



SAW METHOD ON THE DETERMINATION OF ACHIEVING VOCATIONAL SCHOOL

Riza Aditya Ramadhana Lubis¹, Melva Sari Panjaitan², Nova Mayasari³

Faculty Science and Technology
Universitas Pembangunan Panca Budi
Medan, North Sumatera Indonesia

ABSTRACT

The achievements obtained are of course based on an ability to the knowledge possessed by each student, so that this achievement will greatly help in obtaining a good life in the future. To realize this desire, every school needs to evaluate, further improve its services, both regarding teaching techniques, assessment, quality assurance in order to make schools competitive, qualified and achievers. This research discusses the *Simple Additive Weighting method* (SAW) so that schools can more easily see student achievement. results calculation Mark maximum . Maximum value is . V10 , so . alternative . A10 is . alternative . which . selected . as . alternative . student achievement . with . said . others , Lisa is the one who gets title student achievement .

Keywords: simple, additive weighting, student achievement.

1. INTRODUCTION

Become student achievement is dream every child age school, moreover stand out between student schoolgirl other. Achievements obtained of course based on with something ability to knowledge possessed by each students , so achievement this will very help get good life in the future. Every institution education especially at school Intermediate Vocational which is destination school and focus develop ability child in the field the vocational they select always have vision and mission oriented to smart, superior graduates in achievement , insightful broad and embodied rating evaluation standard international like The same is true for your Putera Anda Vocational High School in Binjai. For realize desire that every school need evaluate , improve more carry on again service good about technique teaching , assessment , assurance quality to make competitive , high - quality and high- achieving school .

With existence Thing that , from problem ever there is previously from school teacher this sometimes still get difficulty for determine candidate students who will followed include Olympic study leveled School Intermediate First every year . At your Putera Vocational High School Binjai , still difficulty give rating in determine student achievement between a lot outstanding students because still election in manual state and still often experience error because there are human errors. Besides it 's data at school this especially assessment data about students and other data at school this most still written manually so the data is still prone to lost . So from that still anything needed developed so as not to lost compete with another school whose level equal .

Based on description on so could made design a system for help the teacher in determination decision student achievement , where the result can be made ingredient teacher's consideration for determine students who will followed include when school get invitation olympics study



every year , can help party school for determine candidate worthy student accept scholarships , apart from it's this data can also beused value data archiving students .

2. LITERATURE REVIEW

Set method that does modeling evaluation on each the process in order to help manager make decision is definition from the support system decision . According to Turban, on the data to be processed in taking decision has available interface to user for more easy in do combined results thinking in do decision end (Sari, 2018).

Usual *Simple Additive Weighting* (SAW) called with method gift weights on data that have draft *simple weighted* in determination total weight in evaluation performance from each its attributes . Method this need a process that requires normalization to matrix decisions that will compared to with alternative evaluation scale (Setiadi , 2018).

SAW method or often called method do total data weights . Draft base method in determination total weight in evaluation performance from each its attributes . according to Nuraeni (2018), method this very suitable for do taking the decision with method do weighting on each attributes and and the ranking process is also carried out for look for alternative best from amount many attributes .

Then This SAW method if compared to with the decision process other is in more rating accurate based on the value of reference and weight preferences that have been carry out the determination process before . Method this succeed carry out the retrieval process decisions on cases that have been studied before . Due to method this perform a computational process that can give Mark maximum so that could give results the best ending . Method this used in calculation when selected option fulfil criteria specified .

3. RESEARCH RESULTS AND DISCUSSION

Tables used for process student data information

Table 1 Criteria

Initialize Criteria	Criteria
C1	Attitude
C2	Presence
C3	school



Tables 2. Criteria
Weight

weight	
weight	Mark
Not good [1]	>1
Enough Fine [2]	>2
Very Good (3)	>3

Tables 3.
Attitude

Attitude	Weight	Mark
Not Well	T	1
Enough Fine	C	2
Very Well	S	3

Tables 4. Attendance

Presence	Weight	Mark
Not Well	T	1
Enough Fine	C	2
Very Well	S	3



Tables 5. School

school	Weight	Mark
Not Well	T	1
Enough Fine	C	2
Very Well	S	3

**Tables 6 Criteria
Alternative**

Alternative	Criteria		
	Attitude	Presence	school
Ayu	2	1	2
Ningsih	1	2	2
Lia	2	3	2
Dedi	2	3	1
Dika	2	1	2
Tya	1	2	2
Andi	2	3	2
Lika	2	3	1
Rini	2	1	1
Lisa	3	3	2



So need do formation matrix then converted with Mark as following :

Tables 7. Ratings compatibility

Alternative	Criteria		
	C1	C2	C3
A1	2	1	2
A2	1	2	2
A3	2	3	2
A4	2	3	1
A5	2	1	2
A6	1	2	2
A7	2	3	2
A8	2	3	1
A9	2	1	1
A10	3	3	2

5. CONCLUSION

Based on calculation before , with so could interesting conclusion from results calculation Mark maximum. Maximum value is . V10 , so . alternative . A10 is . alternative . which . selected . as . alternative . student achievement . with . said . others , Lisa is the one who gets title student achievement .



REFERENCE

- [1]. Anjarwati, S. and Kuncoro, EH 2016. Decision Support System for Lending in Village Unit Cooperatives (KUD) Using The Satisficing Model . Journal of VOI STMIK Tasikmalaya , 5(1), pp. 46–54.
- [2]. Hermanto , Nailul Izzah . 2018. System Motor Selection Decision Support with Method Simple Additive Weighting (SAW). Qomaruddin Gresik Technical College .
- [3]. Magdalena Hilyah .(2015),|| System Decision Support for Determine College student Graduate of Best in College (Study STMIK Atma Kasus case sublime Pangkalpinang)||. Technology National Seminar Information and Communication (SENTIKA), Volume: 1, Number : 1.
- [4]. Nuraeni , Nia. 2018. Application Simple Additive Weighting (SAW) method in Selection Candidate Employees . STMIK Nusa Mandiri Jakarta.
- [5]. Riandari Fristy ., Hasugian Easter Marto ., Taufik human . 2017. System Decision Support using e . method Topsis in Choose Head Department at the Sumatra II Medan River Basin Office. Journal of Informatics Pelita Nusantara.
- [6]. Sari, Desi Ratna ., Windarto , Agus Perdana., Hartama , Dedy., Solikhun . 2018. System Decision Support for Recommendation Graduation Hearing Essay Use AHP-TOPSIS method . Study Program System Information , STIKOM Tunas Bangsa Pematangsiantar .
- [7]. Timotius, Setyaningsih, FA and Ristian, U. 2018. Decision Support System for Cu Bima Credit Fund Lending at the Tempunak Branch Using the Web-Based Simple Additive Weighting (SAW) Method. Journal of Coding , 06(03), pp. 265–275.
- [8]. Widyaningsih Maura.(2016),|| Determination Participant Contest Competence Student Using Simple Additive Weighting (SAW) . Journal Informatics and Computers (JIKO), Volume: 1, Number : 1.