Performance Appraisal Design Using 360 Degree Feedback at University X

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Abstract— Directorate of Information Systems is a unit that provides information technology services, at University X, that needs to perform at its best most of time. Its employees’ performance directly affects the unit performance. One problem in employee assessment due to its high subjectivity. Currently the assessment carried out directly from superior officers to their subordinates. Most of the employees are fall into the “good” category of performance. This trend remains from time to time of assessment. There are five generic elements used in the current assessment without descriptions of the aspect and grading that leaves ample room for subjectivity. The purpose of the study is to offer less subjective assessment method using 360-degree feedback approach with elaboration on each assessment elements. The elements are extended to nine: leadership, team player, self-management, communication, vision, organizational skill, decision making, expertise and adaptability. The assessment conducted to 22 employees that were assessed using previous version assessment as well. Result showed that employees performance is more varied.

Keywords: performance, performance appraisal, 360-degree feedback, subjectivity

I. INTRODUCTION

Performance appraisals is an evaluation process of individual performance within specific time frame [1]. This process provides information as a basic of decision making. University X’ Directorate of Information System (DIS) plays strategic roles in its business process. The performance of this unit affects the performance of the university. The unit performance is a result of its employees’ performance. The assessment to one employee is done by their direct superordinate the superordinate’s supervisor. No descriptions or rubric for grading to each criteria of performance. Assessor and assessee do not now on what bases or what kind of criteria that assign to them. Employees are assessed based on 5 elements (integrity, innovation, contribution, attitude, and English test score). Each element is scored from 1 to 5 by two assessors (one is employee’s direct supervisor and the other is the direct supervisor’s superordinate). The score of each element is then transformed into a determined new score where $1 = 91$, $2 = 94$, $3 = 97$, $4 = 100$, $5 = 103$. Total score range $\leq 89$ (P5/very poor), $\geq 90$-$95$ (P4/poor), $\geq 96$, $100$ (P3/moderate), $\geq 101$-$109$ (P2/good), $\geq 110$ (P1/very good). The following is the average performance assessment result of DIS employee in 2016.

![Figure 1: 2016 Average Performance Assessment Result](image)

Figure 1 shows the average results of employee performance in DIS unit. Assessor 1 is manager, assessor 2 is manager’s superordinate (Director of DIS). Average score for employees from assessor 1 is 104.83 and 103.6 from assessor 2 that all DIS employee performance result fall within “good” category. The result that is given to human resource department is the score form assessor 2. The assessment result cannot be compared when the assessment is done by different parties and the two assessors will likely to have different standards during the appraisal with heavy loads of subjectivities [6]. Employees cannot tell which behaviors valued by the organization and actually showed in the day to day activities by the high scored employees. Fellow employee could not tell on what ground that their scores are differ. Are the 5 elements used in the current assessment can cover all the relevant aspect of an employee? How to make sure that all the parties involved in the appraisals when assigning a score are based on the same criteria? The goals of this research are twofold: identifying the elements that worth to assess and finding the appropriate performance appraisals approach that lessen the subjectivity that suits the DIS.
II. RELATED WORK

Employee performance is something that he/she does or does not do that contributes to the organization where he/she works [3]. There are two things needed to conduct effective performance appraisals: 1) criteria that can be measured objectively and 2) objectivity of the evaluation process [5]. To gain an intended result of an appraisal, the assessment should comply to the following principles:

1. Objective: as it is relevant to the criteria that has been set and agreed upon.
2. Fair: every employee has the same opportunity to perform well on the criteria.
3. Transparent: everyone can tell the bases that used in the assessment and why they have the results as shown.

360-degree performance assessment is one of the less subjective approach [2] that can increase organizational performance since its involve many parties (supervisor, top management, subordinate, co-worker, representative department, and self-assessment of the employee) [3]. Previous research shows some elements that used in the managerial line of work.

TABLE 1 MANAGERIAL PERFORMANCE APPRAISALS’ ELEMENTS

<table>
<thead>
<tr>
<th>Element</th>
<th>Definition</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Ability to influence and direct others to do a task or job and motivate others to do it well.</td>
<td>Armstrong (2006), Abraham (2001)</td>
</tr>
<tr>
<td>Team Player</td>
<td>To be able to work well with others in a team and good relations with team members.</td>
<td>Armstrong (2006), Cohen &amp; Bailey (1999)</td>
</tr>
<tr>
<td>Communication</td>
<td>Ability to express written or oral ideas, feelings in effective manner.</td>
<td>Armstrong (2006), Abraham (2001)</td>
</tr>
<tr>
<td>Vision</td>
<td>Able to visualize, set future goals, actions that are willing to do.</td>
<td>Armstrong (2006)</td>
</tr>
<tr>
<td>Organizational Skill</td>
<td>Ability to organize, manage one’s time and others to achieve a certain goal.</td>
<td>Armstrong (2006)</td>
</tr>
<tr>
<td>Expertise</td>
<td>Having specific experience to advice or solve the problem.</td>
<td>Armstrong (2006), Savickas (2003)</td>
</tr>
<tr>
<td>Adaptability</td>
<td>Ability to adjust to the environment.</td>
<td></td>
</tr>
</tbody>
</table>

III. METHODOLOGY

The research conducted following a series of steps starting from identifying problem through the analysis. Employee representatives of DIS (manager, assistant manager and two staffs) were interviewed regarding the existing performance appraisal regarding the subjects: how was the performance appraisal conducted, did the employees understand why they were assigned a certain score, how did they see the result compared to the other fellow employees at DIS. Samples were 50 employees (managers, assistant managers, and staffs) of DIS unit.

Questionnaire consists of 9 proposed appraisal elements (based on the work of previous research on table 1) is used to assess DIS employee performance with 360-degree feedback approach. The 9 elements are used due to the nature of the elements that valued by the organization. Each element then breaks down into more specific questions that reflect the behavior of each (see appendix). Validity of the questionnaire is assessed with Pearson correlation and Cronbach Alpha to test its reliability using SPSS 17.

TABLE 2 POSITIONS AND ASSESSORS

<table>
<thead>
<tr>
<th>Position</th>
<th>Assessors of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>Director, fellow manager, staff</td>
</tr>
<tr>
<td>Assistant Manager</td>
<td>Manager, fellow assistance manager, staff</td>
</tr>
<tr>
<td>Staff</td>
<td>Assistant manager, fellow staff</td>
</tr>
</tbody>
</table>

IV. RESULT

A. Proposed Element(s)

The questionnaire proved to be valid and reliable. Table 3 showed the numbers of valid items form each element.

TABLE 3 QUESTIONNAIRE VALIDATION RESULTS

<table>
<thead>
<tr>
<th>Elements</th>
<th>Number of Questions</th>
<th>Not valid</th>
<th>Valid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Team Player</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Self-Management</td>
<td>7</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Communication</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Vision</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Organizational Skill</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Decision Making</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Expertise</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Adaptability</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Cronbach Alpha coefficient of 0.746 show to be reliable.

B. Proposed Performance Appraisal

Using proposed method and elements of performance appraisal, the averaged result of the manager, assistant manager and staff are change.

TABLE 4 EXISTING AND PROPOSED MODEL PERFORMANCE APPRAISALS

<table>
<thead>
<tr>
<th>Category</th>
<th>Existing</th>
<th>Proposed Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Assistant Manager</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Staff</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

P1 44 2 6 14 22
P2 6 1 3 22 26
P4 - - - 2 2
P5 - - - - -

196
The scores assign on every element according to the assessor’s perceptions. They compared the performance of the assesse to the definitions of elements. Since the criteria are more detailed so the assessors can assign finer scores according to the criteria given. The results also vary across the positions.

Managers’ average score is low on team player and organizational skills. Managerial skills take some used to do to practice. It could be that the incumbents need some upgrading regarding those elements since the activities carried out are more operational and routines. Every decision is made by the upper level. The lower positions simply deploy what has been decided. Unclear expectation due to the lack of socialization left individual in the dark.

Assistant manager’s average score low on leadership and organizational skill. This can happen if the incumbent is not given the chance to lead since the job activities more operational than the manager’s position.

Table 1. Performance Appraisal Score

<table>
<thead>
<tr>
<th>Variable</th>
<th>manager's score</th>
<th>assistant manager's score</th>
<th>staff's score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>4.5</td>
<td>4.2</td>
<td>4.3</td>
</tr>
<tr>
<td>Team Player</td>
<td>4.4</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Self-Management</td>
<td>4.4</td>
<td>4.4</td>
<td>4.3</td>
</tr>
<tr>
<td>Communication</td>
<td>4.6</td>
<td>4.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Vision</td>
<td>4.4</td>
<td>4.4</td>
<td>4.3</td>
</tr>
<tr>
<td>Organizational</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision Making</td>
<td>4.3</td>
<td>4.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Expertise</td>
<td>4.4</td>
<td>4.4</td>
<td>4.2</td>
</tr>
<tr>
<td>Adaptability</td>
<td>4.5</td>
<td>4.5</td>
<td>4.4</td>
</tr>
</tbody>
</table>

Staffs’ average score is low on communication. The nature of the staff’s job mostly dealing with data and individual activities (coding, making algorithm...
programming) where communication with others is not their priority as long as they get the job done. Yet, communication skills need to be harnessed so everyone can communicate effectively, especially for those in the managerial positions. Results show that this element need serious attention form University X’ management.

V. DISCUSSION

Proposed 360-degree performance method shows to be more comprehensive and less subjective. All the nine elements proven to be reliable and valid. Based on the proposed performance appraisal, score of manager, assistant manager and staff fall in to good (44%), moderate (52%), poor (2%) with average scores amongst every position are range between moderate and good category.

a. Leadership
Leadership skill is a must have for those in managerial or more strategic positions and need to be maintain from as early as the staff position as part of the University X succession planning. Manager’s leadership considered good (4.3) where “able to boost work enthusiasm of fellow employee” perceived highest score. Leader plays important role to get the job done and this can be achieved by giving a good, supportive climate. Leadership skill among assistant managers (4.16) is lower than those of managers’. In University X, this is due to the nature of work of assistant managers’ that is less demanding on leadership area than those of managers’. Another explanation is due to the tendency to preserve status quo. Challenging the process is not popular at University X [16].

b. Team Player
Team player is one’s ability to work with others [2] where all the manager, assistant manager and staff fall above 4 points. Team player is required to get the job done. No single individual or position can execute the job individually. For manager and assistant manager, highest score is “contribute to the organization’s activity”. Good leader that involved in his/her subordinate job activities, can promote trust amongst the team. Once trust is formed, leader can easily direct others to do the task at hand [17]. Staff showed the best at “maintaining good relationship with fellow employee”. It tells that harmonious and conflict free environment is what they prefer that can improve productivity.

c. Self-management
Managers also scored high in this element, where “having good attitude/personal quality” perceived the highest score. Assistant manager and staff score highest on “carrying one’s job fair and square”. Self-management is an element that showed individual ability to develop good personal attribute to achieve the goal. Personal competence has proved as a driver to organizational performance [12]. Manager with high score on self-management is an asset worth keeping.

d. Communication
Communication is the ability to convey written and oral communication effectively [2]. This is a must have skill for leader since most of the leader’s activity is giving directions and motivation to his/her subordinates. Effective two-way communication proved to be important in the line of work [13]. Managers scored above 4.3 but assistant managers and staffs score were lower than managers’. Idea-sharing is one thing that can be done to improve effective communication. Manager can design routine activities where every assistant manager and staff are freely to speak up what they have in mind. Face to face interaction plays a significant role to improve this competence [13]. Programs are designed less formal since informal communication can boost trust better than formal communication [14,15].

e. Vision
Vision is the ability to visualized goal and how to achieve it [2]. Leaders usually have excellent vision. Managers were score highest on “ability to see problems form various perspective”. Assistant managers score on the area were lower than managers’. In DIS unit, this ability does not depend on the managerial position. Staff showed relatively good ability on this area. University X needs to take into account all individuals, not only those whose had managerial positions, in the succession planning. This result also showed that communication regarding the organizational goals is not effectively deployed throughout University X. Effective communication is one of the issues that need to be addressed by University X [16], that in turn affect the DIS unit.

f. Organizational Skill
Organizational Skill is one’s ability to organize things in order to achieve the goal [2]. This is a must have ability of every member in the organization, especially those in the managerial positions. Result showed that staffs’ score almost as equally as assistant managers’ score in this element. Ideally the supervisors are more apt in this area since he/she is the one who has staffs to be managed. Managers and assistant managers score were highest when it comes to “acknowledge others’ contributions in achieving organization’s goal”. They knew that acknowledging others in the form of tangible reward can lead to higher motivation [18]. Yet they need a lot of work out when they have
to allocate resources and facilities to achieve organizational goals.

g. Decision Making
Decision making is the individual’s ability to execute an appropriate decision with sound arguments [2]. This is a must have element of a leader [12]. At the DIS unit, this element was amongst the three lowest elements of all employees. One possible explanation relates to the non-strategic nature of managers’ and assistant managers’ job. They carried out more routine day to day activities. Decision making is a nice to have amongst staffs, since they are the lowest on the hierarchy. No high decision making needed in their line of work.

h. Expertise
Expertise is the ability to consult to a problem at hand [2]. At the DIS unit, this element needs to be improved, especially among the staff. This finding indicates that the staffs are lack of exposure to the situation where they are able to broaden their knowledge and skills. Specific training for staffs is one option to address this situation.

i. Adaptability
Adaptability of its employees show to be one competitive advantage of an organization [9,11]. Adaptability makes the organization is able to survive through a crisis. Managers, assistant managers, and staffs were score well in this area. This is good news for the University X that its employees in DIS unit have the resiliency to face whatever may come.

VI. CONCLUSION
Proposed method and elements of performance appraisals are able to differentiate the results of the appraisals. Subjectivity can be lowered using the proposed method since there are many parties involved. Communication within the DIS need some serious attention so everyone in the unit have the same big picture as reference, regarding what are expected from the DIS. Since the goal of this research is to reduce subjectivity in the appraisals, it raises limitation due to the synchronizing the proposed method with what are actually expected from the DIS (reliability of the service, accessibility of applications). Thus, critical incidents sampling method is more appropriate to capture the situation. On the other hand, the existing performance appraisals remain the same for all individuals within the university that probably do not reflect/relate to the results expected by the DIS’ internal customers.

The research also leads to managerial implication to choose the most appropriate elements for different position as decision making will not be fit for those in staff position if the element is not specifically stated on the job description. This showed case the crucial role of job descriptions that describe individual’s job and responsibilities.

REFERENCES
## APPENDIX

### The proposed Instruments

<table>
<thead>
<tr>
<th>No.</th>
<th>Element</th>
<th>Definitions</th>
<th>Item</th>
</tr>
</thead>
</table>
| 1.  | **Leadership** | Ability to influence and direct others to do a task or job and motivate others to do it well. | 1. Able to influence others to achieve organization’s goal.  
2. Able to direct other employee to achieve organization’s goal.  
3. Set as an example in committed to achieve organization’s mission  
4. Trust co-workers and subordinate to follow through the given job.  
5. Able to deliver the organization’s vision and mission clearly.  
6. Able to boost work enthusiasm of fellow employee. |
| 2.  | **Team Player**| To be able to work well with others in a team and good relations with team members. | 1. Able to work harmoniously with fellow employee.  
2. Maintaining good relationship with fellow employee.  
3. Appreciate feedback form fellow employee.  
4. Contribute to organization’s activities. |
| 3.  | **Self-Management** | Organize and develop personal ability to achieve good things. | 1. Having good understanding of one’s main job.  
2. Manage to minimum attendance standard.  
3. Responsible to one’s job.  
4. Having good attitude/personal quality.  
5. Making a good work planning.  
6. Carrying one’s job fair and square.  
7. Show initiative to get the job done more effective and or efficiently. |
| 4.  | **Communication** | Ability to express written or oral ideas, feelings in effective manner. | 1. Conveying oral message in a clear and effective manner.  
2. Delivering information accurately. |
| 5.  | **Vision**     | Able to visualize, set future goals, actions that are willing to do. | 1. Intent to achieve organization’s goal.  
2. Working in an organized manner to achieve organization’s goal.  
3. Able to see problems form various perspective. |

### Additional Details

6. **Organizational Skill**  
   Ability to organize, manage one’s time and others to achieve a certain goal.  
   1. Using facility to the optimum to achieve organization’s goal.  
   2. Able to manage and allocate facilities to achieve organization’s goal.  
   3. Acknowledge others’ contributions in achieving organization’s goal.  

7. **Decision Making**  
   Able to make a right decision based on judgement and ethical consideration.  
   1. Taking into account of others ideas during decision making.  
   2. Show consistency in making decision.  
   3. Objectively making decision.  
   4. Put careful and thorough considerations in making decision.  

8. **Expertise**  
   Having specific experience to advice or solve the problem.  
   1. Equipped with broad knowledge on one’s job and outside as well.  
   2. Able to advice according to one’s expertise.  

9. **Adaptability**  
   Ability to adjust to the environment.  
   1. Adjust well to the work environment.  
   2. Able to adapt well to the new job.