

Nama : Muhammad Kurniawan Dwi Hariyadi	Nim : 210441100167
Nama : Yohan Permana	Nim : 210441100052

1. Menentukan Kriteria dan Bobot Masing-masing Kriteria

BOBOT	KEPENTINGAN
1	Tidak Penting
2	Kurang Penting
3	Cukup Penting
4	Penting
5	Sangat Penting

2. Melakukan perhitungan nilai relatif bobot awal (w_j). Dimana $\sum w_j = 1$

3. Membuat Matriks Perbandingan Alternatif dan Kriteria

$$W_j = \frac{w_j}{\sum w_j}$$

$$\sum w_j :$$

Pangkat = bobot kepentingan X Jumlah Total Sigma $W_j = 1$

4. Melakukan perhitungan nilai vektor S

$$S_i = \prod_{j=i}^n X_{ij}^{w_j}$$

Tabel Alternatif

Alternatif
Muhammad Kurniawan Dwi Hariyadi
Ahmad Fauzi
Rina Novianti
Budi Santoso
Siti Rahmawati
Hendri Kurniawan
Dewi Anggraini
Eko Prasetyo
Ratna Sari
Andi Wijaya
Siti Nurhayati
Rizal Rahman
Linda Suryani
Dedi Kusuma
Yuliati Hartono
Bayu Nugroho
Lina Sari
Agus Santoso
Ratna Dewi
Arief Wibowo
Siti Maryam
Nina Puspita
Adi Setiawan
Rina Dewi
Surya Nugraha

5. Melakukan perhitungan nilai preferensi relatif (Vektor V)

$$V_i = \frac{S_i}{\prod_{j=1}^n (X_j^*)^{w_j}}$$

6. Merangking Alternatif

Mira Sari
Bambang Kusumo
Siska Lestari
Agung Prabowo
Indah Wulandari
Hadi Siswanto
Rita Cahyani
Dodi Prasetya
Siska Putri
Hendra Gunawan
Rini Puspitasari
Andika Wijaya
Dewi Lestari
Rudi Setiawan
Siti Maryani
Fajar Pratama
Nina Sari
Adi Permadi
Rina Agustina
Eka Nugraha
Arief Kusumo
Siska Pratiwi
Agung Santoso
Dina Puspita
Bayu Wijaya

Perhitungan Penentuan Alternatif Guru Terbaik dengan Metode AHP

Kode
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A19
A20
A21
A22
A23
A24
A25

Tabel Kriteria

Kriteria	Bobot	Cost/Benefit	Kode
Kehadiran (C1)	3	Benefit	C1
Ketertiban (C2)	4	Benefit	C2
Tugas (C3)	4	Benefit	C3
Sikap (C4)	5	Benefit	C4
Kemampuan (C5)	3	Benefit	C5
Jumlah	19		

Ketentuan

Positif

Bobot/ kriteria	C1	C2	C3	C4	C5
	Bobot Kepentingan	0.158	0.211	0.211	0.263
Alternatif / Kriteria	C1	C2	C3	C4	C5
A1	4	3	2	5	3
A2	3	4	5	1	3
A3	5	2	3	2	4
A4	3	2	4	5	1
A5	2	3	4	5	2
A6	5	2	3	4	3
A7	4	5	1	2	3
A8	4	4	5	1	3
A9	5	1	2	2	4
A10	4	2	4	5	1
A11	3	4	2	1	5
A12	5	3	1	2	4

- A26
- A27
- A28
- A29
- A30
- A31
- A32
- A33
- A34
- A35
- A36
- A37
- A38
- A39
- A40
- A41
- A42
- A43
- A44
- A45
- A46
- A47
- A48
- A49
- A50

- A13
- A14
- A15
- A16
- A17
- A18
- A19
- A20
- A21
- A22
- A23
- A24
- A25
- A26
- A27
- A28
- A29
- A30
- A31
- A32
- A33
- A34
- A35
- A36
- A37
- A38
- A39
- A40
- A41
- A42
- A43
- A44
- A45
- A46
- A47

2	4	5	1	3
4	5	3	2	1
1	3	4	5	2
4	2	3	1	5
3	4	2	5	1
5	3	1	4	2
2	4	5	1	3
4	5	3	2	1
3	2	4	1	5
5	1	3	4	2
2	5	4	1	3
4	2	3	5	1
1	3	5	2	4
4	5	2	1	3
3	4	5	1	2
5	2	3	4	1
2	4	1	5	3
4	5	3	2	1
3	2	4	1	5
5	1	3	4	2
2	5	4	1	3
4	2	3	5	1
1	3	5	2	4
4	5	2	1	3
3	4	5	1	2
5	2	3	4	1
2	4	1	5	3
4	5	3	2	1
1	3	5	2	4
4	5	2	1	3
3	4	5	1	2
5	2	3	4	1
2	4	1	5	3
4	5	3	2	1
3	2	4	1	5
5	1	3	4	2
2	5	4	1	3
4	2	3	5	1
1	3	5	2	4
4	5	2	1	3
3	4	5	1	2
5	2	3	4	1
2	4	1	5	3
4	5	3	2	1
3	2	4	1	5
5	1	3	4	2
2	5	4	1	3
4	2	3	5	1
1	3	5	2	4
4	5	2	1	3
3	4	5	1	2

A48	5	2	3	4	1
A49	2	4	1	5	3
A50	4	5	3	2	1

Metode WP

Bobot yang didapatkan bebas, disini bobot range angka dari 1-5

$$W = (3, 4, 4, 5, 3)$$

0.158	0.211	0.211	0.263	0.158
-------	-------	-------	-------	-------

Σw_j	Alternatif	S
1	A1	3.30
	A2	2.66
	A3	2.81
	A4	2.81
	A5	3.21
	A6	3.22
	A7	2.49
	A8	2.78
	A9	2.23
	A10	2.95
	A11	2.38
	A12	2.43
	A13	2.49
	A14	2.64

Alternatif	V
A1	0.025
A2	0.020
A3	0.021
A4	0.021
A5	0.024
A6	0.024
A7	0.019
A8	0.021
A9	0.017
A10	0.022
A11	0.018
A12	0.018
A13	0.019
A14	0.020

Alternatif	V	Rangking
A1	0.025	1
A2	0.020	19
A3	0.021	8
A4	0.021	6
A5	0.024	3
A6	0.024	2
A7	0.019	32
A8	0.021	9
A9	0.017	50
A10	0.022	4
A11	0.018	45
A12	0.018	41
A13	0.019	33
A14	0.020	20

A15	2.88
A16	2.34
A17	2.81
A18	2.61
A19	2.49
A20	2.64
A21	2.38
A22	2.61
A23	2.49
A24	2.77
A25	2.64
A26	2.40
A27	2.49
A28	2.71
A29	2.71
A30	2.64
A31	2.38
A32	2.61
A33	2.49
A34	2.77
A35	2.64
A36	2.40
A37	2.49
A38	2.71
A39	2.71
A40	2.64
A41	2.38
A42	2.61
A43	2.49
A44	2.77
A45	2.64
A46	2.40
A47	2.49
A48	2.71
A49	2.71

A15	0.022
A16	0.018
A17	0.021
A18	0.020
A19	0.019
A20	0.020
A21	0.018
A22	0.020
A23	0.019
A24	0.021
A25	0.020
A26	0.018
A27	0.019
A28	0.021
A29	0.021
A30	0.020
A31	0.018
A32	0.020
A33	0.019
A34	0.021
A35	0.020
A36	0.018
A37	0.019
A38	0.021
A39	0.021
A40	0.020
A41	0.018
A42	0.020
A43	0.019
A44	0.021
A45	0.020
A46	0.018
A47	0.019
A48	0.021
A49	0.021

A15	0.022	5
A16	0.018	49
A17	0.021	7
A18	0.020	28
A19	0.019	33
A20	0.020	20
A21	0.018	45
A22	0.020	28
A23	0.019	33
A24	0.021	10
A25	0.020	20
A26	0.018	42
A27	0.019	33
A28	0.021	16
A29	0.021	13
A30	0.020	20
A31	0.018	45
A32	0.020	28
A33	0.019	33
A34	0.021	10
A35	0.020	20
A36	0.018	42
A37	0.019	33
A38	0.021	16
A39	0.021	13
A40	0.020	20
A41	0.018	45
A42	0.020	28
A43	0.019	33
A44	0.021	10
A45	0.020	20
A46	0.018	42
A47	0.019	33
A48	0.021	16
A49	0.021	13

A50	2.64
Jumlah	131.73

A50	0.020
Jumlah	1.00

A50	0.020	20
Jumlah	1.00	

—

—

1

|