



Employee Performance Appraisal by Determining Key Performance Indicators Using the Balanced Scorecard Method and Web-Based 360 Degree Feedback

Sari Dwiyanti¹, Fauziah², Novi Dian Nathasia³

^{1,2,3}Sistem Informasi, Fakultas Teknologi Komunikasi Dan Informatika, Universitas Nasional

Email: Saridy09@gmail.com¹, fauziah@civitas.unas.ac.id², novidian@civitas.unas.ac.id³

ARTICLE INFO

Article history:

Received: 01/11/2020

Revised: 10/11/2020

Accepted: 30/11/2020

Keywords:

Balanced Scorecard, 360 Degree Feedback, performance assessment

ABSTRACT

One way to know the performance of an employee is by direct assessment or by filling out an employee performance appraisal questionnaire. But not all companies or factories do that. Only a few companies do this. Therefore, this research is used to make it easier for employees and superiors to jointly know or evaluate their respective performance. The Balanced Scorecard method is a method of measuring company work results or commonly referred to as management strategies. Meanwhile, 360 degree feedback is a tool that provides feedback on the performance of managers, supervisors, superiors. From the results of this study, it can produce an application to apply the Balanced Scorecard method and 360 degrees of feedback into the Employee Performance Appraisal application.

Copyright © 2020 Jurnal Mantik.
All rights reserved.

1. Introduction

Employee performance appraisal is a system that seeks to combine activities related to human resource performance management and information technology. The use of information technology-based information systems in human resource performance management will produce the information needed by the company in making decisions.

Performance is a function of motivation and ability to complete a task or job. A person should have a certain degree of willingness and level of ability. Performance is a tangible behavior that is displayed by everyone as work performance produced by employees in accordance with their role in the agency. Employee performance is very important in an agency's efforts to achieve its goals. Performance appraisal is basically a process that companies use to evaluate job performance. If done correctly, this will provide important benefits for the company.

Bosses must evaluate performance to determine what action to take. Specific feedback enables them to make career planning, training and development, pay increases, promotions, and other placement decisions. Performance appraisal relates to the performance and accountability of employees to the company. In a globally competitive world, it requires feedback on its performance as a guide for attitudes for the future. The HR department uses the information gathered through performance appraisals to evaluate the success of hiring, selection, orientation, placement, training, and other activities.

Although continuous and informal daily assessments are important for smooth operations, formal assessments are needed to assist managers in matters related to HR decisions, such as placement, payroll, and others. In a well-managed company, judgment is associated with problems. Supervisors and managers often perceive formal assessments as unnecessary. They feel that they already know how their employees are doing, and they don't think they need to spend valuable time doing it. In addition, the design of the appraisal system that is not appropriate allows the occurrence of unwanted actions by employees and their superiors.

2. Method Research

2.1 Formulation of the problem

This stage is an important stage because this research path will be guided by the initial objectives of the problem that have been formulated previously.

2.2 Data collection

In collecting data the author uses the method of observation, interviews and questionnaires



2.3 Study of literature

Studying and understanding the theories that serve as guidelines and references in order to solve the problems discussed in this research and

2.4 Data analysis

After the above data collection is complete, then an analysis of the data that has been collected is carried out. This aims to group data such as assessment criteria data, employee data, and other necessary data, so that it will make it easier for the author to carry out the next analysis.

2.5 System planning

There are 2 methods used in the development of this system, namely the balanced scorecard method and 360 degrees.

3. Result and Discussion

3.1 360 Degree Method

A. System Requirements Analysis

Employee performance appraisal which is carried out is still manual and simple, namely in the form of a written questionnaire distributed by 5 respondents, then the results of the assessment are archived into an archive storage. Some of these problems can be described as follows:

- 1) Employee performance appraisal still uses a simple method.
- 2) In the process of employee performance appraisal is relatively time consuming.
- 3) Possible loss of archive damage can occur.
- 4) Requires a lot of money to duplicate the questionnaire.

B. Information Systems Modeling

1) Use Case Diagram

The Use Case Diagram of the Employee Performance Appraisal Information System Using the 360 Degree Method can be seen in the following Fig

2) Activity Diagram

3) Activity Diagram Login

Actors need to log into the system in order to manage data. To log in, the actor must open the login page then enter the username and password that has been previously set. If the username and password are valid then the actor will be redirected to the user's main page. If it is not valid, the system will display a failed login message and the actor must repeat entering the correct username and password.

C. 2 Login Activity Diagram

Displays the Login application. In Activity Diagrams are used to show and model the flow from one activity to another

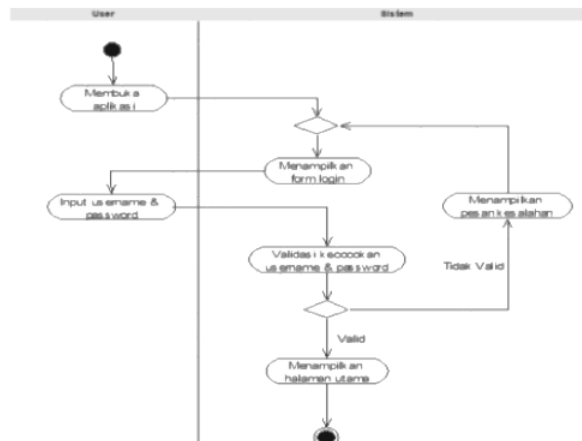


Fig 1 Activity Diagram Login

1) Activity Diagram Weights

In the Weights activity diagram, where can the weight value that the employee get is the correct one

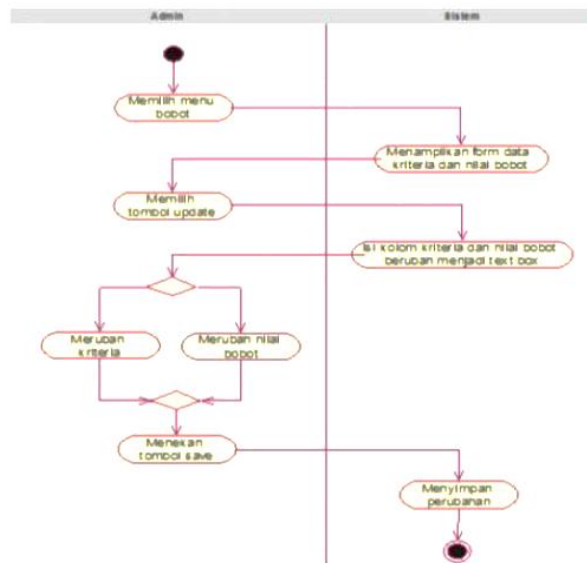


Fig 2 Activity Diagram Weights

2) Value Activity Diagram

In the Values activity diagram displays the results of the values that will be displayed

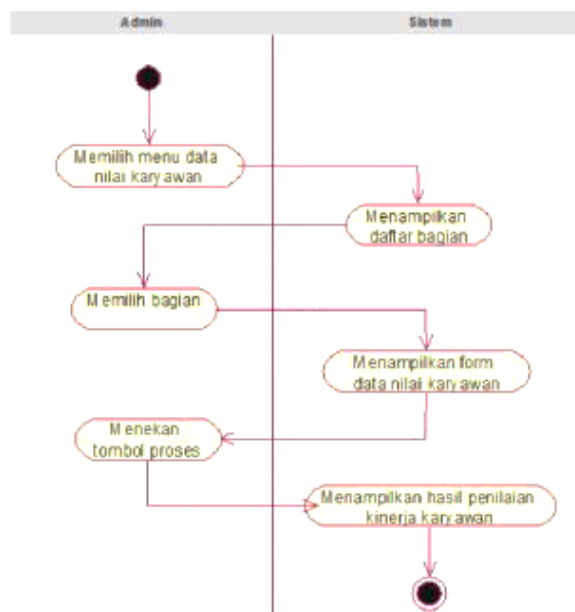


Fig 3 Activity Diagram Value Data Processing

D. Implementation Results

1) Login Page Views

This login display is the main page when the program is run. Login is given based on level according to institutional policy.



Fig 4 Login

2) Main Page Display

The system main page will appear when the user successfully logs in. On this page there are options for user activity, indicators, employees, assessments, value processes, and recaps.

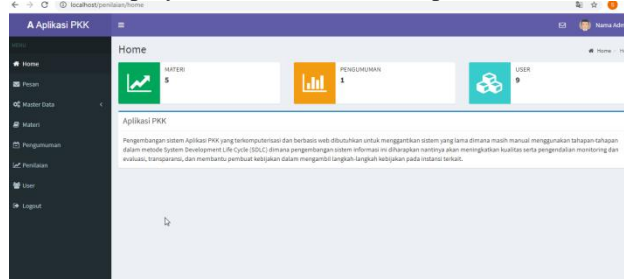


Fig 5 Main page

3) Page Views Manage Weighted Data The page manages value weight data will appear when the user selects the value weight menu which functions to manage weighted data.

No	Nama Bobot	Persentase Bobot	Action
1	Hasil Pekerjaan	30%	[Edit] [Delete]
2	Kedispilinan	15%	[Edit] [Delete]
3	Penitaka	10%	[Edit] [Delete]
4	Loyalitas	20%	[Edit] [Delete]
5	Komitmen	10%	[Edit] [Delete]
6	Kerjasama	15%	[Edit] [Delete]
TOTAL		100%	

Fig 6 Data processing

4) Indicator Page Display

The indicator data management page will appear when the user selects the indicator menu which functions to manage indicator data

No	Username	Nama Lengkap	Periode	Penitak	Nilai Akhir	Action
1	4001	Arya	2020	3	78.47	[Edit] [Delete]
2	4002	Damia	2020	2	88.3	[Edit] [Delete]
3	4003	Ratih	2020	1	88.3	[Edit] [Delete]
4	4004	Temoni		0	-	[Edit] [Delete]
5	4005	Poni Ramu		0	-	[Edit] [Delete]
6	4006	Layan		0	-	[Edit] [Delete]

Fig 7 Indicator

5) Page Views of the Employee Performance Appraisal Questionnaire

The employee performance appraisal questionnaire page will appear when the user selects the appraisal menu which functions to manage employee performance appraisal data.

Username	Nama Lengkap	Nomor Rp	Alamat	Tahun	Unit	Roles	Action
3001	Dika Aryadi	081765428242	Jl. Rambutan Raya	2018		Admin	[Edit] [Delete]
2001	Dito Antoni	081765428254	Jl. Durian RT 404 Rv 201 Mac. Semarang	2018		Atasan	[Edit] [Delete]
3001	Rafa Anbari	081765427803	Jalan Kamping Tengah	2002		Supervisor	[Edit] [Delete]
4001	Arya	081765485432	Jln Semopati	2018	Finance	Karyawan	[Edit] [Delete]
4002	Damia	081765470502	Jalan Satu	2017	Marketing	Karyawan	[Edit] [Delete]
4003	Ratih	08176543767645	Jalan Durian	2017	Production	Karyawan	[Edit] [Delete]
4004	Temoni	08176547376173	Jln Anditaba	2018	Finance	Karyawan	[Edit] [Delete]
4005	Poni Ramu	081765487604	Jln Mawar	2018	Marketing	Karyawan	[Edit] [Delete]
4006	Layan	08176567570878	Jln Waruati	2017	Production	Karyawan	[Edit] [Delete]

Fig 8 Coercionary Assessment

6) Appraisal Calculation Process Page Display

The assessment calculation process page will appear when the user selects the value process menu which functions to display the assessment calculation process

Username	Nama Lengkap	Nomor Hp	Alamat	Tahun	Unit	Roles	Action
1001	Dika Aryadi	081754205542	Jl. Rambutan Raya	2018		Admin	[Edit] [Delete]
2001	Dito Antoni	081754205542	Jl. Durian RT 404 RW 215 Kec. Semangka	2018		Admin	[Edit] [Delete]
3001	Nelly Antoni	081754205542	Jalan Kembang Tengah	2002		Supervisor	[Edit] [Delete]
4001	Arya	081754205542	Jln Semangat	2018	Finance	Karyawan	[Edit] [Delete]
4002	Dania	081754205542	Jalan Satu	2017	Marketing	Karyawan	[Edit] [Delete]
4003	Rahm	081754205542	Jalan Durjan	2017	Production	Karyawan	[Edit] [Delete]
4004	Yenni	081754205542	Jln Anindabata	2018	Finance	Karyawan	[Edit] [Delete]
4005	Puri Ratu	081754205542	Jln Mawar	2018	Marketing	Karyawan	[Edit] [Delete]
4006	Lailan	081754205542	Jln Martani	2017	Production	Karyawan	[Edit] [Delete]

Fig 9 Calculation Process

E. Analysis Results

From the results of the questionnaire that has been filled in, the authors enter into the system the author designed in accordance with what was previously described. Furthermore, to determine the employee performance appraisal rank, the author refers to the provisions of the employee performance appraisal in the order of the assessment rank.

3.2 Balanced Scorecard Method

A. Alignment of Company Vision and Strategy

The strategy taken is to ensure that all departments in the company's organization can make a positive contribution according to their respective functions.

B. KPI Determination Using the 4 Perspective Method

1) Balanced Score Card

To determine the KPI, the industrial engineering department organization is divided into 4 interrelated perspectives as shown in the table

2) Setup Target Key Performance Indicator

To determine the target, each KPI still uses SMART principles (specific, measurable, achievable, reasonable, time bound) and the set targets must be communicated and mutually agreed upon by all engineers who are members of the Industrial Engineering department. The results of the target setup that have been mutually agreed upon for each Key Performance Indicator item.

3) Result Monitoring, Coaching and Feedback

After determining the target, the next step is monitoring the achievement results, coaching and feedback. This process is used as a discussion material between the engineer and the department head to ensure there is feedback from each engineer so that future achievements can be even better.

4. Conclusion

Employee performance appraisal using the balanced scorecard method and 360 Feedback produces a useful application to determine the percentage of employee performance results while working at the company. And make it easier for bosses to assess the results of employee work while working during their work period.

5. Reference

- [1] Rokhim, Muh. "Penentuan Key Performance Indicator Dengan Metode Balanced Scorecard," Jurnal Teknik Industri, vol. 18, no.02, pp. 168-175, Agustus 2017.
- [2] H, Diana ,Riana. "Pengukuran kinerja perusahaan pt Indofood dengan menggunakan balanced scorecard," Jurnal Sekuritas, vol.1, no.2, Desember 2017.
- [3] Doto, Zulfa Fitri Ikatrinasari. "Perancangan penilaian kinerja berdasarkan kompetensi dan kpi (key performance indicator) pada pt. kmi," Jurnal Inkofar vol 1, no.1, Juli 2018.
- [4] Rohaini, Eni. "Sistem informasi penilaian kinerja karyawan menggunakan metode 360 derajat pada STIKOM dinamika bangsa jambi," Jurnal ilmiah media sisfo vol. 12, no.2, Oktober 2018.
- [5] MM, SE, Rahmayanti. "Alisis sistem penilaian kinerja karyawan dengan menggunakan metode 360 derajat (studi kasus pada pt. arga bangun bangsa)," Jurnal Sekretari vol. 5, no. 2, Juni 2018.
- [6] Wahdaniah, A. Aiyul Ikhrum. "Penerapan balanced scorecard terhadap peningkatan kinerja perusahaan (studi kasus perusahaan jasa kontruksi)," MANDAR (Management Development and Applied Research Journal) vol.2.no.1, Desember 2019.
- [7] Siregar, Mia Juliana. "Perancangan model penilaian kinerja karyawan dengan metode 360 degree di departemen

- warehouse,” *Profisiensi* vol.6, no.1;33-40, Juni 2018.
- [8] Suhardoyo,” E-Performance sebagai implementasi umpan balik 360 derajat dalam pelaksanaan kinerja pegawai,” *Perspektif* vol.xvi,no.2, September 2018.
- [9] Sabitah, Nadiyah Muhana,” Implementasi metode penelitian kinerja 360 degree feedback untuk mengukur soft competency karyawan (Studi pada PT Petrokimia Gresik),”*Jurnal administrasi bisnis (JAB)* vol.47,no.1, Juni 2017.
- [10] Annisa, Nurul.” Analisis pengukuran kinerja perusahaan menggunakan perspektif keuangan, perspektif pelanggan, perspektif proses bisnis internal dan perspektif pertumbuhan pembelajaran (balance scorecard) pada pt. gapura angka.” *Jurnal Ekobis Dewantara* Vol.1,no.9, September2018.