Chapter 6

User Testing of Web-based Performance Appraisal System

This chapter discusses the user testing of the performance appraisal system. The questionnaire provided to the users to test the system is described, the results of the test is shown and discussed. We did two kinds of user testing for the system. The first one was for the testing of the general features of the system. The second user testing was to check the usefulness of this appraisal system in the company to help the employers be more aware about the importance of the job performance management system and job reassignment system. These two testing will be discussed separately.

6.1   Testing of the general characteristics of the system

We let our system be used and tested by around fifteen employees. They were given a brief explanation about how the system works. They were asked to fill a short questionnaire regarding some aspects of the system in order to get some feedback about the system. The employees were asked to rate their level of satisfaction about some features of the system. The rating scale has five levels from 1 = 'Not satisfied' to 5 = 'Very happy with it'. The features that were asked to be rated were as follows:

- Easy to understand

- Easy to use

- Faster compared to paper-based appraisal system

- Clarity of the definitions of the competencies

- Security

- Fair for the employees

- Usefulness of the system for the managers and employees

- Practical for the organization

- More objective in nature

The weighted average values of the above features from the result of the user testing are shown in Table 6.1.

Table 6.1 Weighted average values of the user testing of the features of the system

Features	**Weighted average value**
Easy to understand	3.63
Easy to use	3.88
Faster compared to paper-based appraisal system	4.25
Clarity of the definitions of the competencies	3.75
Security	3.50
Fair for the employees	3.50
Usefulness of the system to the managers and employees	4.00
Practical for the organization	3.75
More objective in nature	3.25

The ratings showed that the employees find the system faster than the paper-based system and they feel that the system is useful for both the managers and employees in terms of evaluation. It was also seen that the users were satisfied with the system in terms of finding it easy to use and understand, secure, fair for the employees, practical for the organization and the whole system being more objective in nature.

In addition to the above questions, we also asked the users if they have seen or used this kind of web-based evaluation system before and all of them answered 'No'. We also asked them if given a choice between a paper-based system and a web-based evaluation system which one would they prefer (in both cases of if they were managers or they were employees), majority of them answered that they would prefer to use web-based evaluation system as it is more convenient, time-saving, less paper-work, faster feedback, secure, easy to access, enhances two-way communication, easy to notice the overview score and make corrections if needed. Overall, the users showed good satisfaction rating for the system and gave some valuable comments and suggestions about the system which can be implemented to improvise it.

6.2   Testing of the usefulness of system for improving awareness among employers

For this user-testing, we let our system be used and tested by around fifteen employees. They were asked to fill two sets of questionnaires regarding the system in order

to get some feedback about the system. The first set of questionnaire was asked to be filled before using our system (pre-testing). The aim of this survey was to check the usefulness of the current system being used in their company. The employees were asked to rate the answers on questions regarding the awareness among the employers about the importance of the following issues:

- Employees' satisfaction on job
- Matching the right person to the right job
- Employees' satisfaction on job reassignment
- Employees' understanding of organizational goals
- Employees' satisfaction on effectiveness on performance evaluation system
- Training system for employers about performance evaluation system
- Feedback of performance evaluation provided for employees

The second set of questionnaire was asked to be filled out after using our system (post-testing). With this survey, we wanted to check the usefulness of our performance evaluation system compared to the existing one. The purpose of the second questionnaire was to find out whether our system would make any difference in help improve the employers' awareness towards performance management and job reassignment matters. The employees were asked to rate their opinion about the usefulness of the system in helping the employers be concerned on the same topics as mentioned in the pre-testing questionnaire. Additionally, they were also asked to answer specifically which stages among the three stages (selection stage, appraisal/evaluation stage and development planning stage) of the system will help the employers be more aware about each of the topics. In this test, a 5-point Likert scale, ranging from 1 (not useful at all) to 5 (very useful), was used. A paired-sample t-test was applied to the employees' two sets of ratings (pre-testing and post-testing) and the results are summarized in Table 6.2.

Table 6.2 Paired samples t-test on employees' pre and post testing the performance appraisal system

Employers' awareness on the importance of following issues:	Paired differences			Standard Deviation	*p*-value[1]
	Mean Score Pre-test	Mean Score Post-test	Difference		
Employees' job satisfaction	3.60	4.20	0.60	0.84	0.000
Matching the right person to the right job	3.50	4.00	0.50	0.97	0.000
Employees' satisfaction on job reassignment	3.40	4.10	0.70	0.82	0.000
Employees' understanding of organizational goals	3.30	4.40	1.10	0.99	0.000

Employees' satisfaction on effectiveness on performance evaluation system	3.00	3.80	0.80	0.63	0.000
Training system for employers about performance evaluation system	3.22	3.66	0.44	0.88	0.000
Feedback of performance evaluation provided for employees	2.90	4.70	1.80	1.39	0.002

From the data in Table 6.2, the comparison of mean values for each element shows that the test users find the system useful in improving all the elements. Statistically significant improvement was found on all the elements which were tested (*p*-value < significance level of 0.01). This comparison testing has shown that the performance evaluation system discussed in this paper can help improve the performance evaluation system. It can make the employers become more aware of the importance of the job reassignment and performance management systems.

Moreover, the stages chosen by the majority of the respondents which they think will help for each topic is shown in the Table 6.3.

Table 6.3 The stages of the performance appraisal system which will help for each issue

Usefulness of the system in helping employers become more aware on the importance of following topics:	Stages appropriate for helping each topic
Employees' job satisfaction	Appraisal/Evaluation Stage
Matching the right person to the right job	Selection Stage Appraisal/Evaluation Stage
Employees' satisfaction on job reassignment	Appraisal/Evaluation Stage Development Planning Stage
Employees' understanding of organizational goals	Selection Stage Appraisal/Evaluation Stage Development Planning Stage
Employees' satisfaction on effectiveness on performance evaluation system	Development Planning Stage
Training system for employers about performance evaluation system	Development Planning Stage
Feedback of performance evaluation provided for employees	Development Planning Stage

From the data in Tables 6.2 and 6.3, according to the opinion of the users who tested our system, it can be seen that the system is useful in helping the employers become more aware of the importance of the issues as mentioned in Table 6.2. The different stages which will help in fulfilling each issue are also shown in the table (Table 6.3). As we can see from the differences in mean values in Table 6.2, the system is most useful for helping employers become concerned about giving feedback of the performance evaluation to the employees which is performed in the development planning stage. Similarly, the system is also very useful in making the employers aware of the importance of the employees' understanding of organizational goals and employees' satisfaction on effectiveness on performance evaluation system for which the combination of all the three stages of the system play equally important roles.