DEVELOPMENT MANAGEMENT INFORMATION SYSTEM OF PROMOTION AND EMPLOYEES MUTATION ON COOPERATIVE KARYAWAN MANUNGGAL PERKASA

Feisal Fauzi Akbar[1], Riani Lubis[2]

[1,2] Informatics Engineering – Indonesia Computer University
JL. DIPATI UKUR NO. 102-116 , JL. DAGO NO 160-162 BANDUNG 40132
E-mail : feisalfauzi@gmail.com[1,] riani.lubis@email.unikom.ac.id[2]

ABSTRACT

Cooperative Karyawan Manunggal Perkasa is a cooperative that active in some services. Management Informarmation System of promotion and employees mutation are needed for management employees assessment. to get a candidate employees who will promote or mutation

The unit leader is having trouble in finding candidate employees to be promotion or mutation. Employees will be assessed by presence. But if there two or more employees whose presence is equally good then the leader of unit will be difficult to decide which will be promotion or mutation. The AHP (Analytical Hierarchy Process) method is a method use for permormance appraisal of employees performed by the leader of unit and the result will be rank

Based on BlackBox and beta testing, it can be concluded that this system is able to help unit leader to conducting employees performance appraisal using AHP (Analytical Hierarchy Process) method and get employees candidate who will be promote or mutate.

Keywords : Management Information System, promotion and mutation, AHP(Analytical Hierarchy Process)

1. PENDAHULUAN

Cooperative Karyawan Manunggal perkasa is an operating business entity whose members consist of employees of PT Indocement Tunggal Prakarsa Tbk. Cooperative Employees Manunggal Perkasa in JL. Raya Cirebon, Bandung – KM 20 45161 who has 117 employees remained in the year 2017. The existing term of Office, namely: head units, Staff, and implementers. Businesses that are in this mighty Corporate Employee Cooperative is an autonomous business save loan, venture stores/waserda, venture, venture manunggal TB general trade, business services, tourism and business civil hot water.

Based on the results of interviews with Staff of the employee Cooperative Manunggal Mighty Mr. Sigit Herlambang. On the process of the promotion of officers, the Chairman of the unit will perform a selection of employees through performance assessment. Where performance assessment conducted at the end of the year. To see the data in a way the presence of employees from January to December. The Chairman of the unit will have difficulty in choosing which Employees will be promoted. Because if only assessed in terms of the presence of a then there is a possibility of more than one employee that her presence as good, where the incident took place in the year 2016. Not just presence for decided employees will be on promotion or transferred, as for education which if from executing or staff wanted to become Chairman of the unit then at least S1.

At a time when the process of mutation, the Chairman of the unit will perform a selection of employees according the terms of certain educational and performance assessment. Same is the case with the promotion. the Chairman of the unit will perform a selection of employees through performance assessment. Where performance assessment conducted at the end of the year. To see the data in a way the presence of employees from January to December. Then at the time of the performance assessment process, the Chairman of the unit requires additional criteria to assist in the assessment process.

Based on the problems from the results of the interview with Mr. Sigit Herlambang as Staff needed a management information system that can assist Administrators in managing employee data and conduct employee performance assessment that is objective under the title "DEVELOPMENT MANAGEMENT INFORMATION SYSTEM OF PROMOTION AND EMPLOYEES MUTATION ON COOPERATIVE KARYAWAN MANUNGGAL PERKASA".

2. ISI PENELITIAN

2.1 Promotion

The Displacement is the promotion enlarge the authority and responsibility of the employees to a higher position within an organization so that the obligations, rights, status, and income the greater the [1].

2.2 Mutation

A mutation is a change of position/job title/place/job done both horizontally as well as vertically (promotion/demosi) within an

organization. Basically the mutation is included in employee development functions because the goal is to improve the efficiency and effectiveness of the work in the company [1]

2.3 POAC management functions

There are several management functions that can be used to help the desired goals, one of them namely the POAC (Planning, Organising, Actuating and Controlling), the principal functions of the POAC according to George r. Terry i.e.: [6]

1. Planning
   Activities that define the various objectives and causes subsequent actions.
   a. Describe the solidify, and ensure the goal is achieved.
   b. Predict the event or circumstance at the time.
   c. Estimate the conditions of work done.
   d. Create wisdom, procedures, standards and methods for the implementation of the work
   e. Change the plan in accordance with the instructions of the results of supervision..
2. Organizing
   Activities to divide the work among the members of the Group and making provision in the necessary relations.
   a. Divide a job into the operational tasks.
   b. Grouping tasks into positions in operations.
   c. Combining operational offices into units that are inter-related.
   d. Select and put people to work.
   e. Adjust the authority and responsibilities for each Member of the.
3. Actuating
   Activities to divide the work among the members of the Group and making provision in the necessary relations.
   a. Doing activity participation with pleasure to all the decisions, actions or deeds.
   b. Direct and challenging others that work as well as possible.
   c. Sufficient officers in accordance with the purposes of the activities of his work,
   d. Tribute to reward workers who do a good job.
4. Controlling
   Activities to adjust between implementers and plans that have been determined.
   a. Comparing the results of his work with the overall plan.
   b. Assess the results of the work with the standard work.
   c. Move the data in detail to be visible comparison and deviations.
   d. Tell the members responsible for the awarding of an explanation.

2.4 AHP Method

The components of the AHP is a functional hierarchy with the main input in the form of human principles. AHP has a lot of advantages, one of which is can be described graphically so that it is easily understood by all parties involved in a decision making. Some of the principles when using the method of AHP SPK problems that must be understood, including the following: [3]:

1. Create a hierarchy of complex system can be understood with the supporting elemenelemen, break it down into composing elements in the hierarchy, and incorporate it or mensintesisnya. The scale of the value comparison of the pair can be seen at Tabel1. Create the hierarchy of complex system can be understood with the supporting elemenelemen, break it down into composing elements in the hierarchy, and incorporate it or mensintesisnya. The scale of the value comparison of the pair can be seen in Table 2.1

Table 1. Scale Of Assessment Of Comparative Pairs

the intensity of interest	Description	Information
1	Both elements are equally important	Two elements have the same influence on the 3 goals
3	Element one is a little more important than the other elements	Experience and judgment a little supporting one element compared to other elements
5	One more important element than the other elements	The experience and the evaluation is very strong supporting one comparable elements over other elements
7	One element clearly more pending on other elements of the	One strong element is supported and has seen its dominating in practice
9	One element of absolute importance than other pasal	The evidence supports one element against other elements have the highest level of discernment that

		might streng then the
2,4,6,8	Values betw een two adjacent consideratio n value	This value is give n when there are two com promises bet ween the two options
The opposite	If activity i got one digit compared with activity j j has a value, then the reverse is compared to i	

2. Systhesis of priority
   Each of the criteria and alternatives need to be done a comparison of paired (pairwise comprasions). The values of all the comparisons can be adjusted with the judgement that had ditentuk to produce a lighter weight and priority. Weighting and prioritization performed the calculation by doing the manipulation of matrices or by performing a mathematical equation..
3. Logical Consistency
   Consistency has two meanings. First, the objects of the same/similar can be grouped based on the uniformity and relevance. Second, regarding the level of relationships between objects based on certain criteria.

AHP has procedures in processing the data to get a decision in accordance with the specified hierarchy. The existing procedures on AHP is as follows: [3]

1. Defining the problem and determine a solution. After that compose the hierarchy of problems faced.
2. Specify the priority of the elements as a first step. Comparison is a partner in accordance with the criteria given. Comparison matrix is filled using the number in order to represent the relative importance of one element with other elements.
3. Make the comparison matrix in accordance with kriterian or subkriteria, and then make an average of each criterion or subkriteria:
   a. the following is a description of the paired comparison matrix in the form of a table that can be seen in table 2.

Tabel 2. Paired Comparison Matrix

	K1	K2	…	Kn
K1	scale of assessment of comparative	K1/ k2	...	…
K2	...	...	...	…
..	...	...	...	…
Kn	...	...	...	…
total			...	…

Each value in the column 2 with row 2 until n refers to the scale of assessments in Table 1.1. Penentukan value must be based on the scale of assessments if the criteria in the same row and column then it has value because it is the one element that is equally important. In the second line and beyond comparing whether column 2 with row 3 has the same value or not, if not then determine the value of the scale must be in the same important, determine whether important or more.

b. Determine the value matrix criteria
   The following is an overview of the value matrix of the criteria in the form of a table that can be seen in table 3..

Tabel 3. Matrix values criteria

	K1	K2	...	Kn	Jumlah	Prioritas
K1	Value line's new column = (value row column)/(number of lines)	...	...	...	∑K	∑K/n
K2	...	...	...	...	...	...
..	...	...	...	...	...	...
Kn	...	...	...	...	...	...

c. Create a summation of each row of the matrix
   The following is an overview of the matrix sum each row in the form of a table that can be seen in table 4.

Tabel 4. The Sum Of Each Row Of The Matrix

	K1	K2	...	Kn	Jumlah
K1	(Value comparison) x (perbaris-priority)	...	...	...	∑K
K2	...	...	...	...	...
..	...	...	...	...	...
Kn	...	...	...	...	...

d. Calculate the ratio of consistency
   In this step we can find out how well the consistency of a decision. Because it is not possible to determine a decision with this level of consistency is low. In table 5 is an overview of the results of calculation of each criteria will be tested barbata.

Tabel 5. Calculation Of The Ratio Of Kosistensi

	The number of each line	Priority	results
K1	(Value comparison) x (priorority of each line)	...	...
K2	...	...	...
..	...	...	...
Kn	...	...	...
total			...

Before you calculate a consistency, do the first stages as follows:

The results (table 5) = perbaris + number of priority

Amount (table 2.5) = K1 + K2 + K3 + Kn

λ = Max Sum (table 5)/number of criteria

Calculate the Consistency Index (CI) with the formulas:

CI = (λ maks-n)/n where n = the number of elements

Calculate a ratio consistency/Consistency Ratio (CR) with the formula: CR = CI/IR Where CR = Consistency Ratio, CI = Consistency Index, IR = Index of Random Concsitency

Determining the consistency of a decision. If the value is more than 10% the assessment of judgement (scale of assessments) should be corrected, if a ratio consistency (CI/IR) less 0.1 then stated is true..

Tabel 6. List Of Random Consistency Index

The Size Of The Matrix	The Value Of IR
1,2	0.00
3	0.58
4	0.90
5	1.12
6	1.24
7	1.32
8	1.41
9	1.45
10	1.49
11	1.51
12	1.48
13	1.56
14	1.57
15	1.59

2.5 analysis of performance appraisal employee of his own method of AHP

Analysis to assess the performance of employees. Based on the flow performance assessment officer who is running, that the employees that will be of value only as seen from presence. Employees who will be judged will be made simultaneously at the end of the year by way of looking at the data from January to December. Then obtained the criteria below:

Tabel 7. Performance Assessment Criteria

No	Code	Criteria
1	A1	The Responsibility
3	A2	Discipline
6	A3	Loyalty
7	A4	Education
2	A5	Communication
4	A6	The behavior
5	A7	The presence

1. Determine the scale of the paired comparison based on weighted criteria for employee performance appraisal:

   When an element is compared with itself then is given a value of 1. If the element i compared with elements of a specific value to get j, then the elements of j compared to element i is the reverse.

   a. elements of A1 (row): element A1 (column) = 1 because the responsibilities with the responsibilities of equal importance
   b. elements of the A5 (line): element A1 (column) = 0.14 (formulas equations)

Tabel 8. Paired Comparison scaling criteria

	A1	A2	A3	A4	A5	A6	A7
A1	1	7	1	7	9	1	1
A2	0.14	1	0.14	1	5	0.14	0.14
A3	1	7	1	7	9	1	1
A4	0.14	1	0.14	1	5	0.14	0.14
A5	0.1	0.2	0.1	0.2	1	0.1	0.1
A6	1	7	1	7	9	1	1
A7	1	7	1	7	9	1	1
Jumlah	4.40	30.2	4.40	30.2	47	4.40	4.40

2. Create a matrix of values criteria

   This matrix is obtained by the formula:

   New column = value matrix elements of long-line column (table 6)/number of

   a. Elements of liability (line) with the responsibility of (column) = 0.23 because elements of the responsibility (of the line) with elements of responsibility (columns) in the table 6 divided by the amount at line 8 column 2 with Indigo 1/4.40 = 0.23
   b. Elements of liability (line) with a communication element (column) = 0.23 because elements of the responsibility (of the line) and communication elements (columns) in the table 6 divided by the amount at line 8 3 column with a value of 1/30.2 = 0.23

   Calculations on columns = number of priorities/n obtained from the results of the pernjumlahan on the number divided by the number of criteria (n).

Tabel 9. Matrix value/number of criteria criteria

	A1	A2	A3	A4	A5	A6	A7	Total	Priority= Total/n
A1	0.23	0.23	0.23	0.23	0.19	0.23	0.23	1.56	0.22
A2	0.03	0.03	0.03	0.03	0.11	0.03	0.03	0.30	0.04
A3	0.23	0.23	0.23	0.23	0.19	0.23	0.23	1.56	0.22
A4	0.03	0.03	0.03	0.03	0.11	0.03	0.03	0.30	0.04
A5	0.03	0.01	0.03	0.01	0.02	0.03	0.03	0.14	0.02
A6	0.23	0.23	0.23	0.23	0.19	0.23	0.23	1.56	0.22
A7	0.23	0.23	0.23	0.23	0.19	0.23	0.23	1.56	0.22

3. The sum of each row of the Matrix

   This matrix is created with the following formula:

   New column matrix = priority on table comparison matrix 7 x pairs in table 6

   a. Elements of liability (line) with the responsibility of (column) = 0.20 because the priority of line 2 on the table column 10 7di multiply by line 2 column 2 in table 6 with value of 0.22 x 1 = 0.22

b. Elemen Tanggung jawab (baris) dengan komunikasi (kolom) = 1.56 karena prioritas bari 2 kolom 10 pada tabel 7 di kalikan dengan baris 2 kolom 3 pada tabel 6 dengan nilai 0.03 x 7 = 1.5Elemen Tanggung jawab (baris) dengan komunikasi (kolom) = 1.56 karena prioritas bari 2 kolom 10 pada tabel 7 di kalikan dengan baris 2 kolom 3 pada tabel 6 dengan nilai 0.03 x 7 = 1.56

Tabel 10. Matriks penjumlahan setiap baris

	A1	A2	A3	A4	A5	A6	A7	Total
A1	0.22	1.56	0.22	1.56	2.01	0.22	0.22	6.02
A2	0.01	0.04	0.04	0.04	0.21	0.04	0.04	0.42
A3	0.22	1.56	0.22	1.56	2.01	0.22	0.22	6.02
A4	0.01	0.04	0.01	0.04	0.21	0.01	0.01	0.42
A5	0.04	0.04	0.04	0.04	0.02	0.04	0.04	0.26
A6	0.22	1.56	0.22	1.56	2.01	0.22	0.22	6.02
A7	0.22	1.56	0.22	1.56	2.01	0.22	0.22	6.02

4. The calculation of the ratio of kosistensi

   This stage is the final stage of the process of determining the value of criteria and to test the validity of the value. Calculate the ratio of the value of consistency (CR) whether < 0.1. If it turns out that the value of the CR is greater than 0.1, then the paired comparison matrix must be repaired. To calculate the ratio of kosistensi, can be seen in table 9:

Tabel 9. The Calculation Of The Ratio Of Kosistensi

Criteria	The number of each line	Priority	result (total+Priority)
Tanggung Jawab	6.02	0.22	6.24
Komunikasi	0.42	0.04	0.46
Disiplin	6.02	0.22	6.24
Perilaku	0.42	0.04	0.46
Kehadiran	0.26	0.02	0.28
Loyalitas	6.02	0.22	6.24
Pendidikan	6.02	0.22	6.24

Perbaris amount column is obtained from the sum of column in table 8, whereas the priority column is obtained from the columns in table 7 priorities

Number Of Results = 26

n (The Number Of Criteria) = 7

ʎ maks (Number Of Results/Number Of Criteria) = 3.74

Consistency Index (CI) = ((ʎ results-n)/n-1) = -0.54

Index Random Consistency (IR) = 1.32

Consistency Ratio (CR) = CI/IR = -0,41

The test is done after the value of the ratio of consistency, then the value of bawha can be summed up in a column of the results Table 9 referable assessment because CR < 0.1

After obtained priority value then the next step is to conduct a performance appraisal with a value 0-100

Tabel 10. List Of Employee Assessment

No	Nama Pegawai	Kriteria	Nilai	Jabatan
1	Desty Septyani	The Responsibility	75	Staff
		Discipline	75	
		Loyalty	75	
		Education	65	
		Communication	89	
		The behavior	50	
		The presence	80	
2	Yeni Andriani	The Responsibility	88	Staff
		Discipline	50	
		Loyalty	75	
		Education	50	
		Communication	80	
		The behavior	100	
		The presence	100	
3	Nining Kurmianingsih	The Responsibility	92	Staff
		Discipline	60	
		Loyalty	75	
		Education	45	
		Communication	86	
		The behavior	75	
		The presence	80	
4	Mery Marina	The Responsibility	66	Staff
		Discipline	75	
		Loyalty	45	
		Education	50	
		Communication	87	
		The behavior	100	
		The presence	100	
5	Arbiansyah	The Responsibility	99	Pelaksana
		Discipline	25	
		Loyalty	45	
		Education	80	
		Communication	77	
		The behavior	100	
		The presence	60	

The results of performance assessment with a value of 0-100 multiplied by the value of the priority on table 9

Tabel 11. The Results Of The Assessment Officer

Pegawai / Kriteria	Desty Septyani	Yeni Andriani	Nining K	Mery Marina	Arbiansyah
The Responsibility	16.5	19.36	20.24	14.52	21.78
Discipline	3	2	2.4	3	1
Loyalty	16.5	16.5	16.5	9.9	9.9
Education	2.6	2	1.8	2	3.2
Communication	1.78	1.6	1.72	1.74	1.54
The behavior	11	22	16.5	22	22
The presence	17.6	22	17.6	22	13.2
The Responsibility	68.98	85.46	76.76	75.16	72.62

2.6 analysis of Employee Promotion

Analysis of the promotion of employees using the POAC management functions.

1. Planning Promotion

   Define employees who will be promoted, for example employees that will be used for promotion exists in the unit Hot Water. Where an employee would we value can be seen in table 12

Tabel 12. The officer candidates will be promoted

No	Employee Name	Education	Position	Unit
1	Winda Widiangsih	S1	Staff	Hot Water
2	Pranggono	SLTA	Staff	Hot Water
3	Chaerul Anwar	SMA	Pelaksana	Hot Water
4	Husen	SMA	Pelaksana	Hot Water
5	Jamal Ulel	S1	Pelaksana	Hot Water
6	Rukiyat	STM	Pelaksana	Hot Water
7	Sobirin	SMA	Pelaksana	Hot Water
8	Sukana B	STM	Pelaksana	Hot Water
9	Sunadi B	SMA	Pelaksana	Hot Water

2. Organizing Promotion

   After determining which employees are at the unit of heat banyu 9 employees. The next step is the selection of appropriate employee will be on education. Where an employee who will be promoted to become Chairman of the unit must be educated at least S1. The results of the employees already in the selection of appropriate education can be seen in table 13

Tabel 13. Employees who are already in the selection

No	Employee Name	Education	Position	Unit
1	Winda Widiangsih	S1	Staff	Hot Water
2	Jamal Ulel	S1	Pelaksana	Hot Water

3. Actuating Promotion

Employees who have already selected suitable education the next step is the selection of employees according the results of performance assessment of employees. Where is the value entered is just a dummy value and the value that will be entered starting from 0-100.

Tabel 14. List Of Employee Assessment

No	Employee Name	Criteria	Value	Position
1	Winda Widiangsih	The Responsibility	80	Staff
		Discipline	75	
		Loyalty	70	
		Education	65	
		Communication	85	
		The behavior	70	
		The presence	100	
2	Jamal Ulel	The Responsibility	55	Pelaksana
		Discipline	75	
		Loyalty	50	
		Education	80	
		Communication	65	
		The behavior	45	
		The presence	100	

The results of performance assessment with a value of 0-100 multiplied by the value of the priorities on the table 9

Tabel 15. Employee Performance Appraisal

Criteria \ Employee	Winda Widiangsih	Jamal Ulel
The Responsibility	17.6	12.1
Discipline	3	3
Loyalty	15.4	11
Education	2.6	3.2
Communication	1.7	1.3
The behavior	15.4	9.9
The presence	22	22
The Responsibility	77.7	62.5

4. Controlling Promotion

Controlling stage is the stage of the examination of whether the results of performance appraisal is done already in accordance with what is expected of a company. This inspection is carried out by means of checking the results of the assessment of the performance of each employee. The taking of final value based on the total value of the employees of each of the criteria

Tabel 16. Final results of the assessment Officer

No	Name	Final Value
1	Winda Widiangsih	77.7
2	Jamal Ulel	62.5

Based on table 3.19, can be inferred that the Winda Widiangsih and Jamal Ulel deserve to get consideration of granting promotion. If only one employee in need for promotion then winda widiangsih who will get it in the end because the value get higher than jamal ulel.

2.7 analysis of mutations of Employees

Mutation analysis of employees using the POAC management functions

1. Planning Mutation

Check the units that require employees and determine which employees will be transferred, for example employees that will be used for the mutation exists in the Save unit Borrowed with the Office staff. Where an employee would we value can be seen in table 17

Tabel 17. The Officer candidates will transfers

No	Employee name	Education	Position	Unit
1	Desty Septyani	D3	Staff	Save loan
2	Yeni Andriani	S1	Staff	Save loan
3	Nining Kusmianingsih	D3	Staff	Save loan
4	Mery Marina	S1	Staff	Save loan
5	Arbiansyah	SMA	Pelaksana	Save loan

Mereka akan dinilai untuk menjadi candidates will was demoted to administrative and Accounting unit with the title of Chairman of the Unit. The requirement for votes is education, which for the post of Chairman of the unit i.e. minimal S1, while for the post of staff i.e. D3, and the last one for the Office of executor that is HIGH SCHOOL equivalent.

2. Organizing Mutation

After determining the employees who are on a Loan totalling Save unit 5 employees. The next step is the selection of appropriate employee will be on education and job title. Where employees will be transferred to the administrative and Accounting units became the Chairman of the unit must be educated at least Bachelor degree from the Department of Accounting/Management/Administration offices. The results of the employees already in the selection of appropriate education can be seen in table 18

Tabel 18. Employees who have been selected

No	Employees Name	Education	Position	Unit
1	Yeni Andriani	S1	staf	Simpan pinjam
2	Mery Marina	S1	staf	Simpan pinjam

3. Actuating Mutation

After the assessment already made then the appropriate employee criteria to fill an existing vacancy, then this stage is the selection of employees according the results of performance assessment of employees. Where is the value entered is just a dummy value and the value that will be entered starting from 0-100.

Tabel 19. List The Value Of Employees

No	Employees name	Criteria	Value	Postion
1	Yeni Andriani	The Responsibility	88	Staf
		Discipline	50	
		Loyalty	75	
		Education	50	
		Communication	80	
		The behavior	100	

		The presence	100	
2	Mery Marina	The Responsibility	66	staf
		Discipline	75	
		Loyalty	45	
		Education	50	
		Communication	87	
		The behavior	100	
		The presence	100	

The results of performance assessment with a value of 0-100 multiplied by the value of the priority on table 9

Tabel 20. Employee Performance Appraisal

Employees / Criteria	Yeni Andriani	Mery Marina
The Responsibility	19.36	14.52
Discipline	2	3
Loyalty	16.5	9.9
Education	2	2
Communication	1.6	1.74
The behavior	22	22
The presence	22	22
The Responsibility	85.46	75.16

4. Controlling Mutation

Controlling stage is the stage of the examination of whether the results of performance appraisal is done already in accordance with what is expected of a company. This inspection is carried out by means of checking the results of the assessment of the performance of each employee. The taking of final value based on the total value of the employees of each of the criteria.

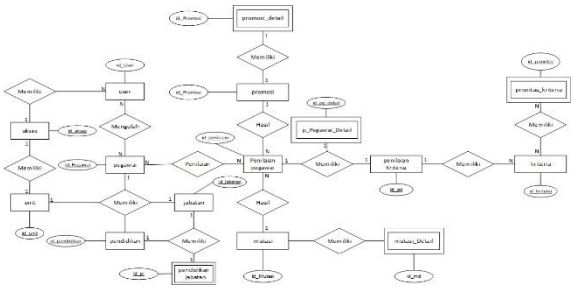
Tabel 21. Final results of the assessment officer

No	Name	Final Value
1	Yeni Adriani	85.46
2	Mery Marina	75.16

Based on table 3.21, can be inferred that Mery Marina and Yeni Andriani deserves to get consideration for transfers to the unit Administration and Accounting. If that was in butuhkannya only one clerk then Yeni Adriani which will be transferred because the ultimate value in May was higher than Mery Marina.

2.8 ERD (entity relationship diagram)

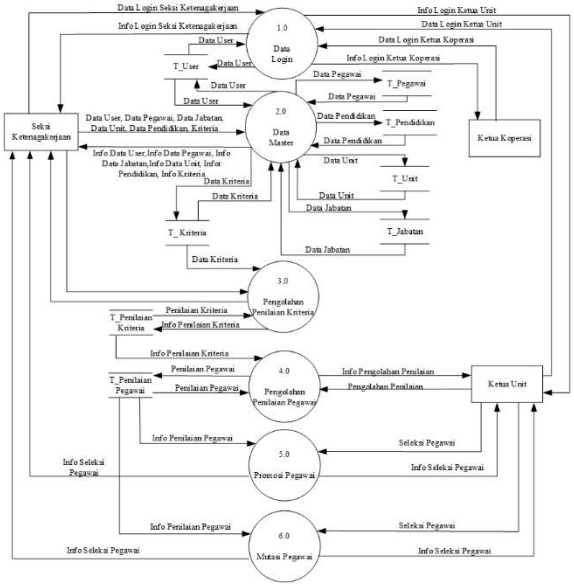
Analysis of data obtained from the database that will be used in the process of construction management information system promotion and Employee on Employee Cooperative Mutation Manunggal mighty, then data that has been retrieved is built a design database with entity relationship diagrams using the tools (ERD) which can be seen in Figure 1



Gambar 1. ERD (entity relationship diagram)

2.9 DFD (Data Flow Diagram)

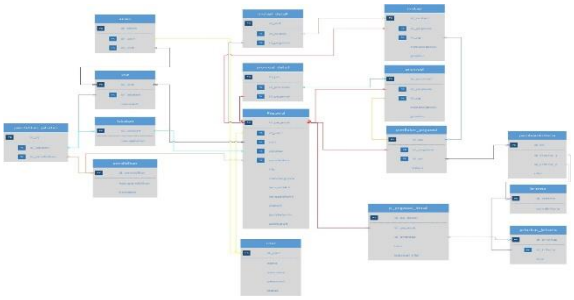
DFD is a logical data model created to illustrate where the origin of the data and where the purpose of the data out of the system, where data is stored, what process the data generated and the interaction between the data stored and the process that will be imposed on those data



Gambar 2. DFD Level 1

2.10 Relation Scheme

The process of relationship between files is a combination between the files that have the same primary key, so that the file-files into a single unity of the dihungkan by the key field. Scheme relation management information system application and promotion officer of mutations as follows:

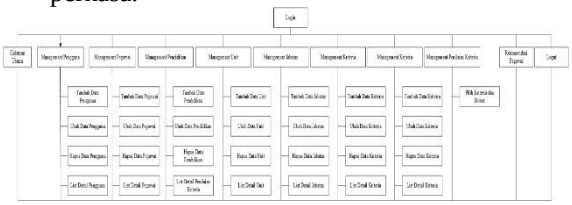


Gambar 3. Relation Scheme

2.11 Menu structure

Here is the design of the structure of the menu that contains the image of the menu and sub

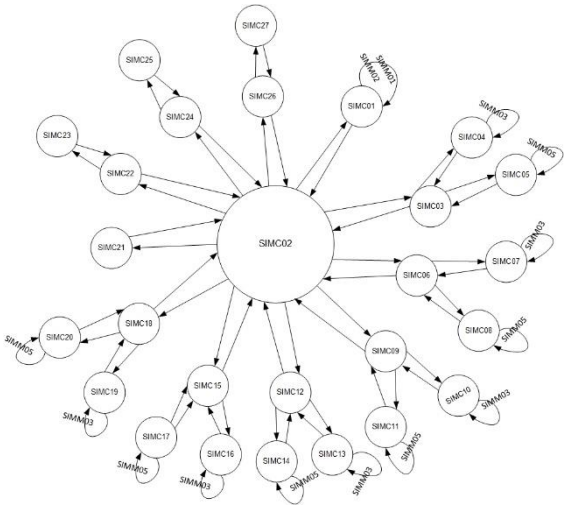
menu, the following explanation of each – each menu and sub menu from management information systems employees and Employees On Employee Cooperative Mutation Manunggal perkasa.



Gambar 4. Menu Structure Section Employment

2.12 Semantic Network

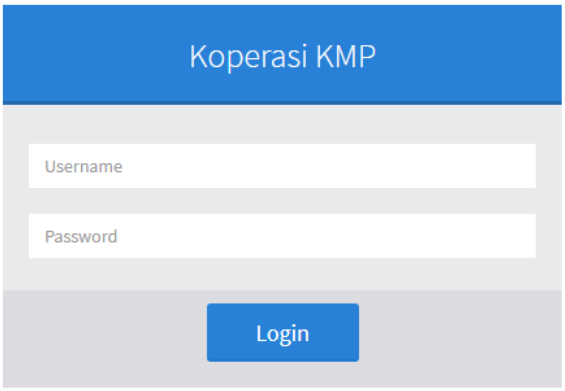
The design of the semantic network is part of the Cooperative is an overview of the semantic network is part of the Cooperative on this system, here is a semantic network is part of the Cooperative can be seen in Figure 5 below:



Gambar 5. Semantic Network Employment Section

2.13 Implementation Of Interface

1. Login Interface Implementation



Gambar 6. Implementation of antramuka Login

2. The implementation of the Employment Section Menu interface



Gambar 7. Implementation of the Employment Section Menu interface

3. CLOSING

3.1 Conclusions

Based on pemabahasan analysis and testing that has been done, then it can be taken towards the conclusion of a management information system promotion and employee on Employee Cooperative mutation Manunggal perkasa as follows:

1. Management information system promotion and employee on Employee Cooperative mutation Manunggal this mighty had enough help in determining a candidate's unit chief clerk who will be on the promotion or transferred.
2. Management information system promotion and employee on Employee Cooperative mutation Manunggal this mighty had enough help Chairman unit in conducting employee performance assessment using the method of AHP.

3.2 Advice

Based on the conclusions already outlined above, it is expected that future is so that management information system promotion and employee on Employee Cooperative mutation Manunggal this mighty can at kembangan again in terms of the assessment of an employee where for attendance should already be in connect with the existing system in cooperative employees manunggal perkasa.

BIBLIOGRAPHY

[1] S.P Hasibuhan, Malayu. 2014. Manajemen Sumber Daya Manusia Edisi Revisi. Jakarta: PT Bumi Aksara.

[2] Kusrini, 2007. Konsep dan Aplikasi Sistem Pendukung Keputusan, Yogyakarta:Andi..

[3] M Herujito, Yayat. 2001. Dasar-Dasar Manajemen. Jakarta:PT Grasindo.