programs are: 1) ministry of the word and sacrament; 2) preserving the treasury of faith; 3) fellowship and leadership; 4) promoting the dignity of the laity; 5) Catholic education and; 6) Church property (Untu, 2018).

The Vicariate Episcopal of Tonsea, which is part of the diocese of Manado, needed to determine the priority of these programs for the short-term, medium-term and long-term periods. It was necessary to determine the priorities of the programs for the Vicariate to ensure that the programs were contextual and able to answer the current needs of Catholics in that area. The priorities must be specific, measurable, attainable, relevant and time-bound.

The application of the Analytic Hierarchy Process (AHP) to rank priorities was proposed as a method to establish priorities. However, a review of the literature showed no academic papers regarding the use of the AHP in the strategic planning process of the Church. Therefore, this study aims to determine the effectiveness of the use of the AHP to determine the program priorities of the Vicariate Apostolic of Tonsea. A disciplined method of establishing priorities was important because of the complexity and quantity of the criteria and sub-criteria.

# 4. Methodology

The basic direction of the Diocese of Manado was promulgated on September 14, 2018 and established the strategic plan for 2019-2023, which consisted of 6 strategic programs with 38 elements that were to be implemented by the various parishes. Due to the limited resources (time, money, people) and the vast area covered by each priest, the Vicariate needed to identify a methodology to determine the priorities of each program in order to fulfill the current needs of the parishioners in the most efficient and effective manner. Since the criteria and sub-criteria were quite complex, the researcher determined that the Analytic Hierarchy Process (AHP) was the appropriate tool for data gathering and analysis. The AHP method is commonly used to determine program priorities and to

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simplify the complexity of problems. This method provides an excellent combination of quantitative and qualitative analysis. The data, which was descriptive and qualitative in nature, can be easily quantified using the AHP method (Saaty, 2008). The AHP is a typical systems engineering method that transforms qualitative analysis into quantitative analysis and is widely used to solve decisions with complicated structures and a large numbers of decision criteria and factors which are difficult to quantify (Li, Ni, Dong, & Zhu, 2018; Fabjanowicz, Bystrzanowska, Namieśnik, Tobiszewski, & Płotka-Wasylka, 2018). As a result, many researchers use this method because of its simplicity and adaptability (Promentilla, Aviso, Lucas, Razon, & Tan, 2018). It is very often used by decision makers to find and determine policies and program priorities (Duleba & Moslem, 2019).

The first step in this method is to determine the purpose of the study, then proceed to find the criteria and sub-criteria (Nguyen, Fong, & Ho, 2010). The purpose of the study was to determine the implementation priorities for the Vicariate Apostolic of Tonsea based on the strategic plan developed by the Diocese of Manado for 2019–2023. The six strategic programs became the criteria and after focus group discussions, it was determined that 26 of the elements qualified as the sub-criteria that must be implemented in the Vicariate Episcopal of Tonsea. Twelve of the criteria were eliminated because it was determined that they needed to be implemented at the Diocese level. Table 5 shows the criteria and sub-criteria and alternatives, the hierarchy was arranged as shown in Figure 2 below.



Figure 2 Hierarchy of Vicariate Episcopal of Tonsea priority program

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Once the goal, criteria and sub-criteria were identified and modeled, then a questionnaire was compiled using the Analytic Hierarchy Process technique, which is in the form of pairwise comparisons. The parish priests of the Vicariate Episcopal of Tonsea, who were the policy makers in each of their respective parishes, completed the questionnaire. It was determined that the parish priests had the proper knowledge, skills, and experience to complete this task. All of them have worked in the parishes for over three years and know the people, culture and living environment. They were considered the experts, the people who understood the true problems, felt the consequences of a problem or had an interest in the problem (Raco & Tanod, 2014). There were 10 respondents.

The AHP does not have a formula for a required number of respondents, but a minimum of 2 people must be involved. In the AHP, the number of responses is not critical, the quality of the data and the quality of the respondent is most important (Duleba & Moslem, 2019). The respondents must have lived-experience and be very knowledgeable about the issues being studied. They should be the decision makers, and be willing and able to share their knowledge regarding the issues, which were complex and qualitative in nature, based on their perception, experience and intuition.

The purpose of the questionnaire in the form of pairwise comparisons, as shown in Table 3, was to calculate the weight of each criteria and sub-criteria based on the hierarchical structure. The respondents determined the weight of each of the criteria and sub-criteria. Pairwise comparisons were made in the form of absolute determinants that represent how many criteria or sub-criteria are compared to one another (Budimčević, 2018).

The paired comparison uses a scale that has been determined by Saaty (2008) where the respondents choose numbers between 1 and 9, which are listed in the scale as shown in Table 1.

Intensity of Importance on an Absolute Scale	Definition	Explanation
1	Equal Importance	Two activities contribute equally to the objective
3	Moderate importance of one over another	Experience and judgment strongly favor one activity over another
5	Essential or strong importance	Experience and judgment strongly favor one activity over another
7	Very strong importance	An activity is strongly favored and its dominance is demonstrated in practice
9	Extreme importance	The evidence favoring one activity over another is of the highest possible order of affirmation
2, 4, 6, 8	Intermediate values between the two adjacent judgments	When compromise is needed

Table 1Saaty's comparative scale

The numbers on the scale of comparison allow respondents to determine the ratings, that were previously expressed verbally and qualitatively, in a quantitative numerical form that actually represents values (Fabjonowics, Namiesnik, Tobiszewski, Plotka-Wasylka, 2018). This ability to quantify qualitative data is one of the advantages of the AHP method.

The results of the data obtained through the questionnaire were then aggregated using the geometric average equation as appears in the Equation 1 below.

$$GM = \sqrt[n]{(x_1)(x_2)\dots(x_n)}$$
(1)

After averaging the questionnaire data, a pairwise comparison matrix was compiled starting with the criteria and then the sub-criteria as shown in Equation 2 below.

$$A = [a_{ij}], \qquad a_{ij} = w_i / w_j, \qquad a_{ji} = 1 / a_{ij} \qquad a_{ii} = 1$$
(2)

To calculate the priority weights, the paired comparison matrix was normalized using Equation 3 below.

$$b_{ij} = \frac{a_{ij}}{\sum_{i=1}^{n} a_{ij}} \tag{3}$$

This was followed by calculating the average row in the pairing matrix, which is the priority weight, using Equation 4 below.

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$$w_i = \frac{\sum_{j=1}^n b_{ij}}{n} \tag{4}$$

A consistency test was performed to determine the level of consistency in the paired comparison matrix with the following steps:

Calculate the maximum (principal) eigenvalue using Equation 5.

$$\lambda_{max} = \sum_{i=1}^{n} \frac{(Aw)_i}{nw_i} \tag{5}$$

Calculate the consistency of the index with Equation 6 below.

$$CI = \frac{\lambda_{max} - n}{n - 1} \tag{6}$$

A boundary test, determined by Saaty, was conducted after obtaining a consistency index. The test was measured using the consistency ratio, which is a comparison between the Consistency Index and the Ratio Index (RI). The equation for calculating the consistency ratio is shown in Equation 7 as follows:

$$CR = \frac{CI}{RI} \tag{7}$$

Table 2 shows the RI value for each n object.

Table 2 Ratio index

Ν	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RI	0.00	0.00	0.58	0.90	1.12	1.24	1.32	1.41	1.45	1.49	1.51	1.48	1.56	1.57	1.59

If CR  $\leq 0.10 (10\%)$ , this means that the user's answer is consistent and the resulting solution is optimal and acceptable. Conversely, if the result was more than 0.1, the judgment is not correct and the study needs to be repeated (Saaty, 2008).

Since this methodology has roots in mathematics and psychology, there is no need to ensure statistical generalization. It is only required that the sample size be sufficient to implement the AHP, which is one of the key reasons this methodology has been used effectively with small samples of less than 50 key representatives or stakeholders.

An additional advantage of the AHP method lies in the use of pairwise comparisons that reduce the burden of prioritizing in decision-making. The application of a numeric preference scale enables consistent comparison of quantitative and/or qualitative criteria. The relative simplicity of this method means that the interviewer does not need to be present to guide the respondent through the process, which may be required when using

complex techniques such as contingent valuation. Therefore, the AHP does not require probability sampling or large samples in order to generate valid and reliable results. However, it is necessary to ensure that respondents are selected on the basis of being representative of the experience under study (Morgan, 2017).

## 5. Results

Determining program priorities for the Vicariate Episcopal of Tonsea is very important before implementing the strategic plan. The analysis started with the construction of a hierarchical model. In the first layer, the main goal was formulated, in the second layer the criteria were determined, and finally in the third layer the sub-criteria were located. The goal and criteria, and the criteria and sub-criteria were connected.

In this study, both criteria and sub-criteria were taken from the Manado Diocesan Strategic Plan for 2019-2023. The strategic plan of the Diocese of Manado contained six strategic programs and 38 sub-programs. The six strategic programs of the Manado Diocese were the criteria, and the 38 sub-programs were used as sub-criteria. Only 26 out of 38 sub-criteria were used in the study because they were directly related initiatives that are managed at the parish level.

After the goals, criteria and sub-criteria were determined, a questionnaire was given to the parish priests of the Vicariate Episcopal of Tonsea. They were asked to choose the relative importance of each criterion. Their preferences in pairwise comparisons are defined by Saaty's 1-9 scale as shown in Table 1. The results of the calculations of the pairwise comparison and the priority weight for the criteria are presented in Table 3 below.

	FL	TF	MWS	DL	CE	MCP	Total	Priority Weight	
FL	0.197	0.225	0.169	0.210	0.214	0.169	1.183	0.197	
TF	0.173	0.198	0.261	0.152	0.162	0.257	1.203	0.201	
MWS	0.272	0.176	0.232	0.312	0.224	0.211	1.427	0.238	
DL	0.128	0.177	0.102	0.136	0.178	0.142	0.863	0.144	
CE	0.111	0.146	0.125	0.092	0.120	0.120	0.714	0.119	
MCP	0.119	0.078	0.112	0.098	0.102	0.102	0.610	0.102	
_	$\lambda_{max} = 6.082, CI = 0.016, CR = 0.013$								

Table 3

Pairwise comparison and priority weight of the strategic program priorities

Information:

Symbol Criteria:

FL: Fellowship and leadership; TF: Treasury of faith; MWS: Ministry of Word and Sacrament; DL: Dignity of laity; CE: Catholic Education; MCP: Managing church Property

The results of the pairwise comparison and the priority weight of the sub-criteria with respect to the criteria appear in Table 4 below.

Table 4

Pair wise comparison and priority weight of the element of the strategic program

Fellowship & leadership	FL 1	FL2	FL3	Priority Weight	_			
FL1	1.000	1.558	1.032	0.387	_			
FL2	0.642	1.000	1.379	0.318				
FL3	0.969	0.725	1.000	0.295				
	= 3.060							
	- 5.000	CI = 0.0	030, CA ·	- 0.052		_		
Preserving the treasury of faith	TF 1	TF 2	TF 3	TF 4	Priority Weight			
TF 1	1.000	0.783	1.627	1.629	0.285	-		
TF 2	1.277	1.000	2.273	1.781	0.359			
TF 3	0.615	0.440	1.000	1.182	0.180			
TF 4	0.614	0.562	0.846	1.000	0.176			
$\lambda_{max}$ =	= 4.014,	CI = 0.0	05, CR =	= 0.0053			_	
Ministry of the							-	
Word and	MWS	MWS	MWS	MWS	MWS	Priority		
Sacrament	1	2	3	4	5	Weight		
							_	
MWS 1	1.000	0.926	1.167	1.032	1.196	0.205		
MWS 2	1.080	1.000	2.113	2.217	1.558	0.295		
MWS 3	0.857	0.473	1.000	1.012	1.235	0.168		
MWS 4	0.969	0.451	0.988	1.000	1.649	0.183		
MWS 5	0.836	0.642	0.810	0.607	1.000	0.149		
	max = 5	.082,61	= 0,021,	CR = 0,0	184			
								D · ·
Promoting the dignity of the	DL 1	DL 2	DL 3	DL 4	DL 5	DL 6	DL 7	Priority Weight
dignity of the laity								Weight
dignity of the laity DL 1	1.000	1.849	2.148	1.134	1.077	1.702	1.395	Weight 0.197
dignity of the laity DL 1 DL 1	1.000 0.541	1.849 1.000	2.148 1.629	1.134 0.907	1.077 0.926	1.702 1.351	1.395 1.608	Weight 0.197 0.147
dignity of the laity DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466	1.849 1.000 0.614	2.148 1.629 1.000	1.134 0.907 0.919	1.077 0.926 1.182	1.702 1.351 1.629	1.395 1.608 1.187	Weight 0.197 0.147 0.130
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882	1.849 1.000 0.614 1.102	2.148 1.629 1.000 1.088	1.134 0.907 0.919 1.000	1.077 0.926 1.182 1.403	1.702 1.351 1.629 1.901	1.395 1.608 1.187 2.148	Weight 0.197 0.147 0.130 0.176
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929	1.849 1.000 0.614 1.102 1.080	2.148 1.629 1.000 1.088 0.846	1.134 0.907 0.919 1.000 0.713	1.077 0.926 1.182 1.403 1.000	1.702 1.351 1.629 1.901 1.934	1.395 1.608 1.187 2.148 2.395	Weight 0.197 0.147 0.130 0.176 0.160
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587	1.849 1.000 0.614 1.102 1.080 0.740	2.148 1.629 1.000 1.088 0.846 0.614	1.134 0.907 0.919 1.000 0.713 0.526	1.077 0.926 1.182 1.403 1.000 0.517	1.702 1.351 1.629 1.901 1.934 1.000	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929	1.849 1.000 0.614 1.102 1.080 0.740 0.622	2.148 1.629 1.000 1.088 0.846 0.614 0.843	1.134 0.907 0.919 1.000 0.713 0.526 0.466	1.077 0.926 1.182 1.403 1.000 0.517 0.418	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395	Weight 0.197 0.147 0.130 0.176 0.160
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717	$\begin{array}{c} 1.849\\ 1.000\\ 0.614\\ 1.102\\ 1.080\\ 0.740\\ 0.622\\ \lambda_{max} = \end{array}$	2.148 1.629 1.000 1.088 0.846 0.614 0.843 7.16, <i>CI</i>	$ \begin{array}{r} 1.134\\ 0.907\\ 0.919\\ 1.000\\ 0.713\\ 0.526\\ 0.466\\ = 0.027, 0 \end{array} $	1.077 0.926 1.182 1.403 1.000 0.517	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587	1.849 1.000 0.614 1.102 1.080 0.740 0.622	2.148 1.629 1.000 1.088 0.846 0.614 0.843	1.134 0.907 0.919 1.000 0.713 0.526 0.466	1.077 0.926 1.182 1.403 1.000 0.517 0.418	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717 CE 1	$\begin{array}{c} 1.849\\ 1.000\\ 0.614\\ 1.102\\ 1.080\\ 0.740\\ 0.622\\ \lambda_{max} = \end{array}$	2.148 1.629 1.000 1.088 0.846 0.614 0.843 7.16, <i>CI</i>	$     \begin{array}{r}       1.134 \\       0.907 \\       0.919 \\       1.000 \\       0.713 \\       0.526 \\       0.466 \\       = 0.027, C \\       Priority     \end{array} $	1.077 0.926 1.182 1.403 1.000 0.517 0.418	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717	$\begin{array}{c} 1.849 \\ 1.000 \\ 0.614 \\ 1.102 \\ 1.080 \\ 0.740 \\ 0.622 \\ \lambda_{max} = \\ \text{CE 2} \end{array}$	2.148 1.629 1.000 1.088 0.846 0.614 0.843 7.16, <i>CI</i> CE 3	1.134 0.907 0.919 1.000 0.713 0.526 0.466 = 0.027, <i>C</i> Priority Weight	1.077 0.926 1.182 1.403 1.000 0.517 0.418	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717 CE 1 1.000	$\begin{array}{r} 1.849\\ 1.000\\ 0.614\\ 1.102\\ 1.080\\ 0.740\\ 0.622\\ \lambda_{max} =\\ \hline \text{CE 2}\\ \hline 1.220 \end{array}$	2.148 1.629 1.000 1.088 0.846 0.614 0.843 7.16, <i>CI</i> CE 3 1.318	1.134 0.907 0.919 1.000 0.713 0.526 0.466 = 0.027, <i>C</i> Priority Weight 0.379	1.077 0.926 1.182 1.403 1.000 0.517 0.418	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717 CE 1 1.000 0.819 0.759	$\begin{array}{c} 1.849\\ 1.000\\ 0.614\\ 1.102\\ 1.080\\ 0.740\\ 0.622\\ \lambda_{max} =\\ \hline \text{CE 2}\\ 1.220\\ 1.000\\ 0.472 \end{array}$	2.148 1.629 1.000 1.088 0.846 0.614 0.843 7.16, <i>CI</i> CE 3 1.318 2.120 1.000	$1.134 \\ 0.907 \\ 0.919 \\ 1.000 \\ 0.713 \\ 0.526 \\ 0.466 \\ = 0.027, 0 \\ Priority \\ Weight \\ 0.379 \\ 0.389 \\ 0.232 \\ 0.232 \\ 0.232 \\ 0.900 \\ 0.9$	1.077 0.926 1.182 1.403 1.000 0.517 0.418	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717 CE 1 1.000 0.819 0.759 D51, <i>CI</i> =	$\begin{array}{c} 1.849\\ 1.000\\ 0.614\\ 1.102\\ 1.080\\ 0.740\\ 0.622\\ \lambda_{max} =\\ \hline CE 2\\ 1.220\\ 1.000\\ 0.472\\ = 0.025, c \end{array}$	2.148 1.629 1.000 1.088 0.846 0.614 0.843 7.16, <i>CI</i> CE 3 1.318 2.120 1.000 <i>CR</i> = 0.0	1.134 0.907 0.919 1.000 0.713 0.526 0.466 = 0.027, ( Priority Weight 0.379 0.389 0.232 44	$ \begin{array}{r} 1.077\\ 0.926\\ 1.182\\ 1.403\\ 1.000\\ 0.517\\ 0.418\\ CR = 0.020\\ \end{array} $	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717 CE 1 1.000 0.819 0.759 051, <i>C1</i> = MCP	$\begin{array}{c} 1.849\\ 1.000\\ 0.614\\ 1.102\\ 1.080\\ 0.740\\ 0.622\\ \lambda_{max} = \end{array}$ CE 2 $\begin{array}{c} 1.220\\ 1.000\\ 0.472\\ \hline 0.025, 0\\ MCP \end{array}$	$     \begin{array}{r}       2.148 \\       1.629 \\       1.000 \\       1.088 \\       0.846 \\       0.614 \\       0.843 \\       7.16, CI \\       CE 3 \\       \hline       1.318 \\       2.120 \\       1.000 \\       CR = 0.0 \\       MCP \\     \end{array} $	$1.134 \\ 0.907 \\ 0.919 \\ 1.000 \\ 0.713 \\ 0.526 \\ 0.466 \\ = 0.027, 0 \\ Priority \\ Weight \\ 0.379 \\ 0.389 \\ 0.232 \\ 0.232 \\ 0.232 \\ 0.900 \\ 0.9$	1.077 0.926 1.182 1.403 1.000 0.517 0.418 <i>CR</i> = 0.020	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717 CE 1 1.000 0.819 0.759 051, <i>CI</i> = MCP 1	$\begin{array}{c} 1.849\\ 1.000\\ 0.614\\ 1.102\\ 1.080\\ 0.740\\ 0.622\\ \lambda_{max} = \\ \hline \text{CE 2}\\ 1.220\\ 1.000\\ 0.472\\ \hline 0.025, 0\\ \hline \text{MCP}\\ 2 \end{array}$	$2.148 \\ 1.629 \\ 1.000 \\ 1.088 \\ 0.846 \\ 0.614 \\ 0.843 \\ 7.16, CI \\ CE 3 \\ 1.318 \\ 2.120 \\ 1.000 \\ CR = 0.0 \\ MCP \\ 3 \\ 3$	1.134 0.907 0.919 1.000 0.713 0.526 0.466 = 0.027, <i>C</i> Priority Weight 0.379 0.389 0.232 44 MCP 4	$1.077 \\ 0.926 \\ 1.182 \\ 1.403 \\ 1.000 \\ 0.517 \\ 0.418 \\ CR = 0.020$	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717 CE 1 1.000 0.819 0.759 051, <i>CI</i> = MCP 1 1.000	$1.849$ 1.000 0.614 1.102 1.080 0.740 0.622 $\lambda_{max} =$ CE 2 1.220 1.000 0.472 $0.025, 0$ MCP 2 0.987	$     \begin{array}{r}       2.148 \\       1.629 \\       1.000 \\       1.088 \\       0.846 \\       0.614 \\       0.843 \\       7.16, CI \\       CE 3 \\       \hline       1.318 \\       2.120 \\       1.000 \\       CR = 0.0 \\       MCP \\       3 \\       1.241 \\     \end{array} $	1.134 0.907 0.919 1.000 0.713 0.526 0.466 = 0.027, ( Priority Weight 0.379 0.389 0.232 44	$1.077 \\ 0.926 \\ 1.182 \\ 1.403 \\ 1.000 \\ 0.517 \\ 0.418 \\ CR = 0.020 \\ \hline \\ Priority \\ Weight \\ 0.243 \\ \hline $	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717 CE 1 1.000 0.819 0.759 051, <i>CI</i> = MCP 1 1.000 1.013	$\begin{array}{c} 1.849\\ 1.000\\ 0.614\\ 1.102\\ 1.080\\ 0.740\\ 0.622\\ \lambda_{max} =\\ CE 2\\ \hline 1.220\\ 1.000\\ 0.472\\ \hline 0.025, 0\\ MCP\\ 2\\ \hline 0.987\\ 1.000\\ \end{array}$	2.148 1.629 1.000 1.088 0.846 0.614 0.843 7.16, <i>CI</i> CE 3 1.318 2.120 1.000 <i>CR</i> = 0.0 MCP 3 1.241 2.217	1.134 0.907 0.919 1.000 0.713 0.526 0.466 = 0.027, <i>C</i> Priority Weight 0.379 0.389 0.232 44 MCP 4 0.885 0.744	$1.077 \\ 0.926 \\ 1.182 \\ 1.403 \\ 1.000 \\ 0.517 \\ 0.418 \\ CR = 0.020 \\ \hline \\ Priority \\ Weight \\ 0.243 \\ 0.284 \\ \hline \\$	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	1.000 0.541 0.466 0.882 0.929 0.587 0.717 CE 1 1.000 0.819 0.759 051, <i>CI</i> = MCP 1 1.000	$1.849$ 1.000 0.614 1.102 1.080 0.740 0.622 $\lambda_{max} =$ CE 2 1.220 1.000 0.472 $0.025, 0$ MCP 2 0.987	$     \begin{array}{r}       2.148 \\       1.629 \\       1.000 \\       1.088 \\       0.846 \\       0.614 \\       0.843 \\       7.16, CI \\       CE 3 \\       \hline       1.318 \\       2.120 \\       1.000 \\       CR = 0.0 \\       MCP \\       3 \\       1.241 \\     \end{array} $	1.134 0.907 0.919 1.000 0.713 0.526 0.466 = 0.027, ( Priority Weight 0.379 0.389 0.232 44 MCP 4 0.885	$1.077 \\ 0.926 \\ 1.182 \\ 1.403 \\ 1.000 \\ 0.517 \\ 0.418 \\ CR = 0.020 \\ \hline \\ Priority \\ Weight \\ 0.243 \\ \hline $	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099
dignity of the laity DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1 DL 1	$\begin{array}{c} 1.000\\ 0.541\\ 0.466\\ 0.882\\ 0.929\\ 0.587\\ 0.717\\ \hline \\ \hline$	$\begin{array}{c} 1.849\\ 1.000\\ 0.614\\ 1.102\\ 1.080\\ 0.740\\ 0.622\\ \lambda_{max} = \\ \hline CE 2\\ \hline 1.220\\ 1.000\\ 0.472\\ \hline 0.025, 0\\ \hline MCP\\ 2\\ \hline 0.987\\ 1.000\\ 0.451\\ 1.344\\ \end{array}$	$\begin{array}{r} 2.148\\ 1.629\\ 1.000\\ 1.088\\ 0.846\\ 0.614\\ 0.843\\ \hline \hline \end{array}$	$\begin{array}{r} 1.134\\ 0.907\\ 0.919\\ 1.000\\ 0.713\\ 0.526\\ 0.466\\ = 0.027, C\\ \hline Priority\\ Weight\\ \hline 0.379\\ 0.389\\ 0.232\\ \hline 44\\ \hline MCP 4\\ \hline 0.885\\ 0.744\\ 1.403\\ 1.000\\ \hline \end{array}$	$1.077 \\ 0.926 \\ 1.182 \\ 1.403 \\ 1.000 \\ 0.517 \\ 0.418 \\ CR = 0.020 \\ \hline \\ \hline \\ Priority \\ Weight \\ 0.243 \\ 0.284 \\ 0.216 \\ \hline \\ \hline \\ \\ \hline \\ \hline \\ \\ \\ \hline \\ \hline \\ \\ \hline \\ \\ \hline \\ \\ \hline \\ \hline \\ \\ \hline \\ \\ \hline \\ \\ \hline \\ \\ \hline \\ \\ \hline \\ \hline \\ \\ \hline \\ \hline \\ \\ \hline \\ \hline \\ \hline \\ \\ \\ \hline \hline \\ \hline \hline \\ \hline \\ \hline \\ \hline \\ \hline \hline \\ \hline \hline \\ \hline \\ \hline \\ \hline \\ \hline \hline \\ \hline \\ \hline \\ \hline \\ \hline \hline \\ \hline \\ \hline \\ \hline \\ \hline \hline \\ \hline \hline \\ \hline \hline \\ \hline \\ \hline \\ \hline \\ \hline \hline \\ \hline \hline \\ \hline \hline \\ \hline \hline \\ \hline \\ \hline \\ \hline \hline \\ \hline \\ \hline \\$	1.702 1.351 1.629 1.901 1.934 1.000 0.717	1.395 1.608 1.187 2.148 2.395 1.395	Weight 0.197 0.147 0.130 0.176 0.160 0.099

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The results of the study are presented in Table 5. The most important factors in the selection of the program priorities are: 1) the Ministry of Word and the Sacrament, 23.8%; 2) Preserving the treasury of faith, 20.1%; 3) Fellowship and leadership, 19.7%; 4) Promoting the dignity of the laity, 14.4%; 5) Catholic education, 11.9% and; 6) Managing the Church property, 10.2%.

The sub-criteria 'organizing pastoral structure' was the highest (7.6%), followed by 'upgrading the catechetic program' (7.2%) and 'the role model and competency of liturgy leadership' (7.0%).

The CR calculation uncovered that the inconsistency values of all of the criteria and subcriteria were less than 0.1 (Tables 3 and 4). This means that the consistency of the level of satisfaction and evaluation within the matrix of the criteria and sub-criteria is acceptable, the judgments are trustworthy, and the results obtained are considered reliable.

Table	5
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Value of prio criteria (Wc)	a	Value of priority of sub-c (Wsc)	Overall Priorities of the Sub- criteria (Wc * Wsc)		
Fellowship		Organize pastoral structure	(FL1)	0.387	0.0762
& 0.197	Animate the spirituality of Church based groups	(FL2)	0.318	0.0626	
leadership		Promoting kinship and fraternity	(FL3)	0.295	0.0581
			Sum	1.000	0.1970
Preserving		Strengthening the system and the role of catechetic commission	(TF1)	0.285	0.0571
the	0.201	Upgrade the catechetic program	(TF2)	0.359	0.0720
treasury of faith		Arrange the territory and categorical unit	(TF3)	0.180	0.0361
		Upgrade the catechetic facilities	(TF1)	0.176	0.0353
			Sum	1.000	0.201
		Reinforce the commission of liturgy	(MWS1)	0.205	0.0488
Ministry of		Role model and competency of liturgy leadership	(MWS1)	0.295	0.0702
Ministry of the Word	0.238	Complete the liturgy facilities	(MWS1)	0.168	0.0400
and Sacrament		Education & comprehension of liturgical music	(MWS1)	0.183	0.0435
		Education & comprehension of enculturation	(MWS1)	0.149	0.0354
			Sum	1.000	0.238
		Fostering integral family development	(DL1)	0.197	0.0283
		Empowering lay apostolate	(DL2)	0.147	0.0211
		Unity and solidarity between the lay and the ordained-servant	(DL3)	0.130	0.0187
Promoting the dignity	0.144	Upgrade the socio-economic quality of the people	(DL4)	0.176	0.0253
of the laity		Reinforce the partisanship for the poor	(DL5)	0.160	0.0230
		Promoting the quality of relationship with people of other religious beliefs	(DL6)	0.099	0.0142
		Taking sides in the preservation of the environment	(DL7)	0.091	0.0131
			Sum	1.000	0.144

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Value of the criteria and sub-criteria of the Vicariate Episcopal of Tonsea priority program

Catholic 0. Education		Catholic education to those studying at non-Catholic schools	(CE 1)	0.379	0.0451
	0.119	Attention to early age education	(CE 1)	0.389	0.0463
		Develop non-formal education and training skills	(CE 1)	0.232	0.0276
		-	Sum	1.000	0.1190
		Expand & synergize the competency system	(MCP 1)	0.243	0.0247
Managing the Church property	0.102	Build up a transparent financia 2 information system	(MCP 2)	0.284	0.0289
		Build up the asset management system		0.216	0.0219
		Make good use of Church property	(MCP 4)	0.257	0.0261
			Sum	1.000	0.102

## 6. Discussion

The primary goal of the researchers was to determine the program priorities in order to implement the strategic plan of the Diocese. The need to set priorities was paramount due to the limited resources in the parishes. This study offered a decision hierarchy that provided a robust and valid quantitative methodology that was reliable and workable. The use of the AHP provided researchers with a valuable method to assess the relative importance of the different variables. Additionally, the AHP format provided several benefits beyond establishing the priorities. First, the use of the parish priests as the experts in the study offered them an opportunity to be involved in setting priorities that they would eventually be responsible for implementing. Second, an unanticipated benefit was that the various programs were communicated to the priests as part of the ranked pairings, which gave them a greater insight into the projects that they would be implementing. Third, by serving as experts the priests assumed a greater level of ownership of the various programs since they were involved in the implementation process rather than having the program being dictated to them from above. There was a sense of urgency for the priests because the strategic program of the Vicariate and the budgets needed to be submitted and validated by the Bishop in October 2019. The determination of the program priorities by the priests was critical because each of the Vicariates had unique problems and challenges. Fourth, the AHP methodology provided a simple means of prioritizing the strategic plan using a proven method that was easy to understand and required minimal time, travel, or statistical skills.

The results in Table 4 provide an implementation map for the pastoral strategic program by establishing the priorities in a clear and understandable list. The Ministry of the Word and Sacrament (23.8%) was the leading factor. The pastoral strategic program should implement the Ministry of the Word and Sacrament plan as the first priority since this factor was identified as the most important need. This factor should be viewed by all as the most critical element for a successful and efficient pastoral program. Based on the qualitative analysis of the need by the community, each criterion and sub-criterion discussed previously could then be evaluated and the priorities set for their implementation.

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In exploring the priorities of the programs of the Vicariate Episcopal of Tonsea, the application of the AHP had two principal strengths.

1. Due to the limited resources available and travel restrictions for doing extensive fieldwork, it was determined that it was not possible to conduct a statistically representative survey. To this end, the AHP provided an approach where the opinions of key informants (parish priests) could be successfully explored in a rigorous and robust manner within these restrictions.

2. The second benefit of using AHP relates the design structure associated with this method rather than its application. Through the development of the hierarchy, it is possible to group all of the criteria and sub-criteria into a single tier or key categories. This proved to be an effective communication tool as the implementation plan was developed.

The AHP was suitable and useful for this study; however, it also has limitations. Grouping constraints into a manageable number of key categories resulted in the loss of some detail. Inconsistency in the data could potentially be an issue if the participants or respondents lacked comprehension regarding the method. In addition, some participants struggled with differentiating priorities in the pairwise comparison, which resulted in all of the criteria and sub-criteria being equally important. Several respondents had not encountered the AHP method prior to being interviewed, but were provided with a work example and the opportunity to ask questions prior to completing the questionnaire. While the findings remain valid, these issues identified some potential limitations of the AHP and highlighted the need to consider the suitability of its application, particularly with respondents who were unfamiliar with this method.

## 7. Conclusion

This study aimed to apply the AHP method as a proven methodology to determine the strategic planning priorities of the Vicariate of Tonsea pastoral program. To achieve the objective, the goals, criteria and sub-criteria of the strategic plan were set up in an AHP matrix and pairwise comparisons were completed by the experts.

The results of this study suggested that the AHP method functioned as a significant tool in determining the strategic planning priorities of the Vicariate of Tonsea pastoral program. A review of the literature showed that this was the first time the AHP had been used in a study related to Church affairs. It proved to be very helpful to the Church leaders and decision makers, and Catholic parish priests of the Vicariate.

The AHP provided a methodology to prioritize the strategic plan criteria and sub-criteria that would otherwise have been defined based on the feelings of the parish priests. Using the AHP in this study eliminated subjectivity and biases in evaluating the strategic planning priority. The concept of the scale of assessment was also introduced to provide more objective and reliable decision criteria.

The findings from this study suggest several management implications.

1. Criteria weights, which were derived from the study, could be the guidelines on which management decisions are based. The criteria with the highest weights should receive the greatest attention from the management.

2. The attention given to the criteria and sub-criteria with the higher weights does not mean that the criteria and sub-criteria with lower weights should be neglected. This may suggest that the study should be repeated on an annual basis to determine any changes in the needs of the parishes.

3. Interpretation of the findings may differ from person to person, so caution is needed when applying the study's findings to practice. A narrative that supports the analysis could provide background into the thought processes, and ranking methodologies could be useful in the implementation phase.

However, this research has identified two potential limitations of the AHP including the loss of detail that results from undertaking pairwise comparisons with broad categories, and the issue of inconsistent responses. In the case of the former, the solution is to adopt the use of a semi-structured interviewing plan. The researchers should conduct a combination of the AHP with semi-structured interviewing. In conclusion, it is recommended that these issues be given full consideration in the design and application of similar studies in the future.

The researchers also recommend conducting future studies on other Vicariates of the Diocese of Manado to determine whether the results would be similar to or different from this study. It is recommended that a similar study using different methods such as fuzzy AHP be conducted in the future.

### REFERENCES

Ahmed, A., Bwisa, H. M., & Otieno, R. O. (2014). Strategic decision making: Process, models, and theories. *Business Management and Strategy*, *5*(*1*), 78-104. Doi: https://doi.org/10.5296/bms.v5i1.5267.

Arasa, R., & K'Obonyo, P. (2012). The relationship between strategic planning and firm performance. *International Journal of Humanities and Social Science*, *2*(22), 201–213.

Athapaththu, H. K. S. H. (2016). An overview of strategic management : An analysis of the concepts and the importance of strategic management. *International Journal of Scientific and Research Publications*, 6(2), 124–127.

Bakhmutsky, E. (2013). Strategic planning for a local church. *Paper for Baptist Bible Seminary*. Clarks Summit, Pennsylvania.

Budimčević, K. (2018). Measuring performance of Middle East airlines- AHP approach. *International Journal of the Analytic Hierarchy Process*, *10(3)*, 391–408. Doi: https://doi.org/10.13033/ijahp.v10i3.595

Duleba, S., & Moslem, S. (2019). Examining Pareto optimality in analytic hierarchy process on real data: An application in public transport service development. *Expert Systems with Applications*, *116*, 21–30. Doi: <u>https://doi.org/10.1016/j.eswa.2018.08.049</u>.

Fabjanowicz, M., Bystrzanowska, M., Namieśnik, J., Tobiszewski, M., & Płotka-Wasylka, J. (2018). An analytical hierarchy process for selection of the optimal procedure for resveratrol determination in wine samples. *Microchemical Journal*, *142*, 126–134. Doi: https://doi.org/10.1016/j.microc.2018.06.028.

Golden, B. L., Wasil, A., Harker, P. T. (1989). *The Analytic Hierarchy Process: Applications and Studies*. Springer.

Kagumu, J, G., & Njuguna, R. (2016). Organizational factors influencing strategy implementation. *International Journal of Current Business and Social Sciences*, 1(5), 350–385.

Li, H., Ni, F., Dong, Q., & Zhu, Y. (2018). Application of analytic hierarchy process in network level pavement maintenance decision-making. *International Journal of Pavement Research and Technology*, *11(4)*, 345–354. Doi: https://doi.org/10.1016/j.ijprt.2017.09.015.

Morgan, R. (2017). An investigation of constraints upon fisheries diversification using the Analytic Hierarchy Process (AHP). *Marine Policy*, 86, 24–30. Doi: <u>https://doi.org/10.1016/j.marpol.2017.05.037</u>.

Mutia, P. M., K'Aol, G. O. K., & Katuse, P. (2016). Setting the strategic direction and its influence on church growth in Kenya. *International Journal of Humanities and Social Sciences*, 8(1), 32–41.

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Analytic Hierarchy Process	

Nguyen, H. L., Fong, C., & Ho, C. (2010). Using Analytical Hierarchy Process in decision analysis - the case of Vietnam State Securities Commission. *IBusiness*, 2, 139–144. Doi: <u>https://doi.org/10.4236/ib.2010.22017</u>.

Oosthuizen, J., & Lategan, L. (2016). Strategic management of the church as challenge and reality: *Journal for Christian Scholarship*, *4*, 277–297.

Promentilla, M. A. B., Aviso, K. B., Lucas, R. I. G., Razon, L. F., & Tan, R. R. (2018). Teaching Analytic Hierarchy Process (AHP) in undergraduate chemical engineering courses. *Education for Chemical Engineers*, 23, 34–41. Doi: https://doi.org/10.1016/j.ece.2018.05.002.

Raco, J. R., & Tanod, R. H. M. (2014). The phenomenological method in entrepreneurship. *International Journal of Entrepreneurship and Small Business*, 22(3), 276–285. Doi: <u>https://doi.org/10.1504/ijesb.2014.063776</u>

Saaty, T. L. (2008). Decision making with the analytic hierarchy process. *International Journal of Services Sciences*, 1(1), 83–98.

Thompson, A., Peteraf, M., Gamble, J., Strickland III, A. (2016). *Crafting and executing strategy: the quest for competitive advantage, 21 ed.* McGraw Hill Education.

Untu, B. E. R. (2018). *The strategic planning of the Diocese of Manado (original text in Indonesia)*. Manado, Indonesia: Manado Press.

Wanyoike, J, K., & Orwa, B, H. (2016). Strategic management practices and sustainability of faith-based organisations: an empirical study of Anglican, Diocese of Thika Joseph Kuria Wanyoike. *International Journal of Education and Research*, 4(1), 169–186.



# APPENDIX

Figure 1 Working area of the Vicariate Episcopal of Tonsea