EXECUTIVE APPLICATION INFORMATION SYSTEM (EIS) IN THE FACULTY OF SCIENCE AND COMMUNICATION UIN DA'WAH BANDUNG

Gentisya Tri Mardiani[1],Tatang R Ganda Wijaya[2]

[1] Teknik Informatika – Universitas Komputer Indonesia
Jl. DipatiUkur no 112-116, Coblong, Kota Bandung
[2] Teknik Informatika – Universitas Komputer Indonesia
Jl. DipatiUkur no 112-116, Coblong, Kota Bandung
E-mail : if.gentisya@gmail.com[1],id.1111137@gmail.com[2]

ABSTRACT

Faculty of Da'wa and Communication Studies is one of the Faculty IAIN Bandung , Improving academic and Public Administration has been implementing monitoring and evaluation . Inside the applicability faculty has difficulty in monitoring and evaluation for the current system functioned for operational activities alone . Based on the problems mentioned , we need a computer based information system that can monitor and the results of such monitoring may be used as Evaluation
executive information systems (Sie) one type of computer based information system that is intended to facilitate the needs of information related to the achievement of an organization Sie in applicability assist faculty in knowing the percentage of graduation / i , the percentage of students / i dropout percentage lowest GPA and the highest percentage of academic leave in each course and the General Administration like to know the percentage of employees in retirement, the percentage of tenured faculty in retirement, the percentage lecturer Variable based on the maximum limit of age in the appointment of civil servants (Civil Affairs Officer) , percentage of Assets Steady (Good unused , Shred unused , Good unused , Damaged worn)
Based on the test results it can be concluded that this system is already helping executives in the process of monitoring and evaluation of academic activities and general administration
Keywords : Executive information system , monitoring and evaluation

1 INTRODUCTION

Faculty of Da'wa and Communication Studies is one of the Faculty IAIN Bandung , Faculty of propaganda and communication science itself has 5 courses that Prodi Counseling Islam (BKI) , Communication Studies and Islamic Broadcasting (KPI) , Management of Da'wa (MD), Pengembangan Masyarakat Islam (PMI) dan Ilmu Ko) , The Islamic Society Development (PMI) and Communication Studies.
Faculty of propaganda and communication sciences Uin Bandung itself in improving the academic and Public Administration has been implementing monitoring and evaluation (M & E) to the academic field and Public Administration , monitoring involved is monitoring Academic determine the percentage of graduation / i of each program of study , determine the percentage student / i dropouts in each program of study , determine the percentage of the lowest GPA and highest in each program of study , determine the percentage of academic leave in each course and the General Administration of like knowing the amount of the percentage of employees in retirement, determine the percentage of the lecturers remain in retirement, determine the percentage Lecturer Variable based on the maximum age limit for the appointment of civil servants (Civil Affairs Officer) , knowing the percentage of assets in Condition (Good unused , Shred unused , Good unused , worn Damaged)

Based on observations and interviews , expressed the executive as dean , vice dean , Head , chairman of the study program at the faculty has difficulty in monitoring the academic information and Public Administration , is currently Academic Information Systems and Information Systems General Administration functioned for activity Operations alone , so do not present information to know the percentage of graduation / i of each program of study , determine the percentage of students / i dropouts in each program of study , determine the percentage of the lowest GPA and highest in each program of study , determine the percentage of academic leave in each courses of academic data and find out information presentations employees in retirement, knowing the percentage of tenured faculty in retirement, knowing the percentage lecturer Variable based on the maximum age limit for the appointment of civil servants (Civil Affairs Officer), Knowing the percentage of assets in Condition (Good unused , Shred unused , Good unused , worn Damaged)

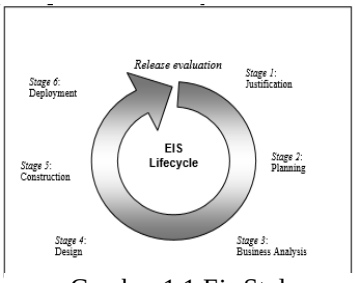
General Administration of data information to the executive level . so the executive has difficulty in monitoring of academic information and Public Administration as well as the difficulty to evaluate the results of the monitoring of the progress of the faculty.

Based on the problems mentioned , we need a computer based information system that can monitor and the results of such monitoring may be used for faculty evaluation . executive information system one type of computer-based information system that is intended to facilitate the needs of information related to the achievement of an organization for the executive.

1.1 Executive Information System(SIE)

Executive Information System is one type of computer-based information system that is intended to facilitate the needs of information related to the achievement of an organization for the executive.

Executive information system itself has six cycles of which stage of justification , planning, business analysis , design stage , construction stage and phase of development and lyrical



Gambar 1.1 Eis Style

1. Justifikasi

   In this phase, the identification of the business case assessment by interview and literature study documents the work program at the faculty.

2. Planning

   In the planning stage is to identify the organizational infrastructure with direct observation techniques to the research that faculty.

3. Business Analysis

   Business analysis is a stage to analyze the existing business processes in faculties such as monitoring and evaluation of the academic and general administration.

4. Stage Design

   The next stage is the design of the system. Design systems used in the Executive Information System.

5. Phase of Construction

   The next stage is the engineering process and system development of applications Executive Information System

6. *Development*

   Once the construction phase is completed , an evaluation of the EIS. In this stage testing of the prototype to the executive . Executives can make suggestions for improvement . Further modification of the prototype to include all the information needed.

1.2 Monitoring AND Evaluasi (Monev)

Monitoring and evaluation is an important step in a study , every plan program made mandatory plan menotoring due to material monitoring and evaluation of programs created for the progress of the program or organization , Monitoring and Evaluation (M & E) are the two integrated activity in order to control a program.

But the most important to the M & E system is how the program managers can obtain data / information accurately and on time, and use it to improve program implementation . A program highly vulnerable to the occurrence of a problem that is very complex , therefore the program should have a monitoring and evaluation in the program , the following is a vulnerability without monitoring and evaluation program.

a. Assessment of performance development and decision-making is limited to the availability of partial information .
b. Not in line with the principles of good management - management program based on performance.
c. Weak mechanism of checks and balances.
d. Contrary to the spirit of accountability and transparency as mentioned in good governance.

Monitoring activities focus more on activities being implemented, monitoring is done by obtaining information on a regular basis based on specific indicators , to determine whether the ongoing activities in accordance with the plans and agreed procedures . Monitoring indicators include the essence of the activity and the target set at the beginning of program planning . If the monitoring is done will be beneficial in keeping the process of implementation remains on track (within the guidelines and planning program) , and provide information to program managers occur when barriers and distortions, as well as input in evaluating.

Monitoring is a process of information gathering and analysis (based on the indicators specified) systematically and continuously about the activities of the program / project in order to take prompt corrective action to pen - perfection of program / project is further.

Evaluation is more focused on the study of the results of a program . Evaluations are conducted periodically a systematic process of collecting , aligning analyzes , and interprets Data to assess the

success of a program 's executive , as well as to identify the components which programs are working and which are not successful.

The basic principles of M & E , among others:

a. M & E system is made simple; adapted to the capacity and resources available. This is to avoid the difficulties of implementation in the field.
b. A clear purpose, M & E focused on things that are relevant to the purpose of monitoring itself associated with the activities and objectives of the program. Do not collect data that is not relevant to the needs of the program. Need to be made logframe, intervention logic models, and M & E work plans which include details of the performance indicators that will be monitored.
c. Done on time; This is the essence of monitoring for on-time availability of data necessary for the management / user data for the settlement of the problem in a timely manner. Besides timeliness of monitoring is also important to obtain accurate data in monitoring certain objects at the right time.
d. Information M & E results should be accurate and objective; information is not accurate and objective could lead to false alarms. Necessary mechanisms to check the consistency and accuracy of data.
e. Information M & E results should be accurate and objective; information is not accurate and objective could lead to false alarms. Necessary mechanisms to check the consistency and accuracy of data.
f. M & E system is made flexible; in the sense not rigid but can be adapted to the needs and conditions but still within the limits of the corridor SOP.
g. Is action-oriented; monitoring is expected to be the basis for decision-making and action. Therefore, since the beginning of the information necessary to analyze the need to ensure that the monitoring data will be used to perform the action.
h. M & E activities conducted cost-effective.
i. Unit M & E consists of specialists who are not only gather data but also to analyze problems and provide troubleshooting recommendations in practice.

1.3 Measurement Scale

Measurement scale is intended to determine the ratio between categories of objects by different values . Scale in research administration , education and social services , among others , Likert Scale is commonly used to determine the response of an object . Likert scale commonly used by psychological scientists because of reliability satisfactory . Generally Likert -scale set of attitude questions

Tabel 1.1 Kategory Sekala Linker

written , compiled and analyzed in such sedemikia and responses indicated a person generally numbers (scores) with a linker measurement can measure the attitudes of individuals , groups carefully and accurately .

The following formula for intervals of the results of questionnaire answers will be undertaken.

$$Skor\ Terendah = Skor\ Terendah\ X\ Jumlah\ Pertanyaan$$
$$Skor\ Tertinggi = Skor\ Tertinggi\ X\ Jumlah\ Pertanyaan$$
$$\text{Interval (I)} = \frac{Range\ (R)}{Kategory(K)}$$
$$Range\ (R) = Skor\ Tertinggi - Skor\ Terendah$$
$$Kategory\ (K) = Banyaknya\ kriteria\ dalam\ penentuan\ variable$$

Pernyataan Positif (+)	Pernyataan (-)
Sangat Tidak Setuju	Sangat Setuju
Tidak Setuju	Setuju
Ragu-Ragu	Ragu-Ragu
Setuju	Tidak Setuju
Sangat Setuju	Sangat Tidak Setuju

$$Nilai\ Persentase = \frac{Jumlah\ Skor}{Frekuensi\ Jawaban\ Responden * Kategory\ Jawaban}$$

Likert scale is a type of scale that uses a psychometric questionnaire and use a wider scale in survey research . Linkert scale generally used was 5 kategory used but kategory could have been changed from 7 to 9 depending on needs. Here are kategory on a scale linkert.

2 RESEARCH

2.1 Monitoring and Evaluasi

Analysis of monitoring and evaluation is an analysis based on the indicators set information systematically about the activities carried out by the faculty of preaching and communication sciences UIN Bandung them by the dean , vice- dean , Faculty and Staff Program . Analysis and Monitoring are the results of interviews with the vice dean.

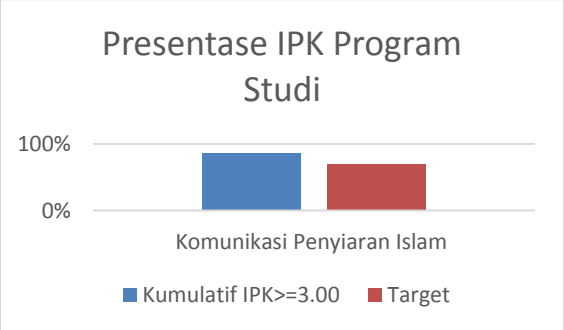
2.1.1.1 Monev Ipk Terendah dan tertinggi

At this stage of the analysis process to determine Percentage of high and low GPA student / i in the KPI study program while the parameter is the CPI , the CPI because the CPI have an indication of whether the method of learning in this effective program

during the study or not . Analysis of Total Percentage GPA Study Program Student KPI.

Tabel 2.1 Calculation IPK

Program Studi	Kumulatif IPK	Presentase
Komunikasi Penyiaran Islam (402)	IPK >=3.00	$\frac{91}{117} = 0.777778$ $\frac{0.777778}{100} x\ 100\% = 78\%$
	IPK <=2.99	$\frac{26}{117} = 0.222222$ $\frac{0.222222}{100} x\ 100\% = 22\%$

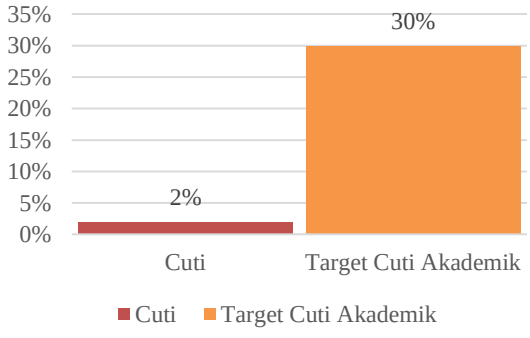


After doing the analysis Monitoring & evaluation based on student GPA Number Presentation / i Program KPI And Getting The conclusion of that amount Presentation GPA student / i Program KPI More than 70 % . then this method of learning for effective and should be done by the faculty is.

a. Give Reward to lecturers and jajaranya .
b. Monitoring the achievement of results returned for re-evaluation materials .
c. Define Target For subsequent years

2.1.1.2 Knowing Monev Percentage Academic leave

At this stage an analysis process to determine the amount of leave Percentage Student / i in the course KPI . The parameter is Cuti Academic and indicators based on whether or not the student leave.

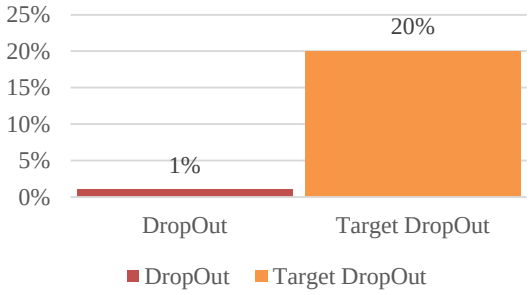


After Analysing Monitoring And Evaluation And Obtaining conclusion from the data is in getting that leave students / i at the faculty of preaching and communication sciences UIN Bandung amounted to 10 % , while the target of 30 % makimal faculty . Then conditions leave the faculty considered reasonable . Because the leave can be caused by family factors and others are not absolutely caused by the university. So what should be done by the faculty is.

a. a. Reward form provides a tour out of the city in the form of tour of the learning process .
b. b . Hold events around the university .
c. c . Providing spiritual guidance and psychologicals

2.1.1.3 Knowing Monev Percentage Dropout

At this stage of the analysis process to determine Percentage of Student Dropout / i in KPI Studies Program . As for the parameter that is in menitoring are dropouts and academic DroupOut The indicator is based on whether or not.



After Analysing Monitoring and evaluation based on the Academic Dropout get dropout value reaches 0 % , while the target Program own 20 % . With a value of 0 % then the student is still in reasonable threshold would be but the faculties necessary to minimize the dropout rate there , that is the way:

a. Provide counseling in the form of counseling and other personalities
b. Utilizing Media Information To communicate between the faculty and parents
c. Making a harmonious environment

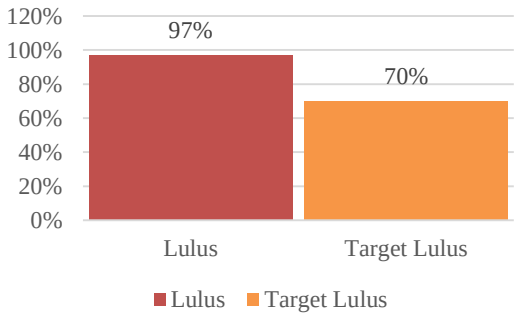
2.1.1.4 Percentage of Completion Academic Monev

At this stage of the analysis process to determine Percentage Kelulusan Student / i in KPI Studies Program . As for the monitoring are analyzed as paramerter used is Total Percentage of Completion Students / i and the indicator is whether or not.

After Analysing Monitoring & evaluation Getting Value Presentation Graduation amounted to 97 % ,

while the target of the faculty by 70 % . Then the presentation of graduation exceeds the target . Students then have psychological problems , environmental , academic and family well . And faculty and university lecturers should give rewards to such facer

a. Give rewards to faculty and courses
b. Improving the quality and standard of the student / i

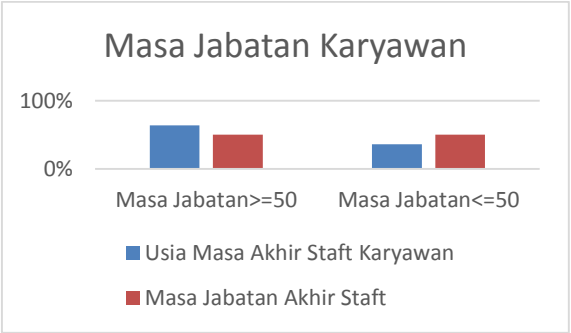


2.1.1.5 Monev Percentage of Employees in entering retirement

At this stage of the analysis process to determine the term of office of staft employees at the Faculty of Da'wa and Communication Studies UIN Bandung . adapaun monitoring that uses the parameter is a retirement and retirement indicator is whether or not the employee staft.

Tabel 2.2 Masa Jabatan

Kumulatif Masa Jabatan Staft Karyawan	Presentase	Indikator
Masa Jabatan Akhir >= 50%	$\frac{7}{11} = 0.636364$ $\frac{0.636364}{100} x\ 100\%$ $= 64\%$	Kurang Baik
Masa Jabatan Akhir <= 50%	$\frac{4}{11} = 0.363636$ $\frac{0.363636}{100} x\ 100\%$ $= 36\%$	Baik



After Conduct Monitoring Analysis and Public Administration based on the Term End staft Employees get some information , that the retirement staft employees more than 50 % . Then the faculty need to do.

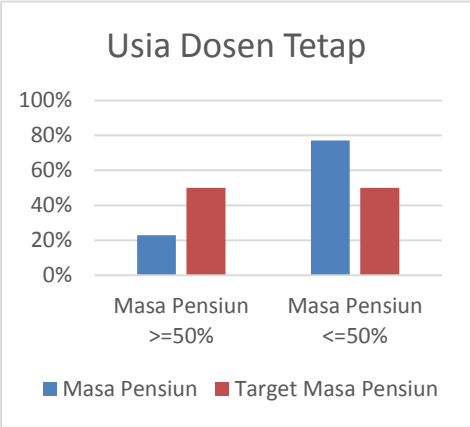
a. Job opening
b. Receive an employee as an apprentice
c. Reduce the workload for employees who want to retire
d. Give rewards to employees who want to retire for their dedication to the faculty

2.1.1.6 Percentage of Employees in entering Retirement

At this stage of the analysis process to determine Retirement permanent Lecturer in the Faculty of Da'wa and Communication Studies UIN Bandung . adapaun monitoring that uses the parameter is a time period of Pensions and Retirement indicator is whether or not Fulltime

Tabel 2.3 Masa Pensiun Karyawan

Kumulatif Masa pensiun	Presentase	Indikator
Masa pensiun >= 55	$\frac{23}{102} = 0.22549$ $\frac{0.22549}{100} x\ 100\%$ $= 23\%$	Kurang Baik
Masa pensiun <= 55	$\frac{79}{102} = 0.77451$ $\frac{0.77451}{100} x\ 100\%$ $= 77\%$	Baik

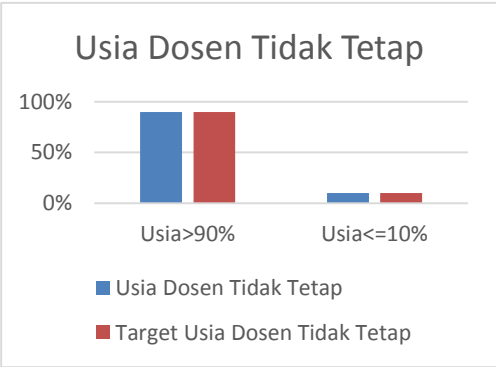


After doing the analysis and monitoring of the Retirement Fulltime generate information that Retirement More than 55 years by 23 % , while the Retirement of less than 55 years of 77% . Such then Results Analysis Faculty Need to do.

a. Performance Memakimalkan Fulltime Yang still productive
b. Lecturers give motive to remain
c. Reward to provide outstanding lecturers.

2.1.1.7 Percentage Fulltime Based Limit Maximum Acceptance PNS.

At this stage, monitoring of the part-time lecturers , part-time lecturers itself a lecturer who helps the process of learning and teaching in the faculty of preaching and communication sciences UIN Bandung . As for the monitoring of the lecturers are not fixed by the age of maximal appointment of civil servants , the parameters in the analysis is the Age Lecturer Variable.



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Variable giving the target age spespikasi appointment of new lecturers.

2.1.1.8 Percentage of Assets Faculty

At this stage of the analysis process to determine the amount of asset conditions of faculty . Adapaun monitoring conducted has the parameter is an asset condition faculty . And is a good indicator of unused , broken , unused , unused and damaged both used.

Tabel 2.4 Kondisi Aset

Nama Tabel	Kondisi	Jumlah Aset	Total Aset
Tabel Aset Managemen	Baik terpakai	2246 Barang	2252 orang
	Rusak tidak terpakai	6 Barang	
	Baik tidak terpakai	0 Barang	
	Rusak dipakai	0 Barang	



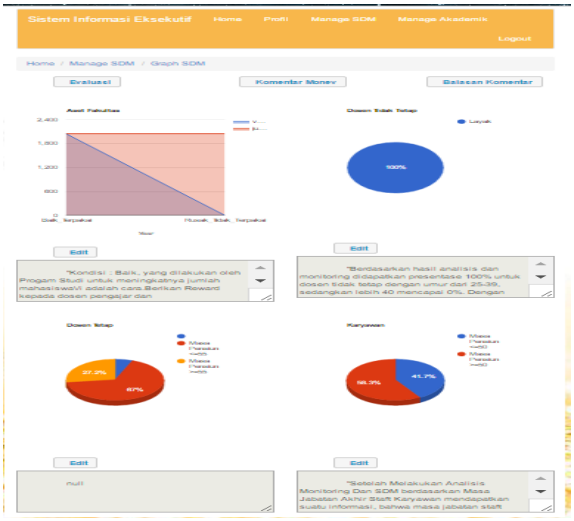
After Analysing Monitoring and Evaluation Getting Good condition unused percentage that reaches 99 % , 1 % Shred unused , Good unused 0 % , 0 % Damaged used . With these results the faculty needs faculty for use with both operational assets.

2.2 Implementation FrontEnd

a. Akademik Grafik SIE



b. Administrasi Umum SIE



2.3 Testing Systems

2.3.1 Testing BlackBox

Blackbox testing that focus on the functional system , the following scenarios of blackbox testing of backend information systems executives and executive information systems.

Tabel 2.5 Pengujian Blackbox

Kelas Uji	Butir Uji	Jenis Pengujian
Login	Login	*BlackBox*
Manage Profil	Update Profil	*BlackBox*
Manage Akademik	Grafik Admintrasi Umum	*BlackBox*
	Evaluasi Grafik Admintrasi Umum	*BlackBox*
	Komentar Monev Admintrasi Umum	*BlackBox*
	Edit Evaluasi Admintrasi Umum	*BlackBox*
	Rekapitulasi Admintrasi Umum	*BlackBox*
	Upload Rekapitulasi Admintrasi Umum	*BlackBox*
	Priview Komentar Admintrasi Umum	*BlackBox*
	Hapus Rekapitulasi Admintrasi Umum	*BlackBox*
Manage Akademik	Grafik Akademik	*BlackBox*
	Evaluasi Grafik Akademik	*BlackBox*
	Komentar Monev Akademik	*BlackBox*
	Edit Evaluasi Akademik	*BlackBox*
	Rekapitulasi Akademik	*BlackBox*
	Upload Rekapitulasi Akademik	*BlackBox*
	Priview Komentar Akademik	*BlackBox*
	Hapus Rekapitulasi Akademik	*BlackBox*

Based on test results Blackbox previously , to the conclusion that it is generally functionally running as good as.

a. a. General Functional in managing Admintrasi General already helped determine the amount of the percentage of graduation / i of each program of study , determine the amount of the percentage of students / i dropouts in each program of study , determine the amount of the percentage of the lowest GPA and highest in each program studies , knowing the number of percentage of academic leave in each program of study is presented in Graph

b. Functional in the executive information system has helped determine the number of presentations employees in retirement, knowing the number of percentage of tenured faculty in retirement, knowing the number of percentage Lecturer Variable based on the maximum limit of age in the appointment of civil servants (Civil Affairs Officer) , Aware Total the percentage of assets in Condition (Good unused , Shred unused , Good unused , worn Damaged)

2.3.2 Beta Testing

Beta testing is testing conducted objectively where tested directly to the field that concerned agencies regarding user satisfaction with the content of the points that the fulfillment of the original purpose of the Executive Information System Application .
Based on the results of beta testing concluded that the implementation of information systems executives as follows.

a. This application can help monitor the Academic Activities
b. Application It Can Facilitate Sharing Recap Academic Report .
c. Simplify Application Evaluation of Academic Activities
d. This application can help monitor the activities of Public Admintrasi
e. Application It Can Facilitate Sharing General Admintrasi Recap Report

3 CONCLUSION

Based on the test results it can be concluded that this system is already helping executives in the process of monitoring and evaluation of academic activities such as Knowing the percentage of graduation / i , the percentage of students / i dropout percentage lowest GPA and the highest percentage of academic leave in each course and Public Administration such as knowing the percentage of employees in retirement, the percentage of tenured faculty in retirement, the percentage lecturer Variable based on the maximum limit of age in the appointment of civil servants (Civil Affairs Officer) , percentage of assets in Condition (Good unused , Shred unused , Good unused , damaged used) of academic information systems and information systems of the Public Administration.

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