

RESEARCH ARTICLE

Payroll design for higher education based on points method

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ABSTRACT

Education Business in Indonesia have been growing rapidly, especially in higher education where a more professional handling is necessary in developing universities, especially private universities. The payroll system is very strategic, where it needs a better arrangement to form a fairness system for employees that impacts to motivation for higher contribution in the industry. This research aims to establish a payroll system that can be used by universities based on points from job evaluation mapping for every position in the organization structure. Through mixed methods (qualitative and quantitative), this research will produce a pay structure for higher education based on points that reflects fairness for every members in the organization. Quantitative method is conducted by distributing questionnaires to measure the depth of the job description of every positions based on the perception of the members in the organization, while qualitative method is conducted through Focus Group Discussion (FGD) and Delphi method to form a consensus that agreed on the points from every position in the organization, through literature reviews, this research also aims to create a literature review schematics on the points criteria that is applied in higher education based on the position's respective job descriptions. The output of this research can be used as a basis for job evaluation regular salary increase in higher education organizations. This research can benefit higher education in developing their pay structure to be fair and drive motivation for members to bring a positive impact for the organization in the long run.

Keywords: fairness, hay method; higher education; job evaluation; motivation; pay structure; point factor

1. Introduction

Human Resources is the main support of the organization^[1-4] in winning the competition as a higher education institution that prioritizes Service Excellence^[3, 5, 6, 7] it is mandatory to create a Human Resource development program for its every customers^[8] to achieve effectiveness and efficiency in the organization^[9]. The rapid developments of the number of students in private higher education's^[7] will require improvements in the organization that is Slim and Clean^[6,9,10,11,12]. Organization structure does not only accommodate operational costs but also must possess efficiency principles^[13-15]. A good organization structure is a structure where every member have a clear understanding of their tasks and responsibilities^[12,15], does not overlap among the positions^[12] effective usage of work hours^[15], every member have a minimum of eight tasks and each tasks have three supporting activities, so that time is used effectively^[6,9]. Aside from the effective use of time, a good organization structure must have a level of difference^[12] (difference between upper and lower levels) logical distance (2x15%)^[16] to allow the members to effectively communicate with each other in the organizations^[9]. The information delivered can be received and processed in operational

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activities in accordance to the visions and missions of the organization ^[15].

Pay structure is clearly the most important part in an organization ^[9,12,15,17]. A competitive pay structure ^[15] will motivate competitiveness ^[17] and job improvements in an organization^[12]. Pay structure have to at least fulfill the fairness aspect for its recipients ^[8]. Every member is given the appropriate salaries ^[17] based on their performance in every job positions ^[8]. Because of that, the design for payroll system based on performance is necessary to drive organization to be more competitive and have a superior Human Resources. Several steps that need to be done in relation to Human Resources development program in higher education are as follow:

Organization Structure Formulation ^[8,15] : Organization structure have to be analyzed based on organization needs that put its business on higher education ^[6], where the number of students enrolled in higher education becomes an important part that support the revenue of higher education causing the development of smart and effective marketing channels in targeting new students is mandatory^[12,18]. Aside from an effective marketing management, an appropriate methodology needs to be developed in managing the final product (students), the availability of lecturers and good university management by lecturers and faculty will give the output (final product) the right expectation of the working world, hence the **Marketing Directorate and Faculty** ^[12,18] is a **Primary** part in an organization in winning the competition and managing the organization's final product that may increase the quality of the university ^[18].

Students that are enrolled in higher education must be managed with student development programs that is effective and supported by a prime university operation that support the activities of University Services ^[12], ^[15] for every student activity. The importance of good and effective research management and community service (manifestation of Tri Dharma University) may reflect the quality of a university. Because of that, the Academic Directorate, Development and Partnership Directorate is a part of **Shared** in an organization ^[18].

Every operational activities in a university is supported by the completeness of adequate facilities and means, Human Resources that are expert in operational management, good IT support, as well as a healthy financial planning that guarantees the university's cash flow, making it a unit called **Contributory** ^[12,15,18] in achieving organization goals.

Library services ^[12,15] that provide information, notes, and record management in the form of journals, extracurricular activities management for students effectively will drive the students' interests and talents, is part of **Indirect** in an organization ^[18].

Job Evaluation : Higher educations must conduct Job Evaluation ^[19,20,21] to make sure that everyone have clear tasks and responsibilities in the organization^[21] have eight tasks that contain three activities each ^[12], so the time spent during work hours is effectively used by every job holders. Job Evaluation ^[21] will be analyzed in the points factor consisting of **Knowledge, Problem solving dan Accountability** components ^[16,22,23,24,25] from each units.

Point method has the advantage of being able to distinguish the level of difference of each job position, can openly describe the points that can be calculated independently by the job position owner, this is something that is not found in other payroll systems that are currently in effect, especially in higher education. so that the development of the point method will have a significant impact on improving the performance of each employee and in the long term can improve organizational performance.

2. Conceptual Theory

Higher education Payroll Design is composed based in competence matrix ^[16,17] that is converted based on Points (**Point Method Analysis**)^[23,24]. Each job positions will be scored ^[21] that will eventually be the basis in the new payroll system. Points analysis is based on five aspects ^[16] which are:

- a. **Knowledge Requirements (Knowledge)** ^[22,23] A position consisting of Basic Knowledge, Work Experience, knowledge on the job position.
- b. **Organization Responsibilities** ^[15,23,24] consists of accountability, influence of responsibility on finances, influence of responsibility on staffs, influence on organization's goals.
- c. **Managerial Capabilities** ^[23] consists of managerial capabilities and work complexity
- d. **Interpersonal Relationships** ^[22]
- e. **Problem Solving** ^[22-25] consists of mental and physical efforts in problem solving.

From the five aspects above, a guideline is formed to determine the competency and Points on each job positions based on higher education structures, explanations on each aspect are as follow:

Personal Qualification ^[16], ^[22-25]

Personal qualifications are evaluated based on the knowledge required to carry out work ranging from high school education graduated at the lowest level to doctoral degrees at the highest level. Furthermore, the level of experience is also a differentiator in job evaluation higher education in the table below:

Table 1. Personal Qualification ^[16], ^[22-24], ^[26]

Component	Criteria	Point
Basic knowledge (Level of education needed to complete the job) ^[22,23]	1. High School (as executioner and doing the job by delegating and strict supervision, using simple program apps or none at all) ^[12]	5
	2. Diploma (as executioner and doing the job by using simple program apps and supervising their subordinates strictly) ^[8,12]	10
	3. Bachelor's Degree (as executioner and have planning functions for activities and budgeting, use of appropriate apps for managerial and budget managed, simple managerial capabilities (intermediate)) ^[8,12,18]	18
	4. Master's Degree (as operational decision maker in work units and coordination between work units that require analysis, provide alternative policies, middle managerial capabilities) ^[8,12,18,27]	33
	Doctoral Degree (As strategic decision maker that require imagination, forecasting capability, not measured) ^[12,15,27]	60
Experience (Level (understanding of the job based on previous experience and relevant on internal and external performance) ^[16,22,23]	1. 0,0 - 2 years	4
	2,1 - 5 years	6
	2. 5,1 - 8 years	9
	3. 8,1 - 11 years	12
	11,1 - 14 years	18
	4. 14,1 - 17 years	25
	5. 17,1 - 20 years	36
Job position Knowledge (Individual capability to	1. Jobs that are routine, simple, established work procedures, and constant guidance by superiors ^[7,16,25] , ^[28,29,30] .	2

Table 1. (Continued)

Component	Criteria	Point
know their jobs to be able to succeed in their jobs in accordance to the university's work plan) ^[8,22,23]	2. Jobs that are done based on established work procedures and uses simple program apps (MS Office, Internet, Electricity and Installations) (Citra Sondari, 2013; Kahya, 2006; Koilias et al., 2012; Oshagbemi, 1997; Quaid, 1993; Supriadi et al., 2023)	9
	3. Jobs that require experience, special skills and several administrative tasks that are relatively different (some tasks are relatively different, programming, network, etc.) that demand a more complex apps for the job (Citra Sondari, 2013; Kahya, 2006; Koilias et al., 2012; Oshagbemi, 1997; Quaid, 1993; Supriadi et al., 2023).	16
	4. Jobs that require special skills obtained from education/experience to do complex administrative tasks. Running procedures and system. Require extra in-depth and broad knowledge on a function. Jobs in this level is professional in this level ^[27]	30
	5. Jobs that require theoretical knowledge and its application, usually obtained from formal education or training/experience. Jobs that require special knowledge such as planning, policies, research, accounting, communication. This job require understanding of principles, concept and execution. This job must be able to answer questions Why, What and How in doing the job ^[27] .	54
	6. This job require the ability to use knowledge in complex and broad situations. Jobs in this level require professional capability supported by theoretical knowledge from experience and additional educations. This job focuses on knowledge utilization. This job require specializations from several fields (Already working in level 5 or 2 or 3 fields and level 4 in other fields) ^[27] .	99
	6. This job require outstanding knowledge/skill supported by competence in knowledge and organization (experts in their field). Extraordinary skill levels in experience and education in manifested in making strategic management, determine policy and execution. This job require deep understanding on theories, principles and techniques. This job require someone who have experience in level 6 jobs ^[27] .	180

Table 1. The above illustrates also the level of work done from routine work operating simple tools, simple procedures to complexes with unstructured problems

Responsibility to Organization (Aulia et al., 2021; Baswara Putera et al., 2022; EL-Hajji, 2015; Kelvin et al., 2022; Skenes & Kleiner, 2003; Supriadi et al., 2023; Yom et al., 2021)

Responsibility to organization describes the level of depth of compliance and using thinking activities, managed financial control is also evaluated in this qualification. The number of staff supervised and the ability to work independently are also evaluated in this case, details about responsibility to organization are presented in the table below:

Table 2. Responsibility to Organization [16,19,20,24,25,26]

Component	Criteria	Point
Accountability (This point measures the impact of a job on an organization from potential errors and its impact as well as finding and fixing problems) ^{[8,12], [22,23]}	1. Routine jobs and if an error occurs, immediately identify it without causing substantial losses ^[16,25,28,30] .	2
	2. Routine jobs and wide scope or between work units. Errors hinder other people/units' work and errors can be fixed immediately ^[16,25,28,30] .	3
	3. Jobs that are related with data/program between work units. Errors cause the processing of important information to be delayed and cause losses in facilities, work equipment and materials. Errors can be fixed in three days at the latest ^[16,25,28,30] .	5
	4. Jobs involved in activities and budgeting planning and require analysis. Errors are hard to detect and have potential to cause huge loss, loss of consumers but does not hinder the overall work units. Errors can be detected in maximum time of three weeks ^[16,25,28,30] .	10
	5. Jobs directing the formulation and implementation of planning, giving recommendations, provide alternative solutions. Errors are hard to detect and hinder the organization as a whole ^[27] .	18
	6. Jobs that are significant in achieving the organization's goals. Have direct access on goals, plans and program as well as results. Errors may be fatal for the organization and can be detected in 6 months – 1 year duration ^[27] .	33
	Jobs that are responsible for the organization as a whole and have access on goals, plans and program. Errors will cause the goals to not be achieved and errors can be detected in 6 months – 1 year duration ^[27]	60
Financial Responsibility (Measure the amount of money that can be managed and become a job responsibility that may affect the achievement of organizational goals) ^[8,12,23,24]	1. < 50 million	2
	2. 50 - 250 million	3
	3. 250 -750 million	5
	4. 750 -1.500 million	10
	5. 1500 - 3.000 million	18
	6. 3.000 - 6.000 million	33
	7. Above > 6.000 million	60
Staff Responsibility (Measure the number of staffs in control or have authority on job positions in achieving organizational goals) ^[22,23]	1. < 6 people	5
	2. 6-15 people	10
	3. 16-30 people	18
	4. 31-60 people	33
	8. >60 people	60

Table 2. (Continued)

Component	Criteria	Point
Influence on goals (Measure job roles on achieving goals) ^[8,12]	1. This job provide constant services and require supervision (Kahya, 2006; Oshagbemi, 1997; Quaid, 1993; Supriadi et al., 2023, Fumasoli & Lepori, 2011).	3
	2. This job provide information, recording and give services to be used by other parties (Kahya, 2006; Oshagbemi, 1997; Quaid, 1993; Supriadi et al., 2023, Fumasoli & Lepori, 2011).	6
	9. This job provide reports/give interpretations, feedbacks or facilities to be used by other parties (Kahya, 2006; Oshagbemi, 1997; Quaid, 1993; Supriadi et al., 2023, Fumasoli & Lepori, 2011).	11
	3. This job makes alternate policies and is responsible for the final products and cooperation in one unit. This job suggests a level of cooperation and shared responsibilities on the final product in a unit (Kahya, 2006; Oshagbemi, 1997; Quaid, 1993; Supriadi et al., 2023, Fumasoli & Lepori, 2011).	20
	4. This job provide alternate policies and is responsible on the final products and cooperation between units. This job suggest a level of cooperation and shared responsibility between units on the final product (Kahya, 2006; Oshagbemi, 1997; Quaid, 1993; Supriadi et al., 2023, Fumasoli & Lepori, 2011).	36
	10. This job manage the impact on the final product and the responsibility of their subordinates in directorate and dean level ^[27] .	66
	11. This job manage the impact on final product and responsibility of their subordinates on every level of the organization as a whole ^[27] .	120

Table 2. The above describes Responsible in the organization which is assessed from 4 (four aspects), each of which describes a different level in job evaluation.

Managerial Skills^{[19,20], [22-26], [31]}

Managerial skills describe the ability to be involved in facing easy to complex work at the highest level must be able to provide solutions to various problems that have no SOP and are not clearly structured. Below are the details of the qualifications of managerial skills as follows:

Table 3. Managerial Skills Criteria ^[16,20,24,26,31]

Component	Criteria	Point
Complexity (Involve the capability in managing the organization as well as provide good supervision both functionally and personally) ^[8,12]	1. Provide functional/technical direction on similar jobs in small scope with rare time intervals or in small scope that can direct independently ^[8,12] .	6
	2. Provide functional/technical direction in subpart/part scope including managing schedules and delegation to everyone in the work unit ^[8,12] .	11
	3. Provide functional/technical direction on work unit that is on par with Study Programs/Parts in University. Guidance in general is standardized and not complex ^[8,12] ..	20
	4. Provide functional/technical direction on big units (Faculty/Bureau), give recommendations, planning and development as well as budget control ^[8,12] ..	36

Table 3. (Continued)

Component	Criteria	Point
	5. Provide functional/technical direction on faculty/directorate level as well as coordinating minimum two work units that have different functions and represent leaders in operational decision making that is final [8,12]..	66
	Provide strategic direction that involve organization, coordinate all activities to achieve goals [27].	120
Managerial Capabilities (The ability to manage work challenges involving environment and problem solving) ^[8,12]	1. This job is specific and does not have subordinate and only manage oneself ^[8,12,28] .	5
	2. This job is specific and supervise their subordinates and demands understanding how to cooperate with others [8,12,28].	9
	3. This job demands finding solution based on existing knowledge, making decisions based on experience [8,12,28].	16
	4. The job demands finding solution based on existing knowledge, making decisions based on experience and with certain considerations if necessary [8,12,28].	30
	5. The job require analysis, interpretation, evaluation and constructive thinking as well as making alternative policies on work units [8,12,28].	54
	6. The job require analysis, interpretation, evaluation and constructive thinking as well as making alternative policies on work units [8,12,28].	99
	12. The job faces complex situations, have to find situations that uses new concepts with imaginative approach and usually under pressure [27].	180

Table 3. The above categorizes the simplest job into a complex by managing sub-ordinates based on the level of supervision carried out.

Interpersonal Relationships [19,20], [22-26], [31]

The classification of interpersonal relationships is to regulate the ability to build relationships with members of the organization both inside and outside the organization. In this classification, mental and physical effort is needed to carry out work, in detail presented in the table below:

Table 4. Interpersonal Relationships criteria [16], [22-24], [26]

Component	Criteria	Point
Interpersonal Relationship (The ability to build relationship with others both inside and outside the organization in relation to the achievement of organization goals) ^[8,12]	1. This job uses most of its time working alone, with little interaction with other employees, customers or the society. Usually provide simple information from frequent questions ^{[7,8], [12], [28]} .	6
	2. The job requires openness and friendliness in building appropriate work relationships with colleagues and leaders in order to achieve their goals. The interaction in this job generally aims to seek information, instruction, advice and clarification on the job [7,8], [12], [28].	11
	3. This job requires the ability to maintain good relationships with subordinate, colleague and boss as well as customer relationship in the organization. This job requires the ability to negotiate between work units [7,8], [12], [28].	20
	4. This job requires the ability to maintain good relationships with subordinates, colleagues and boss as well as customer relationship inside and outside the organization. This job requires negotiation and diplomatic skills with jobs that are routine [7,8], [12], [28].	36

Table 4. (Continued)

Component	Criteria	Point
	5. This job requires interpersonal skill that involves subordinate, colleague and boss to provide clear relationship with internal and external customers. This job requires persuasive, assertive, like sensitive to other people to determine whether a change of attitude is necessary through interpersonal skill training. With unlimited work attitude on routine tasks and job interaction there will be more people doing it in the organization ^[27] .	66
	This job demands to represent the organization effectively in important situation in regards to the current condition of the organization and its future success. It is tightly connected will all types of people. The interaction that is demanded in this job is high intensity because it functions as the organization representative especially when interacting with government institutions and other organizations both local and international. Because of that, the job is demanding to be able to excel in interaction and negotiation ^[27] .	120
Mental Effort (The need to think from a job to achieve organization goals) ^[12,16]	1. The job does not make decisions, instructions are given correctly and clearly and tight supervision is provided to achieve good results ^[16] .	5
	2. The job does not make decisions, instructions are given correctly and clearly, and supervision is present if necessary. In a small amount can compose work orders, more variations of tasks and tasks are given based on experience ^[16] .	9
	3. The job does not allow keeping procedures, but it is allowed to make priorities regarding their work with the approval of their leaders. The job have high variations and is very skilled on the job ^[16] .	16
	4. The job allows them to make their own priorities and make decisions that may be biased or deviate from the procedure concerning the quality, amount and time that is well within the accepted standard. ^[16] .	30
	5. The job makes operational decisions of how and when a job is executed and the output it produces. Provide feedback to the management and approve operational plans and functional policies based on the applicable provision ^[16] .	54
	6. The job determines operational and functional policies between functions or departments. Making operational decisions that that is high level ^[16] .	99
	7. The job to determine strategic and comprehensive policies where its impact will be felt throughout the work unit ^[16] .	180
Physical Effort and Environment (Measure the physical effort of a job in order to achieve organization goals) ^[8,12,16]	1. The job requires little physical effort, sitting a percentage more that 80% of working hour ^[16] .	6
	2. The job demands physical effort such as shifting, picking up and moving equipment that is relatively light. Activities while standing amount to up to 70% of working hour ^[16] .	8
	3. The job demands physical effort that is quite high to place, move and lift things that is relatively big weighing up to 10-40kg. Uses almost 80% of available working days ^[16] .	12
	4. The job demands high physical effort such as lifting, pulling, pushing and installing in a hot environment ^[16] .	17
	8. The job requires high physical effort and takes long time as well as require body endurance ^[16] .	24

Table 4. The above illustrates how work is done by requiring the ability to build relationships both inside and outside the organization, besides that mental and physical abilities are also needed to carry out work.

3. Research Methodology

This research uses research methodology with steps as follow:

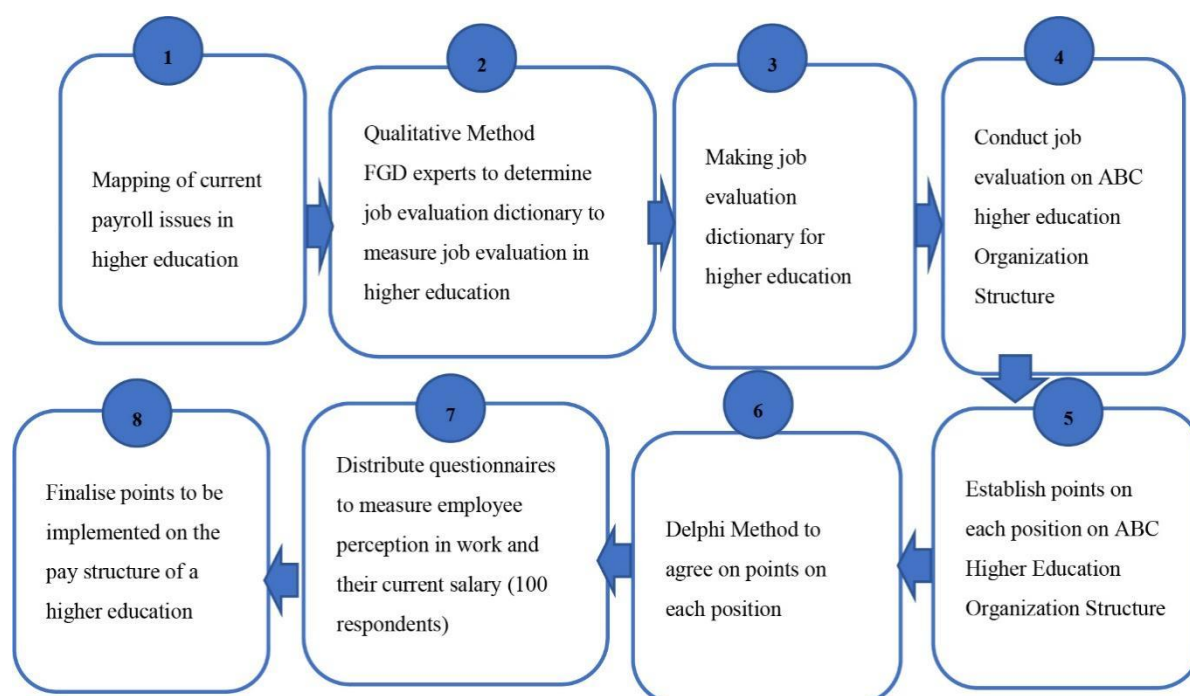


Figure 1. Research Methodology.

From **Figure 1** above, the methods used are divided into two which are qualitative and quantitative method, where qualitative method consist of Focus Group Discussion (FGD) with eight experts that aim to formulate a dictionary for job evaluation on every position in higher education, used in ABC Higher Education case study to ease the job evaluation mapping that will be conducted. Another reason why ABC Higher Education is used because currently ABC Higher Education is the top five private Higher education in Indonesia. Experts that are invited to FGD are representatives from Higher Education consisting of five people, representatives from Human Resources consisting of three people with minimum qualification of a master's degree on thir respective fields, with more than 10 years of experience in their fields. Qualitative method is also used to conduct Delphi method involving five people to make a consensus on whether the points scored reflect the level of difference for each job position in Higher Education. While quantitative method is used to dig the perception of employees in ABC Higher Education related to the current job and the possibility of a change in the payroll system that is fair and reflect the current workload. These two methods will then decide the amount of points that will be used to create the payroll system in Higher Education.

The use of tables in the point method starts from choosing a position, for example HR staff, then the job position requirements will be determined, for example Bachelor degree, then in **Table 1** the value is 18, then the required experience level, for example 0-2 years, then the value is 4, then this job requires administrative procedures and skills, then the value is 16, so the total value of **Table 1** is 38. Next in **Table 2**, the HR staff job requires data and programs related to other work units so the value is 5 and is considered to manage funds of less than 50 million, then the value is 2 and does not have subordinates, then the value is 5 and this job requires information, recording used by other units, then the value is 6, so the total from **Table 2** is 18. Next in **Table 3**, this job is in the technical direction to understand the schedule so the value is 11, this job does not have subordinates so the value is 5, so the total value of **Table 3** is 17. In **Table 4**, this job uses

open information and requires relationships with colleagues so the value is 11 and requires decision making so the value is 9 and does not require great physical effort so the value is 6 so the total of points is 26. Then the next step is to add up the four points.

4. Results

From the job evaluation dictionary of each position and the result of Delphi method that is conducted simultaneously with experts, points mapping is constructed for each job position based on the existing organization structure ^[12,15] in Higher Education. details of organization structure for job evaluation in higher education as follows :

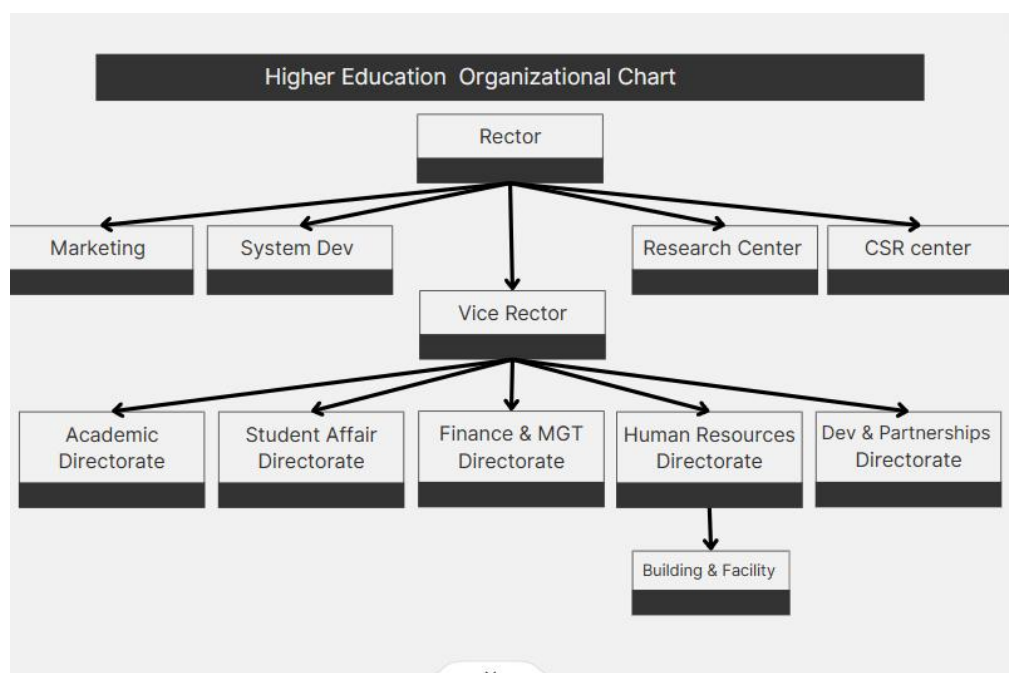


Figure 2. Organization Structure in Higher Education.

Figure 2 above illustrates the organizational structure in higher education that illustrates the operational and functional functions to manage higher education. The next step is that each position in the organizational structure will be evaluated using the measures in **Table 1-4** Job Evaluation. The table below describe the number of points produced from job evaluation based on the 12 components ^[16] in the job evaluation dictionary above:

Table 5. Job Position Points Mapping ^[9,12,15,16]

No	POSITION	TOTAL POINT
I.	RECTORATE ^{[12], [15]}	
1	Rector	1144
2	Vice Rector	820
II	FACULTY ^[12,15]	
3	Dean	542
4	Vice Dean	363
5	Head of Study Program	226
6	Secretary of Study Program	160

No	POSITION	TOTAL POINT
7	Head of Laboratory	148
8	Head of Administration	127
9	Laboratory Assistant	92
10	Administration Staff	56
11	ADM Staff	56
III	ACADEMIC DIRECTORATE ^[12,15]	
12	Academic Director	550
13	Head of Academic Bureau	269
14	Division Head of Academic Administration	166
15	Head of Library	274
16	Division Head of Data Collection Processing	158
17	Library Staff	55
18	Service and Data Processing Staff	55
19	Head of Lecture Operations	278
20	Division Head of Administration and Exams Operations	164
21	Division Head of Administration and Lecture Operations	164
	SYSTEMS DEVELOPMENT ^[12,15]	
21	Head of Systems Development	295
22	Program Analyst	132
23	Programmer	102
24	Support & Delivery	81
25	Administration and System Documentation	64
IV.	DIRECTORATE OF STUDENT AFFAIRS ^[12,15]	
26	Student Affairs Director	410
27	Head of Student Affairs Bureau and Alumni Relations	233
28	Division Head of Student Affairs Administration	125
29	Subdivision Head of Student Affairs Administration	85
30	Subdivision Head of Student Affairs Finance	85
V.	DIRECTORATE OF FINANCE AND ASSET MANAGEMENT ^[12,15]	
31	Finance and Asset Management Director	627
32	Head of Finance Administration Bureau	292
33	Division Head of Finance	156
34	Subdivision Head of Payroll	100
35	Subdivision Head of Student Finance	109
36	Subdivision Head of Cash	100
37	Division Head of Accounting	156
38	Subdivision Head of Taxation	116
39	Finance Administration Staff	49
40	Accounting Staff	68

Table 5. (Continued)

No	POSITION	TOTAL POINT
	BUILDING AND FACILITIES MANAGEMENT ^[12,15]	
41	Head of Building and Facilities Management Bureau	350
42	Division Head of Logistics and Estimator	165
43	Head of Building and Facilities Management	172
44	Subdivision Head of Logistics	90
45	RT Administration Staff	44
46	Logistics Staff	50
47	General Subdivision Head	90
VI.	HUMAN RESOURCES DIRECTORATE ^[12,15]	
48	Human Resources Director	479
49	Head of Human Resources Bureau	313
50	Division Head of Human Resources Recruitment and Administration	177
51	Division Head of Training and Development	177
52	Division Head of Performance and Rank	175
53	Subdivision Head of Recruitment and Placement	102
54	Subdivision Head of Training and Development	102
55	Human Resources Staff	50
VII	DIRECTORATE OF DEVELOPMENT AND PARTNERSHIP ^[12,15]	
56	Director of Development and Partnership	533
	COMMUNITY SERVICE CENTER ^[12,15]	
57	Head of Community Service Center	318
58	Community Service Staff	87
	RESEARCH CENTER ^[12,15]	
59	Head of Research Center	319
60	Research Center Staff	97
VIII.	MARKETING ^[12,15]	
61	Marketing Director	679
62	Division Head of Regular Marketing Bureau	318
63	Division Head of Promotions	142
64	Subdivision Head of Promotions	99
65	Marketing Staff	76
66	Administration Staff	49
67	Division Head of Public Relations	154
68	Public Relations Staff	69

From the table above, a payroll equation is created by regress between points and existing salary, formulated using the regression equation $Y = a + bX$ with the equation as follow:

$$Y = 936.656 + 20020,87 X \text{ with R square } 0,930$$

Where:

Y = Salary of Employees

X = Points from Job Evaluation mapping of each position.

In designing pay structure of higher education after making points-based payroll system, the next step is to conduct a case study on “ABC” Higher Education to measure employee perception on the new points-based payroll system. Questionnaire distributions take 100 respondents as sample using random samples where every position are represented to fill the questionnaire. The questionnaire results are used as a consideration for making decisions on the new payroll design which will be developed by a higher education. Below are the analysis results from the questionnaire based on the question numbers:

Table 6. List of Questions and Response from Respondents^[6,7,12,15,18,27,30]

No	Questions	A	B	C	D
1.	What do you think about the size of your salary in ABC Higher Education? ^[18,29]	74%	22%	2%	2%
		>120%	100%	75%	50%
2.	What do you think about the size of your salary in ABC Higher Education including holiday allowance? ^[18,29]	16%	72%	10%	2%
		>120%	100%	75%	50%
3.	What do you think about the pay structure which are the components calculated into the salary (Basic salary, positional/functional allowance, family, meal allowance, transportation allowance, etc.)? ^[18,29]	34%	62%	2%	2%
		>120% Suitable	100% Suitable	75% Suitable	50% Suitable
4.	Do you agree if the current payroll structure is changed? ^[18,29]	36%	22%	6%	36%
		Strongly Agree	Agree	Somewhat Disagree	Disagree
5.	What is your opinion on the payroll structure consisting of basic salary and incentives (which serves as a measurement for you performance)? ^[18,29]	12%	44%	12%	30%
		Strongly Agree	Agree	Somewhat Disagree	Disagree
6.	What is your opinion on the appropriate proportion between basis salary and income based on performance or incentive? ^[18,29]	8%	60%	6%	24%
		50:50	25:75	75:25	90:10
7.	How long performance measurement should be conducted as a basis for the salary for performance/achievement of an employee? ^[18,29]	4%	38%	46%	10%
		Every month	Every 6 months	Every year	Every 2 years
8.	What is your opinion on salary expenses, operational costs and university investments to keep a healthy payroll and for the university to keep growing? ^[18,29]	8%	54%	18%	0%
		10:45:45	26:45:29	48:45:10	60:45:-5
9.	In your opinion, what is the appropriate salary proportions to pay personal factors or based on their education and experience (BASIC SALARY) ^[18,29]	24%	54%	37.5%	2%
		<10%	10-25%	25- 50%	> 50%
10.	In your opinion, what is the appropriate salary	18%	42%	32%	6%

Table 5. (Continued)

No	Questions	A	B	C	D
	proportions to pay the position or structural factor because of their managerial capability or responsibilities (structural/functional position allowance)? ^[18,29]	<10%	10-25%	25- 50%	> 50%
11.	In your opinion, what is the appropriate salary proportion to pay performance factor or target achievements (Performance/achievement allowance)? ^[18,29]	16%	42%	40%	0%
		<10%	10-25%	25- 50%	> 50%
12.	What do you think if all honors and committees are calculated in the form of points and included as a component of work allowance? ^[18,29]	14%	16%	46%	22%
		Strongly Agree	Agree Max 15%	Somewhat Disagree Max 45%	Disagree
13.	Do you agree if salary is determined by knowledge which is measured with factor (a) education (b) knowledge on the job (c) relationship ability with others to adapt to the job (human relationship)? ^[18,29]	20%	60%	10%	10%
		Strongly Agree 60% salary	Agree 45% salary	Somewhat Disagree 30% salary	Disagree 15% salary
14.	Do you agree if salary is determined based on the employee's ability to solve current and future work problems? ^[18,29]	20%	45%	15%	20%
		Strongly Agree 60% salary	Agree 45% salary	Somewhat Disagree 30% salary	Disagree 15% salary
15.	Do you agree if salary is determined based on responsibilities, which are the amount of money managed, number of students managed, the freedom to act and scope of work? ^[18,29]	25%	40%	12%	23%
		Strongly Agree 60% salary	Agree 45% salary	Somewhat Disagree 30% salary	Disagree 15% salary
16.	Do you agree if performance allowance can increase or decrease every six months based on their six months performance (Performance allowance will increase or decrease based on performance)? ^[18,29]	58%	26%	6%	8%
		Strongly Agree 120% salary	Agree 100% salary	Somewhat Disagree 75% salary	Disagree 50% salary
17.	Do you agree with performance measurement a work target is created between the employee and their boss and evaluated based on their work target achievement every six months as a basis to determine PERFORMANCE EVALUATION in in the next six months? ^[18,29]	20%	68%	6%	6%
		Strongly Agree 120% salary	Agree 100% salary	Somewhat Disagree 75% salary	Disagree 50% salary
18.	Do you currently do your daily work based on the job description given by your boss or university? ^[18,29]	44%	18%	14%	24%
		Very correct 100%	Correct 75%	Somewhat Correct 50%	Incorrect 25%
19.	What do you think is the ideal age for someone to be working in ABC Higher Education? ^[18,29]	34%	46%	6%	12%
		20 –35 years old	25 – 45 years old	25 – 60 years old	25–50 years old
20.	Does, in a daily basis, your time is spent doing the job that becomes your task and responsibility? ^[18,29]	0%	6%	66%	26%
		Very True 100%	True 90%	Somewhat True 75%	False 65%

Table 6. The above shows that employees want a change in the payroll system that reflects their actual jobs and every employee are divided based on their job descriptions ^[6,12,15] so that a fair and proportional work is created for the job holders. Employees also agree that the payroll system have to be able to differentiate employee performance that is measured every six months using accumulated incremental

incentives that different employees receive to be able to create high motivation^[7,16,29,32]. Payroll system must be able to differentiate education, managerial capability, problem solving at work, accountability as well as the impacts both physical and non-physical^{[16,30], [33-37]}.

In the application of this point method, it can be adjusted for various organizational structures in universities, although it is known that the organizational structure of universities is similar and only slightly modified depending on the complexity of some positions, for example marketing and facilities divisions if they require more complex facility handling. If the organization experiences this, the points in the complexity and impact areas can be adjusted. In this section, different points can be given in the table references above.

5. Conclusion

From the explanation above, the conclusion is as follows:

1. Payroll system using Points method in higher education will be more open and fairer and every stakeholders in the organization can calculate and determine their points independently so that it will be more open and create more motivation in doing their work^{[7,17,23], [27,28], [30,32,36]}.
2. Points method is a measurement that differentiates between workload in an organization starting from primary, contributory, shared and indirect inside the organization causing errors in giving compensations in every position to be avoided. This system drives openness and creates a high-level performance to employees^{[19,20], [22-25], [31]}.
3. Points method is developed through knowledge, problem solving and accountability from different positions in their job descriptions ^[22-24].
4. Points method can become a measurement in developing performance appraisal for employees that has an impact on performance and incentives received by employees openly and fairly ^[23-25].

Author Contributions

"Conceptualization P.S.K.; Validation, E.M.S. Formal Analysis, E.M.S; Investigation & Data Curation P.S.K.; Writing – Original Draft Preparation P.S.K Writing – Review & Editing, E.M.S. Visualization, E.M.S. Supervision, P.S.K.; Project Administration, E.M.S.

Conflicts of Interest

The authors declare no conflict of interest.

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Data Availability Statement

Data is contained within the article.

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