SISTEM INFORMASI MANAJEMEN KEPEGAWAIAN DI PT. SHERISH CIPTA INTERINDO

Mia Rusmiyanti[1], Sri Nurhayati[2]

Teknik Informatika – Universitas Komputer Indonesia
Jl. Dipatiukur 112-114 Bandung
E-mail : mia.miaw1441@gmail.com[1], sri.nurhayati@email.unikom.ac.id[2]

ABSTRACT

PT.Sherish Cipta Interindo is one of the furniture companies which located in industrial region of Kabupaten Bandung. PT.Sherish has 3 branches. It also has 48 permanent employees and 52 contract employees. Based on the interview result with Mrs.Nia, there is qualification incompatibility from each position. The other problem is in the process of employees' performance assessment, which in the decision making of hiring the contract employees becomes permanent or contract extension and promotion, position transfer and demotion for permanent employees.Based on the problems above, PT.Sherish Cipta Interindo needs a staffing management information system. The method used in personnel management information system at PT. Sherish Cipta Interindo is Analytical Hierarchy Process (AHP). Analytical Hierarchy Process (AHP) is one of the multicriteria decision-making models that can help the human mindset where the logical, experiential, emotional and sense experiences are optimized into a systematic process. For the analysis of personnel management system at PT. Sherish Cipta Interindo uses a process of problem solving management, planning analysis, organizing, actuating, controlling (POAC). According to the result of blackbox and beta test which have been done in implementation stage, the examiner concludes this staffing management information system can help the human resource department's manager when selecting the new employees based on their position qualification and making decision for the permanent employees and the contract employees to become permanent or extending the contract and promotion, position transfer and demotion for permanent employees.

Keywords: Management Information System, Human Resources, Employees Performance Assessment, Analytical Hierarkhi Process (AHP), Planning, Organizing, Actuating, Controlling (POAC)

1. INTRODUCTION

PT. Sherish Cipta Interindo is one of the companies engaged in the field of furniture, located in the industrial district of Bandung regency. PT. Sherish Cipta Interindo has 3 branches namely Sherish Home Kitchen, Home Solution, and PT. Sherish Cipta Interindo Pamulang. For companies managing human resources (HR) is not an easy thing, and experienced by PT. Sherish Cipta Interindo. PT Sherish Cipta Interindo has 100 employees, where the employees consist of 48 permanent employees and 52 contract employees. PT. Sherish Cipta Interindo has 8 divisions: HRD, Marketing, Production, Finance, Drafter, RnD, Purcasing, Warehouse. PT. Sherish Cipta Interindo has 13 positions and each position has different job qualification.

Mrs.Nia Kurniasih as Human Resource Development Manager at PT. Sherish Cipta Interindo states that the existing problems in the company today is in the process of managing existing human resources such as employee performance appraisal and human resources needed by companies such as new employee acceptance. When vacancy occurs or requires a new workforce, a new employee recruitment procedure will be performed. In the process of admission of new employment, when the vacancy occurs and the position must be filled immediately, so that the acceptance of the employee ignores the qualifications of the existing positions in the company such as formal education and work experience, this may occur non-conformity qualifications of each position, especially in formal education and Work experience Happen mismatch caused by formal education background and work experience not in accordance with job qualification.

the process of appraising employee performance at PT. Sherish Cipta Interindo is done one year 2 times or 6 monthly periodically. In the process of appraising employee performance there are two types of assessment that is for permanent employees and contract employees. Performance appraisal of contract employees will be made for employee appointment. Extended work contract. Performance appraisals for permanent employees are used for the determination of promotions, bonuses, job transfers, and demotions. Performance appraisal is done by filling out form key performance indicator or employee performance appraisal form and employees appraised one by one by HRD Manager. Based on interviews with Ibu Nia in performance appraisal there were problems in determining decisions for promotion, position transfer, demotion and bonus for permanent employees. In making decisions in employment contract employees how many candidates who will become permanent

employees while for permanent employees how many people candidates employees who will get bonus per year and so also for promotion positions, transfer positions, and demotions. This affects the employee career development of being a permanent employee, transfer of positions, promotions, demotions of employees.

the system to be created this recruitment process is done from adjusting the number of employees required in accordance with company criteria, in decision making using SOP. In the assessment process, the results of the assessment will be used to make decisions in permanent employees, employee transfer, employee demotion, promotion of positions. For decision making of assessment result by AHP method. Based on the problems that have been described previously, then required a personnel management information system in PT. Sherish Cipta Interindo who can provide assistance in planning process recruitment and employee performance appraisal at PT. Sherish Cipta Interindo

The purpose of this study is to build personnel information management system at PT. Sherish Cipta Interindo. As for the purpose and goal to be achieved is :

1. Assisting HR Manager to select new employee in accordance with job qualification.
2. Assisting HRD Manager in decision-making for contract employees in extending contracts or hiring of permanent employees and decision-making for permanent employees in terms of promotion of positions, transfer of positions, demotions and bonuses.

2. CONTENTS RESEARCH

2.1 Theoretical Basis

Theoretical basis used in the preparation of the final report of personnel management information system information at PT. Sherish Cipta Interindo is as follows:

2.1.1. Sistem

A system is a collection of objects such as people, resources, concepts, and procedures intended to perform an identifiable function or to serve a purpose. For example, a university is a system of students, faculty, staff, administration, buildings, equipment, ideas, and rules with the aim of educating students, producing research, and providing services to the community (other systems). A clear definition of the purpose of the system is a critical consideration in designing a management support system [1].

2.1.2. Sistem Informasi Manajemen

Management Information System or SIM is a computer-based system that makes information available to managers for the same needs. These managers are usually the unity of a formal organization, ie a company or one of its functional areas. [2]

The information processor provides information in three basic forms to the SIM user. Users, displayed in the middle with organizational charts are placed at the organizational level and in all function areas.

2.1.3. Human Resource Management

There are three definitions of human resources namely:

a. Human resources are people who work within an organization (also called personnel, labor, workers or employees).

b. Human resources are human potential as an organizational motivator in realizing its existence.

c. Human resources are potentials that are assets and function as capital (non-material / non-financial) within the business organization, which can manifest into physical and non-physical real potential in realizing organizational existence [3].

Based on this understanding, it can be concluded that human resources is a process of utilizing human as human labor, so that their physical and psychic potential is functioning optimally for the achievement of organizational goals.

2.1.4. Human Resource Management Information System

Human Resource Information System (human resouces information system) is a systematic procedure for completion, storing, retrieving, and validating data needed by a company to improve Human Resouces decisions [4].

2.1.5. POAC Analysis

POAC, the English abbreviation of "Planning, Organizing, Actuating, and Controlling" (Planning, Organizing, Scaling, Monitoring), is a problem-solving process. The POAC cycle is shown in the figure 2.1

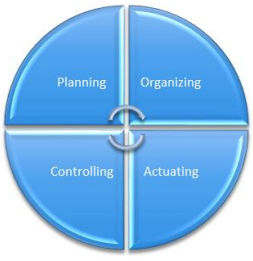


Figure 2. 1 POAC Cycle

For information from the POAC section, namely:

1. Planning (Planning) is the process of defining the goals of the organization, create strategies to achieve goals and develop a work plan in an organization. In planning, there are several factors in planning (planning) that should be considered, namely:

a. Specific is a planning should be clear what the purpose and purpose and its scope.

b. Measurable is a success rate that can be measured from work programs and plans made.
c. Achievable is something that can be achieved and realized, not just fiction and imagination.
d. Realistic is something that matches the abilities and resources that exist, must be balanced but still there are challenges.
e. Time is a clear time limit, so it can be assessed and evaluated.
2. Organizing (Organizing) is a process of activities in preparing the organizational structure in accordance with the objectives, sources and environment
3. Actuating (Movement) is an action that seeks all the planning and corporate goals can be realized well and as expected.
4. Controlling is a process of observation, determination of the standards to be realized, assessing the performance of the implementation, and if necessary take corrective action, so as much as possible in achieving company goals. [4]

2.1.6. Decision-making system

Little (1970) defines a decision support system (DSS) as a set of procedure-based models for data processing and assessment to assist managers in decision making. He argues that to be successful, the system must be simple, powerful, easy to control, adaptive, complete on important issues, and easy to communicate with. Alter (1980) defines decision support systems by contrasting them with (EDP) electronic data processing systems in five dimensions.

2.1.7. Metode Analytical Hierarchy Process (AHP)

Analytical Hierarchy Process (AHP) was developed by Thomas L. Saaty in the 1970s. This method is one of the multicriteria decision-making models that can help the human mindset where the logical, experiential, emotional and sense experiences are optimized into a systematic process. Basically, AHP is a method used to solve complex and unstructured problems into its groups, by organizing the group into a hierarchy, then inserting numerical values instead of human perception in comparative comparison.

AHP has many advantages one of which is graphically depicted so easily understood by all parties involved in a decision-making. Some of the principles when the problem of Decision Making System using Hierarchical Analysis Process Method that must be understood, including:

1. Create a hierarchy

Complex systems can be understood by breaking them into supporting elements, arranging elements hierarchically, and combining them or synthesizing them. Decomposition is a function to solve or divide the whole problem into elements and then into a hierarchical form of decision-making process, in which each element is interconnected with each other.

2. Assessment of alternative criteria

Criteria and alternatives are done by pairwise comparisons.

3. Set priorities

Every criteria and alternatives need pairwise comprasions. The values of all comparisons can be adjusted with the judgment that has been established to produce a weight and a priority. The weights and priorities are calculated by matrix manipulation or by mathematical equations.

4. Logical Consistency

Consistency has two meanings. First, similar objects can be grouped by uniformity and relevance. Second, it concerns the level of relationship between objects based on certain criteria. [5]

2.2. Analysis of the problem

Based on interviews that have been done with HRD manager at PT. Sherish Cipta Interindo states:

1. that when such vacancy occurs and the office must be filled in immediately, so that the employee's acceptance ignores the qualifications of positions such as formal education and work experience. This may occur mismatch of any qualifications from every position in the company, especially on formal education and work experience for all employees that exist in each division.
2. HRD managers have difficulty in making decisions for promotion, demotion, transfer of positions for permanent employees and decision-making for contract extension or appointed permanent employees to contract employees.

2.3. Analysis of Personnel Management

Personnel management analysis using POAC approach (planning, organizing, Actuating, Controlling). In this section will be analyzed how a human resources procedure will be implemented in the personnel management information system built in PT. Sherish Cipta Interindo namely:

1. Employee Reception Management Analysis

POAC analysis on employee receipt at PT, Sherish Cipta Interindo is as follows:

Table 1 Employee Reception Management analysis

Planning	Organizing	Actuating	Controlling

1. Design number Rishi each employee based on monitoring	1. inspection and organizing (placement) of prospective employees who already have the terms of the terms of Office of the	1. the implementation of acceptance of employees who were in accordance with the terms of Office of the 2. the determination of the value of prospective employees	1. amination of the results of the employee's acceptance based on the value it brings 2. signer PKWT

1. Planning

The planning stage of the process of receiving new employees will be made based on monitoring and determining the number and criteria of employees. Employee receipts will be made due to the need for new jobs for vacant positions. Based on interviews with new hrd employee recruitment managers have several criteria and weights on each criteria such as formal education criteria, non-formal education criteria, language ability criteria, writing ability criteria, achievement criteria and job history criteria. Planning and determination of nialai and criteria on which acceptance is based, among others are formal education criteria, non-formal education criteria, language ability criteria, speech criteria, writing skill criteria, achievement criteria, and job history criteria.

2. Organizing

Organizing the criteria that have been made to be adapted to the planning process. This stage is the process of examination and organizing of prospective employees who have met the job requirements and who do not meet the requirements of the job.

3. Actuating

The implementation stage is the stage where the recruitment process has been planned and has been in accordance with the terms of position. The next stage hrd managers will determine the value of the applicant based on administrative tests, written tests, interviews.

4. Controlling

Stage of supervision done after planning, organizing, and execution has been done last phase of employee acceptance is examination result of employee acceptance based on value which have been got by applicant or prospective employee to be used for ranking.

2. Employee Performance Appraisal Management Analysis

Analysis of POAC employee performance appraisal on personnel information management system at PT. Sherish Cipta Interindo is as follows:

Table 2. Employee Performance Appraisal Management Analysis

Planning	Organizing	Actuating	Controlling
1. employee performance appraisal planning to stay and contract 2. planning grant of promotion, transfer of title, demosi Office	1. organizing time performance assessment 2. organizing employees who will get the Promotion Office of transfer demosi	1. Implementation of employee performance appraisal 2. Take decisions for promotion, transfer of positions, demotions	1. Check out the results of decisions for promotion of transfer of positions and demos

1. Planning

This planning stage will be done the determination of the priority value, the calculation of priority values can be seen in the sub-section of employee performance appraisal. Employee performance appraisal analysis which will be used for decision making for promotion, transfer, demotion and bonus while for contract employee is appointed permanent employee and extend work contract with company.

2. Organizing

This stage is the stages of organizing the results of each priority criteria and sub criteria that have been done at the planning stage.

Table 3 Priority Values

No	Criteria	Code	Priority values
1	Performance appraisal of the job description	JD1	7,80
		JD2	2,89
		JD3	0,65
		JD4	0,23
2	work attitude	SK1	3,00
		SK2	2,86
		SK3	0,264
3	Potential and ability	PK1	7,80
		PK2	2,89
		PK3	0,65
		PK4	0,23
4	The personality of self towards mandatory worship	IW1	6,00
		IW2	2,20
		IW3	0,22
5		IS1	6,00
		IS2	2,20

	Personality of self against sunnah worship	IS3	0,220

3. Actuating

This implementation stage is an implementation of employee performance performed by HRD manager. Performance appraisal is done on a period of 1 year 2 times or 6 months.

4. Controlling

Stage supervision and inspection of employee performance against the work done has been in accordance with what has been expected by the company PT. Sherish Cipta Interindo for permanent employees of this controlling stage is for promotion, bonus, transfer of position, demosi and for contract employee of contract stage this is to extend the contract or be appointed to permanent employees in the company.

2. Control of Leave Management Analysis

POAC analysis of leave control on personnel management information system at PT. Sherish Cipta Interindo is as follows:

Table 4. Control of leave management analysis

Planning	Organizing	Actuating	Controlling
1.This type of planning criteria and leave of absence 2. consideration of the working period	1. organizing this type of leave with time 2. organizing employees who file a leave of absence	1.the implementation of the employee took the leave 2. approval of leave of employees 3. rescheduling furlough employees	the employee's leave of absence control

1. Planning

At the planning stage is the determination of the type of leave to be valid at PT. Sehrish Cipta Interindo, taking into account the service period of the employee

2. Organizing

the organizing stage of the submission of leave submitted by employees, the organization includes the types of leave and time has met the rules at PT. Sherish Cipta Interindo or not. General Manager who will be responsible at this stage that will approve the submission of leave.

3. Actuating

The implementation stage is the employee can take leave based on the type of leave that has been set at the planning stage. Employees who want to apply for leave will first choose what type of leave to take. HRD Manager will see the submission of existing leave and will be approved by the General Manager based on the rules set at PT. Sherish Cipta Interindo.

4. Controlling

Supervision and monitoring of employee leave by HRD Manager. The HRD Manager will see how many apply for leave in the same division and see the remaining leave from each employee. Employees who exceed the leave limit then the application of the cut will be rejected.

3. Analysis of pension management

Retired POAC analysis on personnel management information system at PT. Sherish Cipta Interindo is as follows:

Table 5 analysis of pension management

Planning	Organizing	Actuating	Controlling
Planning employees who will retire	Provide a notice of retirement	Approve of retirement	check the employees that will retire in accordance with the age for retirement

1.Planning

This planning stage is the stage where HRD Manager will provide pension to employees who have entered the retirement age limit.

2. Organizing

This organizing stage is the organizing stage of employee retirement. Where employees who have entered the retirement age limit will be submitted or given a notice for retirement.

3. Actuating

This actuating stage is the implementation stage for employee retirement. Employees who have been granted pension will be retired.

4. Controlling

This stage is the stage of supervision of employee pensions. The HRD Manager will monitor employee pensions in order to plan for recruiting new employees in the company.

2.1. Analysis Database

Data analysis aims to analyze the data to be applied in the system and explain the data required for the system to run properly in accordance with the needs of its users Can be seen in Figure 2.2

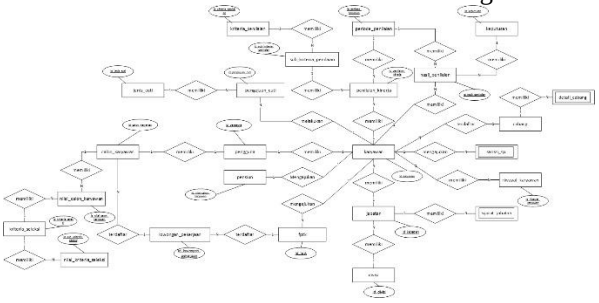
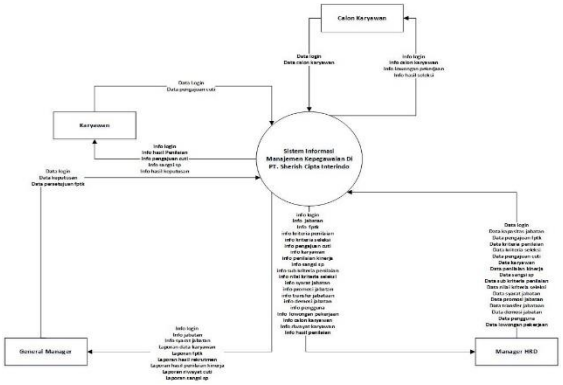


Figure 2.2 ERD

2.2. Diagram Context

Context diagrams are used to describe the first system in outline. Context diagram is also a data flow diagram (Data Flow Diagram) with top level (TOP Level). Context diagram of personnel management information system at PT. Sherish Cipta Interindo can be seen in Figure 2.3



Gambar 2.3 Diagram context

2.3. Data Flow Digaram

Data Flow Diagram is a graphical representation that describes the flow of information and transformation of information applied as data flowing from the input (input) and output (output)

Level 1 DFD can be seen in Figure 2.4

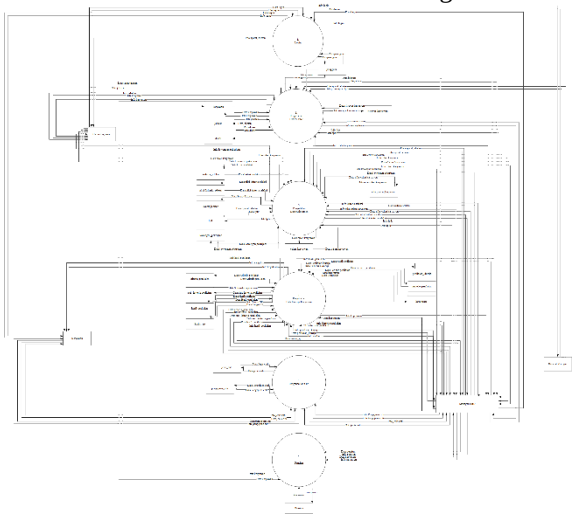


Figure 2.4 DFD Level 1

2.4. Table Relationship

In data modeling, entities are presented with entity tables that exist on E-R charts written with a table template containing attributes called relations schemes. Entity table creation is always guided by the provisions on the way table preparation. So that will get susuanan table entity which is table which free from existence of data. The following are diagaram relations that can be seen in Figure 2.5

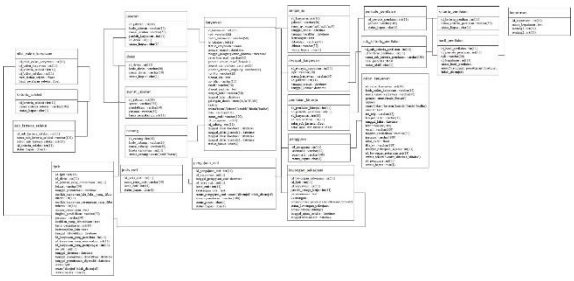


Figure 2.5 Table Relationship

2.5. Interface Design

Interface design is a design that describes the entire state of the interface that is in the system:

The main page of the design of personnel management information system in pt.sherish copyrighted interindo can be seen in Figure 2.6

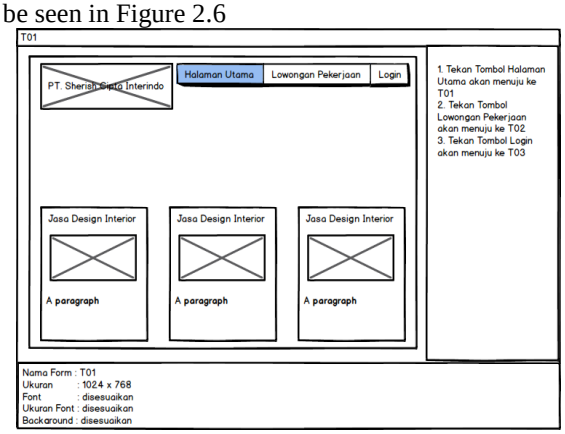


Figure 2.6 Interface Design T01

2.6. Network Design Semantics

Semantic networks describe the interconnection of the menu navigation between one page and another. The connectivity of navigation on each menu of this system can be seen as follows:

Semantic Network Manager of HRD can be seen in Figure2.7

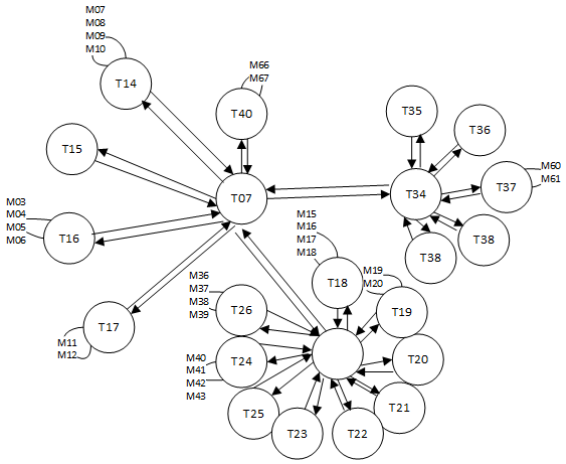


Figure 2.7 Network Design Semantic Manager HRD

2.7. Testing Systems

System testing is the most important thing that aims to find errors and deficiencies in the software being tested. Testing intends to find software that is

made already meet the criteria in accordance with the purpose of designing the software. Testing is done by testing the system built with blackbox testing and beta testing.

1. Blackbox Testing

Testing is done by testing every process that exist in the software to know the possibility of errors that occur. Tests conducted on personnel management information system at PT. Sherish Cipta Interindo.

a. Login Testing

Testing done is at login manager hrd, general manager, employees, prospective employees

Table 6 login testing

Kasus dan Hasil Uji (Data Benar)			
Data Masukan	**Yang diharapkan**	**Pengamatan**	**Kesimpulan**
Contoh masukan : Nama Pengguna : nia Kata Sandi : nia	Menghasilkan data login berupa nama pengguna dan kata sandi yang sudah terdaftar	Data login benar dan masuk ke masing – masing halaman utama yang sudah ditentukan dengan login	[√] diterima [ ] ditolak
Kasus dan Hasil Uji (Data Salah)			
Data Masukan	**Yang Diharapkan**	**Pengamatan**	**Kesimpulan**
Contoh masukan : Nama pengguna : nia Kata sandi : manager	Menampilkan pesan “ username dan password salah”	Tampil pesan “ username dan password salah”	[√] diterima [ ] ditolak
Kasus dan Hasil Uji (Data kosong)			
Data Masukan	**Yang Diharapkan**	**Pengamatan**	**Kesimpulan**
Contoh masukan : Nama pengguna : Kata sandi :	Menampilkan pesan “ harap isi bidang ini”	Tampilkan pesan “ harap isi bidang ini”	[√] diterima [ ] ditolak

2. Beta Testing

Beta testing is an objective test that is tested directly to the field of companies related to user satisfaction with the points content is the fulfillment of the initial goals and interface display of the personnel management information system. Beta testing is done through a data retrieval technique, namely through interviews and questionnaires.

nterviews were conducted on beta testing for pages of each user consisting of hrd manager, general manager, while for employees, prospective employees using questionnaires. Testing done on beta testing is software testing directly in the corporate environment or research place that is PT. Sherish Cipta Interindo. Testing for employees and prospective employees is done by providing questionnaires to application users,

3. CLOSING

In this section, describes the conclusions contains the results obtained after the analysis, design, and implementation of the design of software built and have been developed as well as suggestions that will provide an important record of and possible improvements that need to be done for previous software development.

3.1. CONCLUSION

Based on the research that has been done about personnel management information system at PT. Sherish Cipta Interindo can be concluded as follows:

1. Personnel management information system built this can help the company that is HRD Manager to select new employees in accordance with the qualifications of positions in the company.
2. Personnel management information system built this can help the company HRD Manager to make decisions for contract employees such as the appointment of contract employees to permanent or extension of the contract and make decisions for permanent employees such as promotion, transfer of positions and demotions.

3.2. SUGGESTION

Based on all the results that have been achieved at this time, personnel management information system at PT. Sherish Cipta Interindo has several drawbacks. It is recommended to add things that can. As for suggestions for the development of personnel management information system in PT. Sherish Cipta Interindo is as follows:

1.Need for better development and maintenance of the system that has been built, so the system can be used in accordance with the needs in the future

2. There is a need for rotation of positions to assist the processing of promotional data positions in which there is data of candidates who get promotion of the position but the position is still filled.

BIBLIOGRAPHY

[1] E. Turban, Decision Support Systems and Intelliget System - 7th Ed. Jilid 1, Yogyakarta: Andi, 2005.

[2] J. Pardosi, M. Tambunan and Syahputri, “Pengukuran Kinerja Dengan Menggunakan Integrasi 360 Feedback dan AHP di PT. S,” e-jurnal Teknik Industri FT USU.

[3] H. Nawawi, Manajemen Sumber Daya Manusia, Jakarta: Bumi Aksara, 2001.

[4] V. Rivai, Manajemen Sumber Daya Manusia untuk Perusahaan, Jakarta: Rajagrafindo, 2003.

[5] Kusrini, Konsep dan Aplikasi Sistem Pendukung Keputusan, Yogyakarta: Penerbit Andi.