DEVELOPMENT OF HUMAN RESOURCES MANAGEMENT INFORMATION SYSTEM AT CV. TRIVECTA COMMINDO

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ABSTRACT

CV. Trivecta Commindo *is a company engaged in services and creative communication. The company is divided into 3 departments, namely an open-space called* SPASIAL, *a store called* Norrm, *and a canteen named* Four-Calendar Canteen. *At present the company has an internship program that is open to students within 3 months to fill various positions in the* SPASIAL *department. According to the Managing Director, the company has difficulty in selecting prospective apprentice employees who are in accordance with the job qualifications. Based on the data, there was a 35% appropriateness of apprentice employees because at the selection phase the apprentice employee was only seen based on the value of the interview test alone, did not pay attention to the suitability of the course major with the position applied. In addition, the company experienced problems in making permanent employee decisions to be given bonuses, warning letters, job promotions and demotion, because the company only had 1 assessment criteria for 3 different departments. The solution to the selection of apprentice employees is to use the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) method, while for decision making for permanent employees is to use the Analytical Hierarchy Process (AHP) method.*

Keywords: Management Information System of Human Resources, Human Resources, Technique for Order Preference by Similarity to Ideal Solution, Analytical Hierarcy Process

1. INTRODUCTION

CV. Trivecta Commindo *is a company engaged in the services and creative communication. The company is divided into 3 different departments, namely an open space called* SPASIAL, *a shop called* Norrm, *and a canteen named* Four-Calendar Canteen, *which is in the same management. Based on employee data on April-June 2017 period,* CV. Trivecta Commindo *has 73 employees and is divided into 2 types of employees, namely permanent employees and apprentices.*

Right now, the company has an internship program that is open to students within 3 months to fill various positions in the SPASIAL *department. Based on the interview with Mr. Ardo Ardhana as the Managing Director, stated that the company had difficulty in selecting the right apprentice apprentices and in accordance with job qualifications. When viewed from the recapitulation of appraisal data of apprentice employees in the period of April - June 2017, there was a 35% appropriateness of the apprentice employee due to the apprentice employee selection phase, the only value considered was the interview test, did not pay attention to the suitability of the majors with the position applied so that there can be a mismatch of job qualifications.*

In addition to conducting recruitment activities for apprentices, the company also conducts regular employee performance appraisal activities. The results of the assessment of the performance of permanent employees will later be used as decision support to determine whether the employee deserves a bonus, warning letter, promotion or demotion.

However, the provision of bonuses, warning letters, job promotions or demotion of the position is currently considered not objective, because the company only has 1 assessment criteria for 3 different departments. So that every employee in a different department is assessed only based on general criteria, not specific based on their respective departments. This ultimately resulted in difficulties for companies to make decisions for bonuses, warning letters, promotion or demotion.

Based on the description that has been submitted, it can be concluded that the objectives of this study are as follows.
1. *Helping the company to determine an apprentice to fit the requirements.*
2. *Helping the company in the decision for awarding bonuses, giving a warning letter, promotion or demotion of position refers to the results of employee performance evaluation.*

2. RESEARCH CONTENTS
2.1 Theoritical Basis
2.1.1. Information System
Information system is a combination consisting of people, hardware, software, communication

networks, and databases that work in terms of gathering, changing and transferring information in the form of organizations so as to increase tasks, overall effectiveness, and economic effectiveness [11].

2.1.2. Management Information System

Management information system is a system that provides information for users. Information provided is to explain reports periodically or special reports within an organization or company [7].

Management information system is a collection of subsystems that are interconnected and interact in managing certain data whose results are information that can be used as a basis in a decision making [1].

2.1.3. Human Resources

Human resources are someone who has the potential to work in the environment of an organization. The potential possessed by these employees must be able to help an organization in realizing its goals [9].

The performance of human resources itself is work performance or work results both in quality and quantity that has been achieved by these human resources [10].

2.1.4. PDCA (*Plan – Do – Check – Act*)

The PDCA cycle is a systematic method for maintaining a quality so that it remains in a predetermined standard [8]. The PDCA cycle is divided into 4 phases as follows [2].

1. Plan
   Phase to set targets to be achieved in a problem that wants to be resolved.
2. Do
   The implementation phase of what has been planned before, including to carry out a process and do the data collection needed.
3. Check
   The phase of examination of what has been done in the previous phase. Then it is compared between the results obtained with the targets that have been previously set.
4. Act
   The phase for decision making on the results of the previous phase, and taking the necessary actions to get optimal results.

2.1.5. TOPSIS (*Technique for Order Preference by Similarity of Ideal Solution*)

A multicriteria decision-making method that considers selected alternatives not only has the closest distance from a positive ideal solution, but also one that has the farthest distance from a negative ideal solution [3].

In general, the TOPSIS procedure is as follows.
a. Make normalized decision matrix;
b. Make a weighted normalized decision matrix;
c. Determine the matrix of the ideal positive solution and the negative solution matrix;
d. Determine the distance between the values of each alternative with a matrix of positive ideal solutions and a matrix of ideal negative solutions.

TOPSIS requires a work rating for each alternative A_i on each normalized C_j criteria.

$$r_{ij} = \frac{x_{ij}}{\sqrt{\Sigma_{i=1}^{m} x_{ij}^2}}$$

Information:
r_{ij} = matrix normalized from the basic matrix.
x_{ij} = basic matrix that will be normalized.

Positive ideal solution A^+ and negative ideal solution A^- can be determined based on normalized weight rating (y_{ij}) as:

$$y_{ij} = w_i \cdot r_{ij}$$
$$A^+ = (y_1^+, y_2^+, \dots, y_n^+)$$
$$A^- = (y_1^-, y_2^-, \dots, y_n^-)$$

Information:
y_{ij} = weighted normalized matrix [i][j]
w_i = weight vector [i]
y_1^+ = max y_{ij}, if j attributes are benefit; min y_{ij}, if j attributes are cost.
y_1^- = min y_{ij}, if j attributes are benefit; max y_{ij}, if j attributes are cost.

Distance between alternatives A_i with positive ideal solutions formulated as:

$$D_i^+ = \sqrt{\sum_{i=1}^{n} (y_i^+ - y_{ij})^2}$$

Information:
D_i^+ = alternative distance A_i with positive ideal solution.
y_i^+ = positive ideal solution [i]
y_{ij} = weighted normalization matrix [i] [j]

Distance between alternatives A_i with negative ideal solutions formulated as:

$$D_i^+ = \sqrt{\sum_{i=1}^{n} (y_{ij} - y_i^-)^2}$$

Information:
D_i^- = alternative distance A_i with negative ideal solution.
y_i^- = negative ideal solution [i]
y_{ij} = weighted normalization matrix [i] [j]

Preference value for each alternative (V_i) can be seen in the following formula:

$$v_i = \frac{D_i^-}{D_i^- + D_i^+}$$

Information:
V_i = The closeness of each alternative to the ideal solution.
D_i^+ = alternative distance A_i with positive ideal solution.
D_i^- = alternative distance A_i with negative ideal solution.

V_i value that bigger, shows that the alternative A_i can be choosen.

2.1.6. AHP (*Analytical Hierarchy Procedure*)

AHP method is a decision making technique that provides a procedure for prioritizing a choice that can be used to solve a complex problem [4].

The AHP method using logic and experience factors will be tried to be optimized in a systematic process [5].

The steps in the AHP method include:

1. Make a hierarchy

    The problem to be solved will be described the elements into criteria and alternatives as shown in Figure 1.
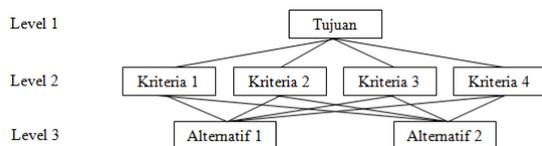

Figure 1. AHP Hierarchy Structure

2. Criteria and alternative assessment

    Criteria and alternatives are carried out by pairwise comparisons, as shown in Table 1.

Table 1. Paired Value Value Scale

Intensitas Kepentingan	Keterangan
1	Kedua elemen sama pentingnya
3	Elemen yang satu sedikit lebih penting daripada elemen yang lainnya
5	Elemen yang satu lebih penting daripada elemen lainnya
7	Satu elemen jelas lebih mutlak penting daripada elemen lainnya
9	Sudut elemen mutlak penting daripada elemen lainnya
2,4,6,8	Nilai-nilai antara dua nilai pertimbangan yang berdekatan
Kebalikan	Jika aktivitas i mendapat satu angka dibandingkan dengan aktivitas j, maka i memiliki nilai kebalikannya dibandingkan dengan i

3. Determining priorities

    In making decisions, it is important to know how good the consistency is. The steps that can be taken to find out this are [6]:

    a. Multiply each value in the first column with the relative priority of the first element, the value in the second column with the relative priority of the second element, and so on.

    b. Add up each row.

    c. The results of the sum of rows are divided by relative priority elements which are combined.

    d. Add the quotient above with the number of elements, the result is called λ max.

    e. Calculate Consistency Index (CI) using formula:
    $$CI = (\lambda\ maks - n) / (n - 1)$$
    Information:
    n = the number of elements based on the source criteria.

    f. Calculate the consistency ratio divided by CI, by formula:
    $$CR = CI / IR$$
    Information:
    CR = Consistency Ratio
    CI = Consistency Index
    IR = Index Random Consistency

    g. Check the consistency of hierarchies. If the value is> 10%, then the assessment of the

decision data must be corrected, if the consistency ratio is <0.1, then it is stated correctly.

Table 2. List of Index Random Consistency

Ukuran Matriks	Nilai 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

2.2 Research Methodology

The research methodology used is descriptive analysis method, shown in Figure 2.
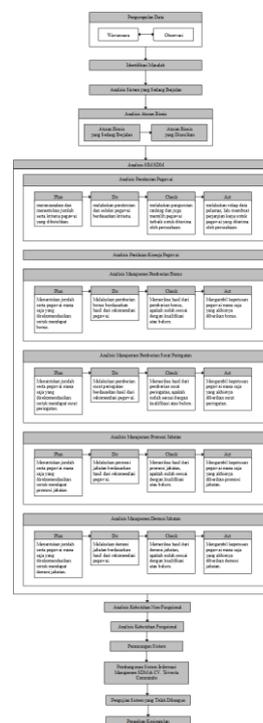

Figure 2. Research Methodology

2.3 Results and Discussion

2.3.1. Analysis of Human Resource Management at CV. Trivecta Commindo

The phases of the PDCA model on human resource management information system at CV. Trivecta Commindo can be seen in Figure 3.
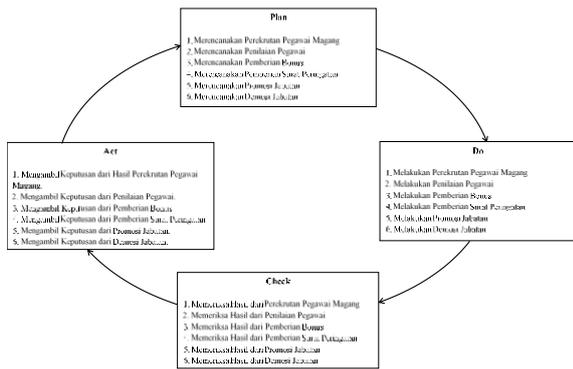
Figure 3. *Phase of Human Resources PDCA Model*

2.3.2. Internship Employee Recruitment Analysis

The PDCA model of the process of recruiting and selecting apprenticeship employees in the company as shown in Figure 4.
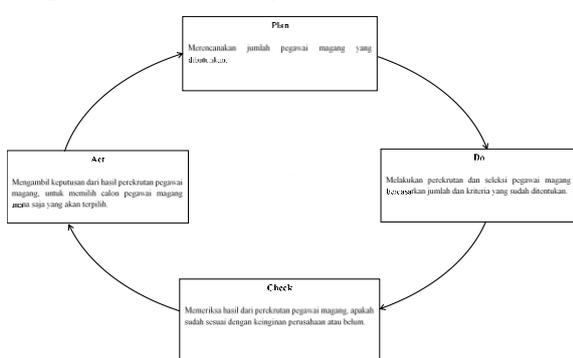

Figure 4. *Employee Internship Recruitment Phase*

1. Plan

The company conducts recruitment plans for apprentices. In Table 3 shows the number and qualifications of the employee needs needed for apprentice employees.

Table 3. *Number of Internship Requirements and Employee Qualifications*

Nama Jabatan	Kuota	Kualifikasi
Penulis	3 orang	1. Berstatus sebagai mahasiswa Jurnalistik. 2. Diutamakan yang sedang menempuh semester 5. 3. Bisa menghasilkan ide-ide kreatif. 4. Apabila sebelumnya memiliki pengalaman menulis, akan lebih disukai.

The criteria and weighting of the recruitment assessment will be used for the selection of prospective apprentices who will use the TOPSIS method for the selection of staff recruitment writers as shown in Table 4.

Table 4. *Criteria and Weight of Selection Assessment*

No.	Kriteria	Bobot Nilai	Inisial
1.	Semester	4	C1
2.	Wawancara	5	C2
3.	Keterampilan	3	C3
4.	Pengalaman Kerja	2	C4

The following is a description of the values for each criterion.

Table 5. *Value and Weight of Semester Criteria*

Semester	Bobot Nilai
Semester lainnya	1
Semester 8	2
Semester 7	3
Semester 6	4
Semester 5	5

Table 6. *Value and Weight Criteria Results of Interview Tests & Skills*

Nilai Tes	Bobot Nilai
0 – 20	1
21 – 40	2
41 – 60	3
61 – 80	4
81 – 100	5

Table 7. *Value and Weight of Work Experience Criteria*

Pengalaman Kerja	Bobot Nilai
Belum Berpengalaman	1
Berpengalaman	2

2. Do

The company recruits and selects apprenticeship employees based on planned criteria, assuming the following data.

Table 8. *Data for Appraisal of Apprentice Employees*

Nama Calon Pegawai	Semester	Nilai Hasil Tes Wawancara	Nilai Hasil Tes Keterampilan	Pengalaman Kerja
Syabila Rasyad	6	90	80	Berpengalaman
Ichsan Ramadhan	6	60	75	Belum Berpengalaman
Rama Dimang	5	85	80	Belum Berpengalaman
Qintara	7	70	90	Berpengalaman

After calculation using the TOPSIS method, the following results are obtained.

Table 9. *Apprentice Candidate Preference Value*

Alternatif	Calon Pegawai	Nilai Preferensi
V1	Syabila Rasyad	0.699
V2	Ichsan Ramadhan	0.254
V3	Rama Dimang	0.677
V4	Qintara	0.448

3. Check

The inspection phase is based on the selection of prospective employee candidates in Table 9, whether it is in accordance with what was planned at the Plan phase or not. If it is appropriate, then it will proceed to the Act phase, which is the decision making of which prospective apprentice employees will be accepted as apprentices. If it is not suitable, then go back to the Plan phase for re-planning.

4. Act

The company will make decisions about which prospective employees will be accepted as apprentices. Based on Table 9, those who are selected as apprentices are Syabila Rasyad, Nika Roes, Ichsan Ramadhan, and Rama Dimang.

Table 10. *Prospective Employee Candidates Who Passed Selection*

Calon Pegawai	Nilai	Ranking
Syabila Rasyad	0.699	1
Rama Dimang	0.677	2
Qintara	0.448	3

The results in Table 10 have met the needs of the apprentice staff as writing staff at SPASIAL.

2.3.3. Permanent Employee Assessment Analysis

The company determines the criteria and sub-criteria as well as the weight used to carry out the assessment of permanent employees, as shown in Table 11.

Table 11. *Weight of Employee Assessment Criteria*

No	Kriteria	Bobot
1	Pengetahuan dan Keterampilan Teknis	40%
2.	Kepribadian	30%
3.	Kemampuan Komunikasi	30%

Table 12. *Criteria Analysis in the Process of Permanent Employee Performance Assessment*

No.	Kriteria	Subkriteria	Kode
1.	Pengetahuan dan Keterampilan Teknis	Kecakapan dalam menyelesaikan tugas	PKT1
		Ketepatan waktu terhadap deadline	PKT2
		Pemahaman terhadap tugas yang diberikan	PKT3
		Inisiatif	PKT4
		Kualitas hasil kerja	PKT5
2.	Kepribadian	Kejujuran	K1
		Kedisiplinan	K2
		Penampilan	K3
		Absensi	K4
3.	Kemampuan Komunikasi	Terhadap Atasan	KK1
		Terhadap Rekan	KK2
		Terhadap Bawahan	KK3

The weight is then calculated using the AHP formula to get priority values for each sub-criteria. The calculation results can be seen in Table 13.

Table 13. *List of Priority Values for Each Sub-Criteria*

No.	Kriteria	Kode	Nilai Prioritas
1.	Pengetahuan dan Keterampilan Teknis	PKT1	0.137
		PKT2	0.396
		PKT3	0.128
		PKT4	0.158
		PKT5	0.181
2.	Kepribadian	K1	0.525
		K2	0.208
		K3	0.109
		K4	0.158
3.	Kemampuan Komunikasi	KK1	0.631
		KK2	0.210
		KK3	0.159

The company then calculates the employee's assessment with its priority values as shown in Table 14.

Table 14. *Table of Assessment of Employee Performance*

Pegawai / Kriteria	A	B	C	D	E	
Pengetahuan dan Keterampilan Teknis						
Kecakapan dalam menyelesaikan tugas	11.628	10.944	10.260	8.892	10.260	8.
Ketepatan waktu terhadap deadline	31.681	29.701	35.641	23.761	27.721	19.
Pemahaman terhadap tugas yang diberikan	10.264	10.264	10.905	6.415	10.264	5.
Inisiatif	11.878	11.878	11.878	8.710	7.919	8.
Kualitas hasil kerja	14.442	12.636	13.539	9.929	12.636	10.
Total	79.892	75.423	82.223	57.707	68.800	54.
Total * 40%	32.0	30.2	32.9	23.1	27.5	2
Kepribadian						
Kejujuran	41.964	41.964	41.964	36.719	41.964	36.
Kedisiplinan	17.696	18.737	15.614	13.532	17.696	10.
Penampilan	8.181	8.181	8.181	6.545	7.635	6.
Absensi	12.655	11.073	10.282	8.700	7.118	11.
Total	80.496	79.955	76.041	65.496	74.414	64.
Total * 30%	24.1	24.0	22.8	19.6	22.3	1
Kemampuan Komunikasi						
Terhadap atasan	50.480	47.325	50.480	37.860	44.170	41.
Terhadap rekan	16.800	16.800	16.800	13.650	14.700	14.
Terhadap bawahan	12.720	13.515	12.720	9.540	11.925	11.
Total	80.000	77.640	80.000	61.050	70.795	67.
Total * 30%	24.0	23.3	24.0	18.3	21.2	2
Nilai Akhir	80.1	77.4	79.7	61.0	71.1	6

The results are shown in Table 14, then sorted so that it is easier to make decisions as seen in Table 15.

Table 15. *Results of Permanent Employee Performance Evaluation*

No	Nama	Jabatan	Nilai Akhir
1	Randy Riandy	Staf Kreatif & Produksi	80.1
2	Zacky	Staf Dokumentasi	77.4
3	Ade Juliansyah	Staf Dokumentasi	79.7
4	Fadli Mulyadi	Staf Penulis	61.0
5	Mahsa Verliana	Staf Sosial Media	71.1
6	Pranata Yudha	Project Officer	61.3

2.3.4. Analysis of Bonus Awards

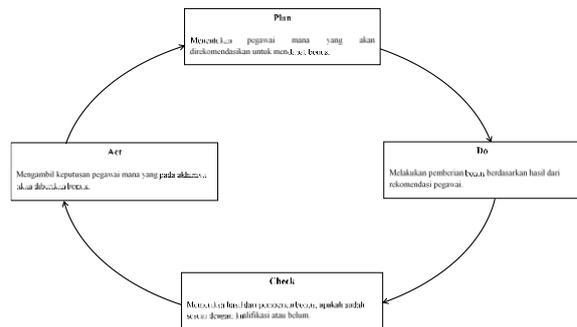The PDCA model in the process of giving bonuses to companies is shown in Figure 5.

Figure 5. *Bonus Giving Phase*

1. *Plan*

   The company will plan employees who will get a bonus. This bonus is only valid for permanent employees. The qualification for bonus giving can be seen in Table 16.

   Table 16. *Bonus Award Qualification*

Kualifikasi
Mendapatkan peringkat teratas pada hasil akhir penilaian pegawai tetap dan memiliki nilai rata-rata >=80 pada 2 kali penilaian (1 tahun). Apabila ada pegawai tetap yang mendapatkan nilai rata-rata >=80 selama 4 kali penilaian (2 tahun), maka pegawai tersebut tidak akan mendapatkan bonus, tetapi akan mendapatkan promosi jabatan apabila terjadi kekosongan jabatan.

Based on the results of the assessment in Table 15, Randy Riandy was ranked top. It is assumed that Randy Riandy has the results of a permanent employee assessment in the previous period as shown in Table 17.

Table 17. *Permanent Employee Assessment Results in the Previous Period*

Nama	Nilai Periode 1	Nilai Periode 2	Nilai Rata-rata
Randy Riandy	82.0	80.1	81.05

2. *Do*
Based on the results in the Plan stage, it can be concluded that Randy Riandy has the right to get a bonus, because he has fulfilled the qualifications for giving bonuses.

3. *Check*
The inspection phase from the results of the bonus award in Table 17, is it in accordance with what was planned at the Plan stage or not.

4. *Act*
Based on the results of the Check stage, Randy Riandy has the right to get an employee promotion, because he has fulfilled the qualifications needed to get a bonus.

2.3.5. Analysis of Letter of Warning
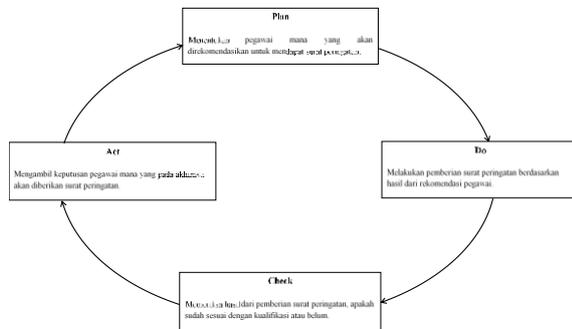*The PDCA model in the process of giving warning letters to companies is shown in Figure 6.*

Figure 6. *Warning Letter Submission Phase*

1. *Plan*
The company will plan employees who will get a warning letter. This warning letter is only valid for permanent employees. The qualification for issuing warning letters can be seen in Table 18.

Table 18. *Qualification of Letter of Warning*

Kualifikasi Pemberian Surat Peringatan
Mendapatkan peringkat terbawah pada hasil akhir penilaian pegawai tetap dan memiliki nilai rata-rata <=50 pada 2 kali periode penilaian pegawai tetap (1 tahun).

Based on the results of the assessment in Table 15, it can be seen that Fadli Mulyadi got the lowest final score of 61.0. It is assumed that Fadli Mulyadi has the results of permanent employee appraisal in the previous period as shown in Table 19.

Table 19. *Permanent Employee Assessment Results in the Previous Period*

Nama	Nilai Periode 1	Nilai Periode 2	Nilai Rata-rata
Fadli Mulyadi	38.0	61.0	49.65

2. *Do*
Based on the results in the Plan stage, it can be concluded that Fadli Mulyadi has the right to get a warning letter, because he has met the qualifications to get a warning letter.

3. *Check*
The inspection phase from the results of giving warning letters on Table 18, is it in accordance with what was planned at the Plan stage or not.

4. *Act*
Based on the results of the Check stage, Fadli Mulyadi will get a warning letter, because the recommended employees fulfill the specified qualifications to get a warning letter.

2.3.6. Analysis of Job Promotion
The PDCA model in the process of granting promotion to companies is shown in Figure 7.

Figure 7. *Stage of Giving Promotion*

1. *Plan*
The company will plan employees who will get a promotion. The qualification for bonus giving can be seen in Table 20.

Table 20. *Job Promotion Qualification*

Kualifikasi	Bentuk Promosi
Pegawai tetap yang berstatus sebagai "Staf" yang dan mendapatkan peringkat teratas pada hasil akhir penilaian pegawai dan memiliki nilai rata-rata >=80 pada 4 kali periode penilaian (2 tahun) dan terjadi kekosongan. Apabila ada pegawai yang berstatus sebagai "Kepala", maka pegawai tersebut hanya berhak untuk mendapatkan bonus.	Naik ke jabatan yang lebih tinggi.

Based on the results of the assessment in Table 15, Randy Riandy was ranked top. It is assumed that Randy Riandy has fixed employee valuation results in the previous period as shown in Table 21.

Table 21. *Permanent Employee Assessment Results in the Previous Period*

Nama	Nilai Periode 1	Nilai Periode 2	Nilai Periode 3	Nilai Periode 4	Nilai Rata-rata
Randy Riandy	78.0	84.0	82.0	80.1	81.025

2. *Do*
Based on the results of the Plan stage, it can be concluded that Randy Riandy has the right to get a promotion promotion recommendation,

because he has fulfilled the qualifications for promotion, as shown in Table 20.

Table 22. *Permanent Employee Recommendations*

Nama	Jabatan	Nilai Rata-rata selama 4 kali periode penilaian	Kekosongan Jabatan
Randy Riandy	Staf Kreatif & Produksi	81.025	Ya

3. *Check*
   The examination phase of the results of the promotion promotion in Table 20, is it in accordance with what was planned in the Plan stage or not.
4. *Act*
   Based on the results of the Check stage, Randy Riandy has the right to get employee promotion recommendations because he has fulfilled the qualifications needed to get a promotion. So, the decision was taken that Randy Riandy was promoted to become the Head of Creative & Production.

2.3.7. Analysis of Position Demotion
The PDCA model in the process of giving demotion to the company is shown in Figure 8.
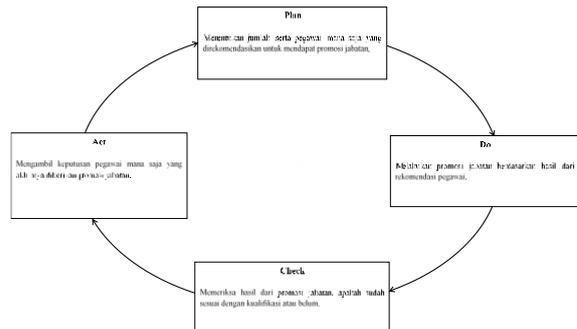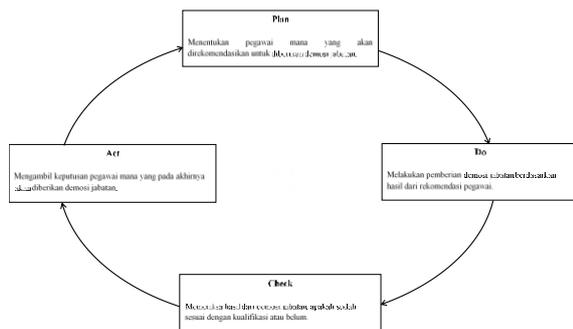

Figure 8. *Stage of Position Demotion Giving*

1. *Plan*
   The company will plan employees who will get demotions. The qualification for bonus giving can be seen in Table 23.

Table 23. *Qualification of Letter of Warning*

Kualifikasi Pemberian Demosi Jabatan
Memiliki Surat Peringatan (SP) sebanyak 3 buah (SP1, SP2, dan SP3).

2. *Do*
   Based on the results in the Plan stage, it can be concluded that Fadli Mulyadi will get the position demotion, because he fulfills the qualifications for demotion.
3. *Check*
   The examination phase of the results of the promotion promotion in Table 23, is it in accordance with what was planned in the Plan stage or not.
4. *Act*
   Based on the results of the Check stage, Fadli Mulyadi has the right to get employee demotion recommendations, because he has fulfilled the qualifications needed to get the position demotion. So, the decision was taken that Fadli Mulyadi would get the demotion of office.

2.3.8. System Analysis and Design
2.3.8.1. Database Analysis
Base Data Analysis Database analysis on human resource management information systems at CV. Trivecta Commindo is configured through an Entity Relationship Diagram (ERD), as shown in Figure 9.
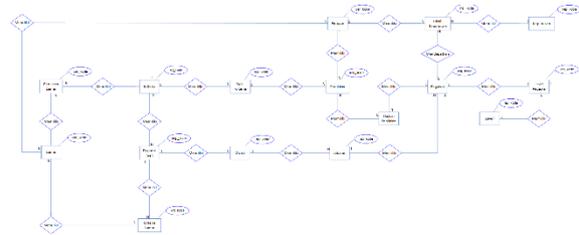
Figure 9. *Entity Relationship Diagram*

2.3.8.2. Context Diagram
Context diagram on human resource management information systems at CV. Trivecta Commindo can be seen in Figure 10.
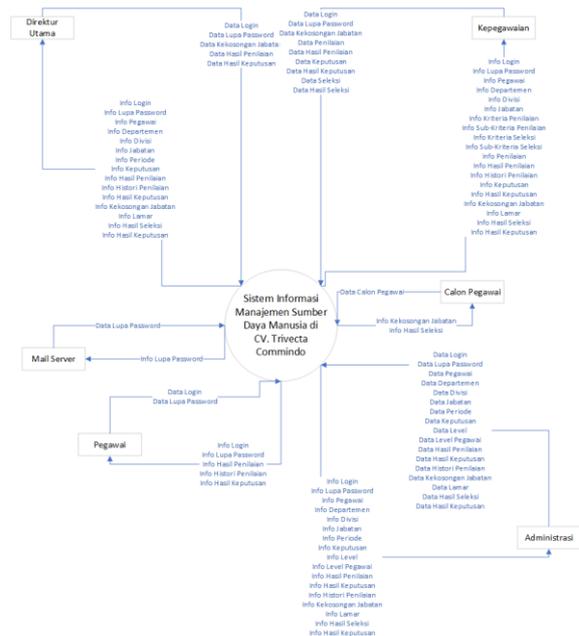
Figure 10. *Contect Diagram*

2.3.8.3. Interface Design
The interface design is done to configure the display of the system to be built. Examples of interface design in human resource management information systems at CV. Trivecta Commindo can be seen in Figure 11.

Figure 11. *Example Interface Design*

2.3.9. System Testing
2.3.9.1. Conclusion of Blackbox Testing

The conclusion of the results of the Blackbox test in this study is that each process in the system is in accordance with the initial design, but still allows for errors. However, functionally meeting the needs as expected.

2.3.9.2. Conclusion of Beta Testing

Based on the results of interviews and questionnaires to the parties concerned regarding human resource management information systems at CV. Trivecta Commindo can be concluded that this system can help companies determine apprenticeship employees according to the needs of the company, and can help companies provide decisions to give bonuses, warning letters, promotions and demotion based on the results of employee appraisal.

3. CLOSING
3.1. Conclusion

Based on the description of the discussion of analysis and testing, it can be summarized as follows.

1. Human Resource Management Information System at CV. Trivecta Commindo can help companies determine apprenticeship employees according to company needs.
2. Human Resource Management Information System at CV. Trivecta Commindo can help companies in making decisions to carry out promotions and demotion based on the results of employee evaluations.

3.2. Suggestion

Based on the conclusions that have been described, here are some things that are expected in the future in the Human Resource Management Information System at CV. Trivecta Commindo.

1. To make it easier for prospective employees to carry out written tests, it is better if an online test facility is provided.
2. In addition, this system is better if recruitment is not limited to apprentices only, but also to permanent employees.

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