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# Performance Measurementof Xyz Government Institution's Contracts Workers Using *Personal Balanced Scorecard* Method

Muhammad Dwi Bagus Aurijanto<sup>1</sup>, Bustanul Arifin Noer<sup>2</sup>, Rita Ambarwati.<sup>3</sup> <sup>1.2,3</sup> Department of Industry Management, Sepuluh Nopember Institute of Technology, Surabaya, Indonesia

Abstract-Implementation of good governance of bureaucracy system of Surabaya City Government, one of them with developed performance-based salary program (e-performance) dedicated specially to Civil Servant. But in reality agencies in Surabaya do not have the full use of civil servants as their human resources, thus involving contractors as supporters of government performance processes. The purpose of this study is to determine key performance indicators(KPI) and strategic objectives in XYZ Institution, determine the importance of each KPI criterion, to understand the performance of each contractor at XYZ Government Agency and provide improvement recommendations from the current employee performance. The unit of analysis of this research is carried out at the General Section in the Sub Division of Administration with the administrative position as the administrative contractor. The design of this study used a survey with questionnaire data collection techniques and questionnaires. The method used is personal balanced scorecard by formulating strategic targets and KPI by stakeholders from XYZ Agency. Weighting method using Analytic Network Process method(ANP). From the research results obtained: the formulation of KPI and Strategy Target has been formed with the highest level of KPI weight is KPI Total Late (0.1532). Total performance of the best contractor performance is Mr. C (6.253) while the smallest total performance achievement is obtained Mr. K ie (3.346). Recommendations include: Provide rewards, provide coaching, conduct regular control and evaluation systems, provide socialization and provide slogans in the corner of the room on performance improvement.

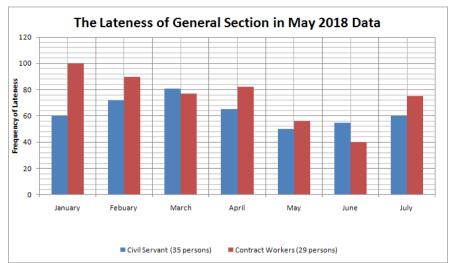
Keywords: KPI, strategic target, PBSC, ANP.

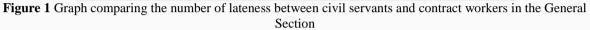
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# I. INTRODUCTION

The bureaucratic system in Surabaya City Government is supported by Civil Servants and contract workers. Contract workersdefined by a person who is appointed by an official in government to carry out the tasks of government agencies and their salary becomes the burden of the state budget or APBD. Based on Law Number 43 Year 1999 Concerning the Civil Service Principles Article 2 paragraph 3 which explains that the civil servants as referred to in paragraph 1, the lawful authority may appoint permanent employees. These non-permanent employees are categorized as contract workers. By reviewing Law Number 5 Year 2014 on the Civil State Apparatus the existence of contract workers is then abolished so that it is replaced with Government Employee with Contract Usage (PPPK).

The object of research is one of the government agencies in Surabaya. Hereinafter referred to as XYZ Agencies. Based on the comparison of the total number of Civil Servants and contract employees in the Institution XYZ obtained data 64: 103. From the data Figure 1 is known still high levels of employee lateness to come to work in the Institution XYZ so that the level of discipline of employees to the specific concern how discipline each employee . If observed the lateness of contract employees from the seven-month period more often as much as six times compared with the delay of civil servants.





Vision of XYZ Institution of Surabaya City is "XYZ Agency as a facilitator to support the work of Surabaya City Government in performing its duties, functions and authority". Explanation of the vision is the realization of the XYZ Agency which serves the main function of providing agency activities in carrying out its duties, functions and authorities so as to realize effective and efficient facilitation to the executor of duties and functions.

The importance of this research is because every employee in XYZ Institution has *job description* and responsibility of each in doing their duty. In addition, the task between one party with the other has sustainability so that if one party requires a longer time in doing the job it will affect the other party in completing the task. Currently, the XYZ Agency does not yet have a measuring instrument as a performance parameter of contract worker. It is hoped that with the existence of individual performance appraisal system, it will be known how big the performance of contract workers and the long-term benefit is also to support to achieve the vision from XYZ Government Institution.

# **2.1 Performance Concepts**

# **II. TEORY AND METHODS**

Performance is defined by a description of the level of achievement of the implementation of an activity or policy program in realizing the goals, objectives, vision, and mission as outlined through strategic planning [1]. Performance is the quantity and quality of work completed by a person or group of people [2]. Performance is a function of one's ability, motivation and opportunity [4]. Performance is an individual achievement over a period of time by reviewing existing standards and objectives established before implementation of activities [5]. A person's performance is influenced by several factors that come from both internal and external [6].

- Ability.
- Motivation owned.
- Support received
- Type of work done.
- Employee's relationship to the organization.

# 2.2 Performance Measurement

Performance measurement must based on a target, one's performance is impossible to be measured if there are no benchmarks or standards in the activities the one has done [8]. Performance measurement is the process of recording and measuring the achievement of activities on the mission of the institution through the results shown in the form of products, services and a process. Performance measurements will illustrate how well a process has been done in terms of cost, time, and optimal quality [9]. Performance measurement is directly related to the level of achievement of organizational performance in both profit and non profit organizations [10].

#### 2.3 Personal Balanced Scorecard Method (PBSC)

Mason is an expert that views the *Balanced Scorecard* (BSC) as a model that groups goals, objectives, and matrices into the field of perspective; 1) finance, 2) customers, 3) internal business processes, and 4) learning and growth. *Scorecards are* considered effective because they help organizational leaders / managers connect their vision, mission and strategy with the goals and objectives to be achieved. *Scorecards* can be used for personal and professional purposes (organization). Through this process, one can learn more about where and how the *Balanced Scorecard* can be applied in the context of an organization or for personal gain , as a manager or an employee [11]. *Personal Balanced Scorecard* (PBSC) is a method of self-performance measurement of one's own employees. this method is used to seek self-knowledge, self-discovery, and self-mastery. *The Balanced Scorecard* developed by Kaplan and Norton can be translated into a personal *scorecard* to achieve personal goals. *Scorecards* for organizations begin with a vision and mission, followed by perspectives (financial, internal, external, and learning and growth processes) that have tactical goals and activities [12].

#### 2.4 Basic Concepts of Analytic Network Process (ANP)

Analytic Network Process Method (ANP) is the development of Analytical Hierarchy Process (AHP) method. ANP method is able to improve the weakness of AHP in the form of ability to accommodate the interconnection between criteria or alternatives. Interconnection on ANP method there are 2 types of oneelement relation (*inner dependence*) and interrelationship between different elements (*outer dependence*). The existence of such linkage causes ANP method more complex than AHP method. There are 2 controls that need to be considered to model the system to know the weight. The first control is a hierarchy of controls indicating the relevance of the criteria and sub-criteria. This control does not require a hierarchical structure such as the AHP method. The second control is the linkage control that shows the interconnection between criteria or *cluster* [13].

The network type of the PBSC *Strategy Map* system shows the type of *feedback network*. This network has a high complexity compared to other types, because of the phenomenon of *feedback* from one *cluster* to other *cluster*. After the model is made, then do tabulation from result of *pairwaise comparison* data using a supermatric table. In Figure 2 and Figure 3 are shown examples of the basic format of the concept of supermatric table calculation. Through ANP data processing will get the weight value of each element and sub elements that have been determined so that next will be known sub-elements that become the largest and smallest weight value. In Figures 2 and 3 there are symbols C is a *cluster* or interacting element and W is a *relative importance weight vector* [14].

			<i>C</i> <sub>1</sub>	<i>C</i> <sub>2</sub>	 $C_N$
			e <sub>11</sub> e <sub>1n 1</sub>	$C_2$ $e_{2_1}e_{2n_1}$	 e <sub>N 1</sub> e <sub>Nn</sub>
		<i>e</i> <sub>11</sub>	W <sub>11</sub> W <sub>21</sub> 		
	$C_1$		W11	W12	 $W_{IN}$
		$e_{ln l}$			
W =		e <sub>21</sub>			
	$C_2$		W 21	W 22	 $W_{2N}$
		e 2m .			
		e			 
	С.,	е <sub>NI</sub>  е <sub>Nn "</sub>	W <sub>NI</sub>	$W_{_{N2}}$	 $W_{_{N\!N}}$
	$\mathcal{O}_N$	0	" NI	// N2	· · NN
		Nn N			



Where block *i*, *j* of this matrix is:

$$W = \begin{bmatrix} W_{i1}^{(j_1)} & W_{i1}^{(j_2)} & \dots & W_{i1}^{(j_{ij})} \\ W_{i2}^{(j_i)} & W_{i2}^{(j_2)} & \dots & W_{i2}^{(j_{ij})} \\ \dots & \dots & \dots & \dots \\ W_{in_i}^{(j_1)} & W_{in_i}^{(j_2)} & \dots & W_{in_i}^{(j_{ij})} \end{bmatrix}$$

Figure 3. Block Matrices *i* and *j* 

#### 2.5 Research Methodology

In this research, Focus Group Discussion (FGD) formed by stakeholders of XYZ Institution has been doneto determine target strategy and key performance indicator (KPI) based on Personal Balanced Scorecard (PBSC) concept. Stakeholders involved 4 people namely; Chairman of XYZ Agency, Head of Employment Division, Kapala General Section and Sub Division General. FGD discussion result will produce KPI concept map along with target of each KPI that will be applied as reference of work target from administrative contractor. Next we do the weighting process using ANP to find out which KPI has the biggest weight based on the assumption of the four stakeholders. ANP data processing is done by using Super Decision software. Data recapitulation of the achievement of workers as much as 11 people from the research object of the administrative contract personnel in May 2018. Determined how far the performance obtained based on the assumptions of stakeholder criteria and scoring to get the total performance achievements of each contract workers on all KPIs that have been done. In the research will be used questionnaires amounting to 2 types given to the four stakeholders. The first questionnaire is a questionnaire to know the criteria and subcriteria. The second questionnaire to determine the level of importance of criteria and subcriteria against other criteria with the recapitulation result.

# **III. RESULT AND DISCUSSION**

#### 3. 1 Determination of Strategy Objectives and KPI of Institution XYZ

Based on FGD results from 4 stakeholders of XYZ Institution, 17 KPIs were obtained with 6 Target Strategy based on PBSC concept: Financial Perspective, Internal Perspective, External Perspective and Perspectives of Self Development. The following is an ANP model formed from performance appraisal of contractor employee of XYZ Agency (Figure 4):

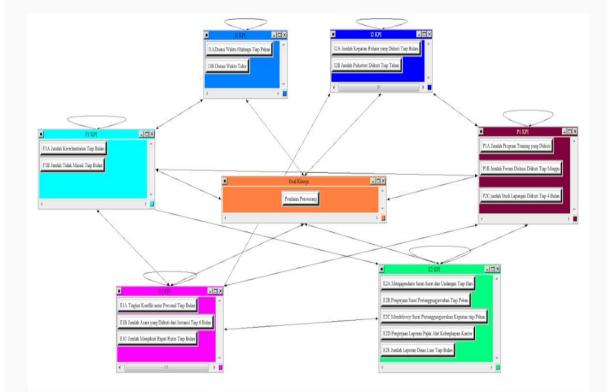


Figure 4. An ANP Model of Performance Appraisal of Contractor Employee Agency XYZ

# **3.2 ANP Results Analysis**

The first data processing done is to find the weight value of each KPI on the concept of performance of each contract workers that has been prepared. If we look at Table 2 then we get the biggest KPI weight value that is on the Number of Lateness of (0.1532), Number of Following Routine Meetings per Month (0.1141) and Number of Field Studies Followed by (0.1108). This indicates that the *stakeholder* valued more the factor of the presence of contract workers on time according to working hours because of this working hours factor is very influential on the discipline of contract labor. In terms of sanctions also greatly affects the financial conditions of contract workers because if the late attendance on time decided it will make contract workers experience a reduction in salary.

The second largest KPI is Following Routine Meetings every Month. This KPI is very important because there is a lot of information that is shared during routine meeting in XYZ Institution. Such information includes internal office information of XYZ as well as external information. For example, for internal information that there are changes in the work-flow of system of correspondence, letters of accountability, or even the format of the report, as well as the time of collection of reports outside the office every month. For external information is usually like a financial examination of the Supreme Audit Agency or even the visit of an outside agency so that it need for a lot of preparation and coordination between the Section and sub-Section in Agency XYZ.

The third largest KPI is the Number of Field Studies Followed. One of the routine agenda always done by XYZ Agency is the field study to the community. On this routine agenda always involves a lot of funds so that the attention of its own *stakeholders* in its implementation and administrative accountability. Leaders always make corrections and improvements about how much budget absorption and the impact of this agenda to exist.

#### 3.3 Making Performance Measurement System

After several steps above has been done then it is followed by the stage of making an integrated performance measurement system so that we will get one final value of each KPI performance and performance of contract employees in the previous Month on period of May 2018. The analysis is based on *scoring system* to find out the value of the achievement of the contract employee against the target of each KPI.

Value Range	Color	Criteria	Information
8 - 10	Green	Good	Successfully reach the target
4 - 7	Yellow	Enough	Approaching the target
0 - 3	Red	Less	Below the target

**Table 1.** Weighted Criteria of Individual Performance of Institutions XYZ

Then the color analysis *system* according to Table 1 is used as a sign of whether the contract workers score is required an improvementor not to the KPI in question.

Prep	W eight	Stratefic Goals	W eight	Key Performance Indicator	Norm Weight	Relativ e Weight
				F1A Number of Lateness every Month	0.7582	0.1532
Finance 0.2116	Effort of Salary Stability	0.211595	F1B Number of Absence every Month	0.2418	0.0584	
				E1A Degree of Conflict between Personnel every Month	0.2448	0.0560
		Teamwork at Workplace	0.213538	E1B Number of Institutional Events Participated Every 6 Month	0.1722	0.0435
ਫ਼	~			E1C Number of Routine Meetings Participated every Month	0.5830	0.1141
Ë	External 0.4163			E2A Recapitulation of incoming Mails and Invitation every Day	0.1631	0.0356
ţ,xţ				E2B Completion of Letter of Acountability every Week	0.3458	0.0600
-		Efficiency of Service Time	0.202796	E2C Delivery of Events Letter of Acountability every Week	0.1395	0.0325
				E2D Completion of Tax and Office Supplies Tool Report	0.1152	0.0293
				E2E Number of Outer Service Monthly Reports	0.2364	0.0454
-	_	Physical Health Improvement	0.117385	IIA Duration of Sports Time Each Week	0.2646	0.0376
Ë	0.1631	r hysical freakin improvement	0.117565	I1B Sleep Time Duration	0.7354	0.0798
Internal	0.1	Mental Health Improvement	0.045713	I2A The Number of Spiritual Activities Followed Each Month	0.5234	0.0233
-		Wental Health Inprovement	0.045715	I2B Number of Psychotests Followed Each Year	0.4766	0.0224
ŧ				P1A Number of Training Programs Followed	0.1382	0.0370
m ei	8			P1B Number of Discussion Forums Followed Every Week	0.2825	0.0612
Self Development	0.2090	Self Development Improvement	0.208972	P2C Number of Field Studies Followed Every 4 Months	0.5794	0 1109
					0.3794	0.1108

Table 2. Weight of Perspective, Target Strategy and KPI

	Table 3 Assessment of Contract Worker Mrs A																	
K	PI	F1A	F1B	E1A	E1B	E1C	E2A	E2B	E2C	E2D	E2E	I1A	I1B	I2A	I2B	P1A	P1B	P1C
Tai	rget	5	5	3	6	2	15	20	10	2	2	35	8	3	1	1	4	4
Achie	vment	4	4	1	4	3	12	17	8	4	1	35	8	5	1	1	6	3
	10	0	0	0	7	4	15	20	10	4	2	35	8	8	1	2	7	5
	9	1.29	0.14	0.14	6.57	3.71	14.57	19.57	9.71	3.57	1.86	33.57	8	7.14	1	1.86	6.71	4.71
	8	2.57	0.29	0.29	6.14	3.43	14.14	19.14	9.43	3.14	1.71	32.14	8	6.29	1	1.71	6.43	4.43
	7	3.86	0.43	0.43	5.71	3.14	13.71	18.71	9.14	2.71	1.57	30.71	8	5.43	1	1.57	6.14	4.14
	6	5.14	0.57	0.57	5.29	2.86	13.29	18.29	8.86	2.29	1.43	29.29	8	4.57	1	1.43	5.86	3.86
Value	5	6.43	0.71	0.71	4.86	2.57	12.86	17.86	8.57	1.86	1.29	27.86	8	3.71	1	1.29	5.57	3.57
	4	7.71	0.86	0.86	4.43	2.29	12.43	17.43	8.29	1.43	1.14	26.43	8	2.86	1	1.14	5.29	3.29
	3	9	1	1	4	2	12	17	8	1	1	25	8	2	1	1	5	3
	2	11	2.33	2.67	2.67	1.67	11.33	16.00	7.67	1	1	25	7	2	1	0.67	4	2.33
	1	13	3.67	4.33	2.00	1.33	10.67	15.00	7.33	1	1	25	6	2	1	0.33	3	1.67
	0	15	5	6	1	1	10	14	7	1	1	25	5	2	1	0	2	1
Va	lue	7	1	3	3	7	3	3	3	10	3	10	10	7	10	3	7	3
We	ight	0.153	0.058	0.056	0.044	0.114	0.036	0.060	0.033	0.029	0.045	0.038	0.080	0.023	0.022	0.037	0.061	0.111
Weighte	ed Value	1.073	0.058	0.168	0.131	0.798	0.107	0.180	0.098	0.293	0.136	0.376	0.798	0.163	0.224	0.111	0.428	0.332
Achie Bety Persp		1.1	31				1.9	910				1.561				0.872		
ormance	e Achiev									5.474								

<i>Performance Measurementof Xyz</i>	Government Institution's Contracts	Workers Using Personal

 Table 4. Contract Power Performance Performance in May 2018

Table 4. Contract Power Performance Performance in May 2018         Nilai Terbobot											
КРІ					1	1 Terbot	oot				
KPI	Mrs A	Mr B	Mr C	Mrs D	Mrs E	Mrs F	Mr G	Mr H	Mrs I	Mrs J	Mr K
F1A Number of Lateness every Month	1.073	1.379	1.379	0.306	0.460	0.000	0.460	0.153	1.226	0.460	0.460
F1B Number of Absence every Month	0.058	0.058	0.175	0.117	0.175	0.117	0.175	0.175	0.584	0.584	0.584
E1A Degree of Conflict between Personnel every Month	0.168	0.000	0.560	0.560	0.560	0.112	0.168	0.168	0.560	0.168	<mark>0.5</mark> 60
E1B Number of Institutional Events Participated Every 6 Month	0.131	0.000	0.435	0.131	0.131	0.087	0.087	0.218	0.435	0.435	0.218
E1C Number of Routine Meetings Participated every Month	0.798	0.798	0.342	0.798	1.141	0.798	0.342	0.342	0.342	0.342	0.000
E2A Recapitulation of incoming Mails and Invitation every Day	0.107	0.000	0.178	0.107	0.178	0.285	0.071	0.107	0.178	0.107	0.178
E2B Completion of Letter of Acountability every Week	0.180	0.120	0.120	0.000	0.300	0.180	0.120	0.300	0.480	0.600	0.060
E2C Delivery of Events Letter of Acountability every Week	0.098	0.000	0.228	0.098	0.098	0.325	0.000	0.098	0.000	0.325	0.228
E2D Completion of Tax and Office Supplies Tool Report	0.293	0.088	0.146	0.088	0.088	0.146	0.146	0.088	0.234	0.088	0.088
E2E Number of Outer Service Monthly Reports	0.136	0.136	0.454	0.136	0.136	0.136	0.454	0.454	0.136	0.136	0.454
I1A Duration of Sports Time Each Week	0.376	0.113	0.376	0.113	0.113	0.113	0.113	0.113	0.376	0.376	0.113
Duration I2A The Number of Spiritual Activities	0.798 0.163	0.000	0.000	0.798 0.070	0.798	0.000	0.798 0.140	0.000	0.798 0.070	0.798 0.070	0.000
Followed Each Month I2B Number of Psychotests Followed Each Year	0.224	0.224	0.224	0.224	0.224	0.224	0.224	0.224	0.224	0.224	0.224
P1A Number of Training Programs Followed	0.111	0.111	0.111	0.370	0.111	0.000	0.000	0.111	0.111	0.111	0.111
P1B Number of Discussion Forums Followed Every Week	0.428	0.612	0.183	0.428	0.428	0.122	0.183	0.183	0.000	0.000	0.000
P2C Number of Field Studies Followed Every 4 Months	0.332	1.108	1.108	0.222	0.332	1.108	1.108	1.108	0.000	0.222	0.000
Total	5.474	4.911	6.253	4.565	5 242	3.824	4.590	4.005	5.754	5.045	3.346

#### 3.4 Performance Measurement of Contracted Personnel

Performance measurements were made by each 11 persons of administrative contract workers with data retrieval in May 2018 and some data 4-6 months earlier. The achievements made by contractors are then recorded by each workforce and then scoring tables are performed by interpolation method. Interpolation is done after determining the worst value (scale 0), standard (scale 3), and best (scale 10) of the overall achievement of the workforce. After that interpolation can be done so that the score score of 0-10 has a certain value and then the value of achievement compared with the calculated interpolation value. Furthermore, scores will be scored multiplied by the weight of each KPI.

#### A. Performance Measurement of Mrs. A

In the performance appraisal of Mrs A, there are 9 red colored KPI, 4 KPI are yellow, and 4 KPI are green. this red criterion will have a special attention from the leadership and should be done immediately to improve the performance of contract workers to be better to support the achievement of the office. There is also a yellow color criterion that is maintained and needs to be improved, ie for the number of lateness, regular meetings, duration of time, and the number of discussion forums that are followed by Mrs A. Although the total performance score of Mrs A is 5,473 which means enough criteria but there is some criteria that need to be fixed again. With the value earned Mrs. A should still be a lot of need to increase because it is still half of the maximum value of total performance weighted value obtained. For improvement Mrs. A should pay attention to KPI who get red first to be repaired so that the average value will improve in the end. For more details, see Table 3.

The next calculation is done the same thing for Mrs A and continued with the other ten contract workers so that the results obtained according to the data Table 4. Achievements of the performance of contract workers as a whole can be said enough category with yellow criteria. This should be of particular concern to the leaders regarding the achievements of individual performance of administrative contract workers. Intensive control is needed on the achievement of each contract worker in order to improve the performance process.

#### 3.5 Managerial Implications for XYZ Agency

Based on the results of data analysis that has been obtained then the effort that can be done by the leadership of Government Institution XYZ are as follows:

- a. Leaders must consider to develop an attitude to attract the sympathy of contract workers. This can be realized by always being present in the midst of contract workers directly. The presence of a leader with a level often will make the leadership close to the elements of contract workers directly and can improve performance.
- b. Leaders must consider to provide flexibility to contract workers to do the task in their own way or even frequently open and observe the work of contract workers on a regular basis. If necessary provide assistance for new coaching for contract workers who are experiencing time management and office management difficulties.
- c. Leaders and Sub-Sections need to make various approaches to the contact person to emphasize the value of loyalty and devotion in the government bureaucracy by providing specific *rewards* or*training* held in Surabaya City Government. This is done solely to improve the performance of contract workers.
- d. Leaders need to socialize the existence of performance appraisal of contract workers, this is given that the agency XYZ has never been assessed the performance of contract workers. This socialization can be done on the appropriate object in this study namely the administrative staff. In the socialization also required to emphasize the importance of performance measurementand how it will affect the performance of agencies.
- e. Leaders need to perform better control on timeliness of contract workers in completing their respective tasks andon evaluation of the Strategic Goals, KPIs, and targets set for the benefita of the organization.

#### **IV. CONCLUSION**

The formulation of KPIs and Target Strategies has been completed with the highest KPI weight on KPI Total Lateness (0,1532), then KPI Following Routine Meeting (0.1141) next KPI Number of Field Studies Followed by (0.1108). Assessment of each administrative contract workers has been done with the highest achievement of the highest total value is Mr. C (5.754) while the smallest total performance performance obtained Mr. K ie (3.346). then after understanding the performance results of each contract workers, the stakeholders should know the conditions of contract workers and able to make improvements that will be provided to contract workers to improve the performance of contract workers and the achievement of agency's vision.

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