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STUDYING THE EFFECT OF IMPLEMENTING RECOMMENDATION SYSTEM ON IRAN TELECOMMUNICATION COMPANY'S EMPLOYEE PERFORMANCE

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ABSTRACT
The aim of this study is to determine the relationship between implementation of recommendation system and Iran Telecommunication Company's management performance. The statistical population of study included 1035 employees of Iran Telecommunication Company that 280 subjects were selected using systematic random sampling method. The research method is descriptive- applicable and correlation method is used to study the relationship between implementation of recommendation system and employee performance. Questionnaire (practical poll) with 5-item Likert Scale was used in order to measure independent and dependent variables. Questionnaire consisted of 18 closed questions and one open question. The design of this study was prepared by reflecting literature on contribution, recommendation systems and employee performance and using Kearney &Hays analytical model and researcher has selected the task of model and has used it in his research. The four hypotheses of research were accepted using Karl Pearson Chi-test at error probability level of α=0.05. This means that implementation of recommendation system has been effective on employee performance and occupational satisfaction. Improved quality of services to clients has resulted in improved problem solving in Iran Telecommunication Company.

Keywords: Recommendation System; Employee Performance; Occupational Satisfaction; Improved Service Quality; Improved Problem Solving

INTRODUCTION
Although, today people apparently live in groups, however, due to excessive specialization of tasks, people have become so embedded in their specialty as if there is no spiritual or occupational relationship between people and other members of organization or community groups, and we can say that they have been alienated so that this alienation has decreased significantly their productivity theorists. Theorists have proposed discussions such as "job enrichment", "Job expansion" and "kaizen plan" (continuous improvement) in order to solve this problem.

Employees participation is important in this method, because participation and involvement in decision-making and performance results in their satisfaction and while satisfy their emotional needs, refer to human noble temperament that is their social life, achieving higher levels of needs. In addition to natural growth, employee undoubtedly can increase their work efficiency (Moshabbaki, 1998).

On the other hand, human resource is everything of organization due to thinking and creativity power. Since any type of productivity, change and improvement in technical and organizational systems and processes are done by humans. Using thought power and capabilities of organizational employees that are referred to hidden capital, needs to create structures that direct organization employee capabilities in order to fulfill the current and future objectives. Involving members of an organization in management system and decision-making is not something as management slogan but it must be made operational and objective through the creation of appropriate mechanisms (Soltani, 2000).

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One of these mechanisms is recommendation system that is one of the key ways of creating employee participation in efficiency improvement activities of organization, in other words, recommendation system is a technique through which we can realize methods and goals of continual improvement in organization and it provides the possibility that employees use their knowledge in the areas of productivity and optimization in occupational environment and keep them from potentiality to actuality (Kazazi, 1999).

Therefore, in this study we try to study the effects of implementing recommendation system on employee performance in a part of Iran community (Telecommunication Company of Iran).

Literature
Definition of Recommendation System
According to Keith Davis and John New Storm, recommendation system is a formal plan through which organization employees are encouraged to help their work improvement (Tusi, 1998). Recommendation system is one of the key ways to create a system for employee participation in activities to improve efficiency of organization (Kazazi, 1999).

Recommendation system is a type of characterizing or giving importance to employees and encourages them to think effective strategies for optimal management of unit and organization and walks in the way of organization progress and identifies the difficulties associated with the organization and offering helpful recommendations resolves these problems and difficulties (Hamadani, 2000).

Methods of Participation
The Importance and Necessity of Participation
Participation is voluntary and enjoyable affair that requires more efforts and tirelessness for community development and obtaining God consent. Participation is basic strategy for creating cooperative system of consultation, collaboration, empathy, solidarity, cooperation and unity of organization. This system is based on excitation of human motives that leads to prosperity of individual, group and institutional talents through providing useful recommendations for constructive reforms and activities and services to people (Batmanqilich, 2001).

Lee Preston and James Post believe that three revolutions have been occurred in management history. The first revolution has been associated with organizational hierarchy and the second revolution has been related to the separation of ownership from management and now participation is concerned with the third and most important contribution in management (Abbaszadegan, 2001).

Cooperative management system is intellectual and practical cooperation system of organization's all members with organization's various levels of management. Participative management art is the participation of all elements and reduction of class distance between managers and employees. The management method that is based on Islamic values and strong motivation of individuals' voluntary activities, emphasizes on educating employees in an appropriate cultural bed in a partnership-oriented organization so that make reasonable organizational behavior through strengthening their inner motivations and adopting correct and efficient ways and make organizational behavior so reasonable that organization witness innovative initiatives and creativity that is unprecedented so far in organizations with centralized management and order management systems (Batmanqilich, 2001).

Due to the need of changes in administrative system of country, importance of collaborative management appears, in order to maximize the efficiency of various resources, and make better use of existing facilities and create areas for people involvement in their affairs and strengthen the public participation. So it is necessary for organizations to actively use this management system (Abbaszadegan, 2001).

Consequences of Participation
Participatory management system has numerous desirable consequences in terms of specific characteristics. Marshal Sashkin is one of the renowned scholars of management, wrote after a thorough review of literature on participation as below:

"A research for one decade firmly suggests that when opportunities are arisen and effective implementation of appropriate conditions is applied, participatory management can certainly achieve the desired result in the realm of performance and efficiency". The first effective consequence of using

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participation system practically was a «Kurt Levin» research result who was the renowned scientist in the field of social science in 1947 in the United States of America on the methods of people feeding. In a scientific study, he showed that when people are active in changing ways of doing their work, their resistance against transformation will be reduced and their enthusiasm and interest in changes will be increased and they will take compatibility way (Tusi, 2000).

Other consequences of participation management:

1. Increased levels of occupational motivation: When management system is collaborative in organizations ranging from small to large, all employees are involved in determining, formulating and approving guidelines and work programs and they are active and determinant in decision making. Hence, they are highly motivated in implementation of actions that they have determined, promoting job motivations are among factors of consciousness, selfless efforts, increased quantity and quality of performance and good working

2. Increased levels of occupational satisfaction: Individual goals are align with organizational goals in organizations through cooperative system and do not conflict with each other, as a result, individual and organizational interests are aligned and level of occupational satisfaction increases.

3. Increased knowledge and information and continuing initiative education: Cooperative management system includes intellectual and active participation of employee, so directs and drives people endogenously and spontaneously towards more learning and improves the level of occupational knowledge.

4. Increased levels of creativity and innovation: Cooperative management system is a dynamic creative and constructive system. The system provides an appropriate bed for fostering the talents and potential creativity and innovation of organization members in terms of characteristics and outcomes (Golestan, 1998).

Also, contribution in economic and social activities has results that general titles are given in Table 1.

Table 1: The consequences of increasing or decreasing participation in positive and negative contribution fields (Tusi, 2000)

Decreasing consequences	Increasing consequences
- Reduction of conflict, animosity and unhealthy competition	-High quality of work and excellence of occupational life quality
- Reduction of supervision and oversight rate	- Facilitating adoption, transformation and renovation
- Reduction of need for discipline and punishment	- Increased organizational morale and loyalty
- Reduction of wastage and waste of raw materials	- Creating "we" sense and unique identity
- Reduction of turnover, absenteeism and delays at work	- Increasing degree of tolerance towards others
- Reduction of stress and tension at work	- Expanding opportunities for free expression of feelings and inner emotions and thoughts
- Reduction of client dissatisfaction	- Increasing the peaceful relations between Boss and subordinates and between co- workers
- Preventing the duplication	- Increasing motivation and interest in work

Planning Recommendation System

Recommendation system must be designed so that its documents establish a formal process to resolve the problem. Documentation of recommendation system must describe that what is the problem? What is its root reason? What are some solutions that are efficient? Are these the only resolutions for the problem? (Darragh, 1996)

Designers have always considered several important features, including:

1. They try to plan so that find more people with a high sense of participation.

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2. They try to eliminate fundamental obstacles of current recommendation system in their plan.

3. They try to plan so that they can accept more recommendations from who are able to recommend.

4. They try to focus plan on ideas not on savings for company or costs that are imposed on company due to its performance (Verespey, 1992).

Prerequisites for Implementing Recommendation Systems in Governmental Offices

The recommendation system is generally based on comments received from individuals on how to improve works and activities, review obtained comments by informed and trustee people, implement acceptable comments and finally acknowledge the recommenders that all of these issues are means of administrative reform and qualitative and quantitative improvement of activities.

It seems that our offices have not been designed in accordance with evolvement principle and usually have flexible structure including management with limited powers, non-transparent duties, and non-updated rules, non-flexible and constrained budgets. So, requirements and standards must be provided for administrative reforms so that departments cooperate and collaborate together and form a great and coherent collection.
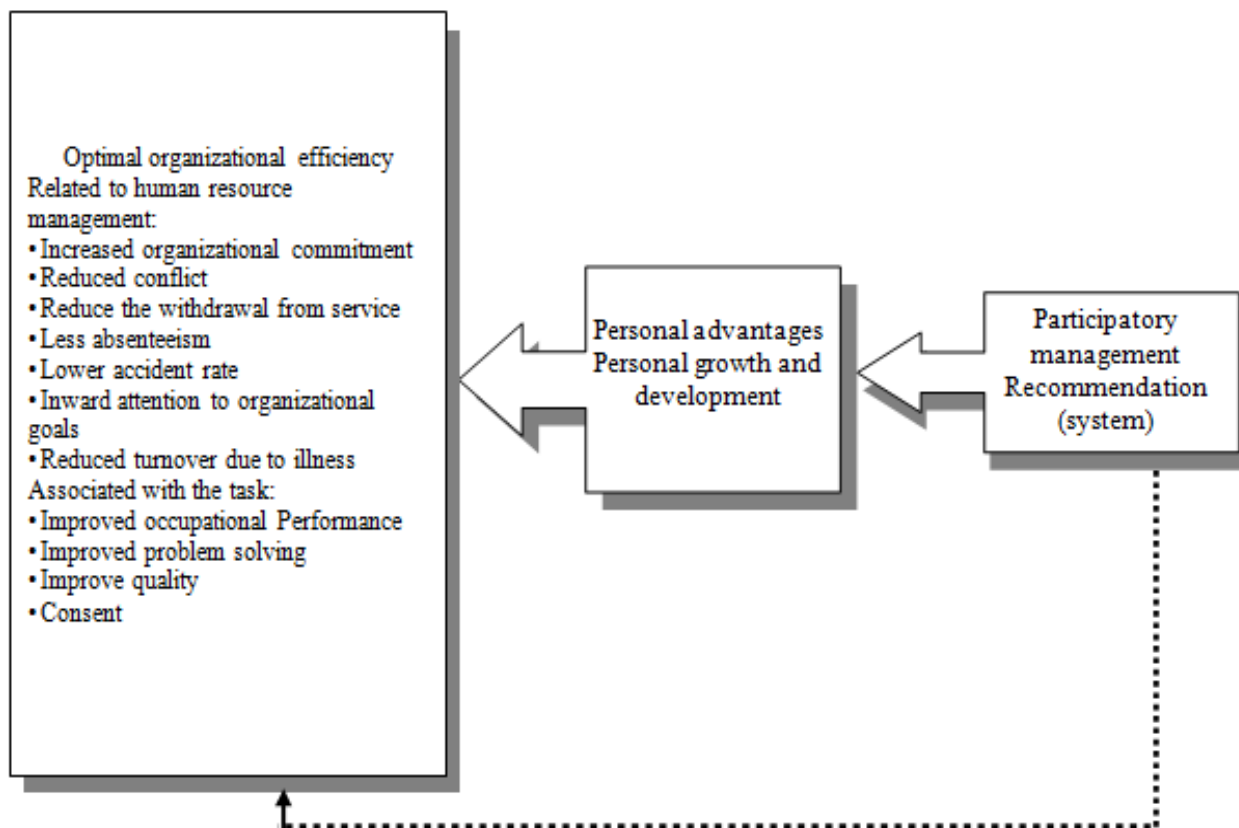

Figure 1: Research Analytical Model

Arrangements for implementing the recommendation system are as follows:

1. Recommendation needs initiative or criticism of current status and the relationship between managers and employees must be so lawful and intimate that employee can express constructive criticism.

2. Severe shortage of most employees' salaries and benefits results in reduction of their attention to their duties including corrective procedures. Therefore, the majority of recommendations in the early implementation of recommendation system will refer to financial and welfare conditions and these recommendations must be followed in the context of recommendation system. The distance between the rights of employees and manager creates a psychological distance between them, Ie, it males less important empathy and cooperation that are necessary for advancement of collective work of pale and in

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this case, employee consider organization problems as directors problems and they are reluctant to solve these problems.

3. Examining some of the recommendations will require fairly extensive studies and related technical researches.

4. Accepting recommendations and ranking them, we must appreciate recommendation and the most common approach is to grant financial benefits so that the bonus value is proportional to the recommendation effect, importance and efforts of recommender.

5. If a recommendation is not accepted for any reason, in implementation of recommendation system, the reason for rejecting recommendation must be formally and clearly described so that recommender is justified and do not disappointed.

6. Implementing recommendation system in an office, some suggestions are put forward that seem plausible and positive, but their implementation is not within the reach of department (there are legal or procedural obstacles to its implementation).

7. In this case, it is better to refer the subject to authority in that Act or Regulations, if appropriate, recommended issue be considered in the revision of related laws or its rejection reason is explained (Naseryan and Frshidnezhad, 2001).

Analytical model of study is derived from Kearney & Hays model that the optimal organizational efficiency section of this model includes two section related to human resources management and related to tasks, and pretest was performed at Iran Telecommunication Company with regard to the components of this section.

Hypothesis
The Main Hypothesis
There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's employee performance.

Sub-hypotheses
1. There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's employee occupational satisfaction.
2. There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's client service quality.
3. There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's problem solving improvement.

MATERIALS AND METHODS

The research method is descriptive- qualitative based on study nature, and is correlation in term of evaluating the relationship between implementation of recommendation system and employee performance. The statistical population of this study includes all employees of Iran Telecommunication Company who are 1035 subjects based on proposed statistics. The systematic random sampling method is used according to the nature of this research that has greater generalization. According to Cochran formula and at ($\alpha=0.05$) level, sample size was n=280. Questionnaire with 5-item Likert Scale was used in order to measure independent and dependent variables. Questionnaire consisted of 18 closed questions and one open question. Karl Pearson Chi-test was used in order to check the validity of relationship between dependent and independent variables and ratio comparison test was used in order to assess questionnaire validity.

Data Analysis
The First Sub-hypothesis
H_0: There is no significant relationship between implementation of recommendation system and Iran Telecommunication Company's employee occupational satisfaction
H_1: There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's employee occupational satisfaction

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Table 2: Empirical frequency of the first sub-hypothesis

Total	Very high	High	Medium	Low	Very low	Question	Question
280	14	132	100	12	22	To what extent do you know the implementation of recommendation system in Iran Telecommunication Company?	5
280	13	94	116	19	38	To what extent you have participated in system?	6
280	16	123	109	14	18	To what extent does your supervisor believe the recommendation system?	7
280	13	131	101	14	21	To what extent will recommendations be reviewed timely?	8
280	7	121	110	23	19	To what extent is rewarding for accepted recommendation timely?	9
280	10	116	122	17	15	To what extent is fairly the evaluation of your recommendations?	10
280	88	133	37	8	14	To what extent is proper the secretariat of recommendation system staff behavior with you?	11
1960	161	850	695	107	147	Total	

Table 3: Results of first sub-hypothesis testing

Test results	Table $\chi^2_{0/95,4}$	Calculated χ^2	Question
H_0 hypothesis is rejected	9.49	224.43	5
H_0 hypothesis is rejected	9.49	153.32	6
H_0 hypothesis is rejected	9.49	216.18	7
H_0 hypothesis is rejected	9.49	223	8
H_0 hypothesis is rejected	9.49	214.49	9
H_0 hypothesis is rejected	9.49	237.04	10
H_0 hypothesis is rejected	9.49	203.25	11

Since the calculated $\chi2$ is greater than Table $\chi2$, hypothesis H_0 is rejected and rejecting the hypothesis H_0 for each variables of first hypothesis at error probability level of α =0.05, the trend (dependence) is confirmed for the first sub-hypothesis.

The Second Sub-hypothesis

H_0: There is no significant relationship between implementation of recommendation system and Iran Telecommunication Company's client service quality

H_1: There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's client service quality

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Table 4: Empirical frequency of the second sub-hypothesis

Total	Very high	High	Medium	Low	Very low	Question	Question
280	57	136	74	6	7	To what extent do clients are satisfied with services that your unit provides?	12
280	7	10	59	94	110	To what extent does your client complaint from your unit?	13
280	26	175	60	5	14	To what extent are client recommendations effective on the quality of services' improvement?	14
280	23	131	107	9	10	To what extent do you use client comments on your work?	15
1120	113	452	300	114	141	Total	

Table 5: Results of second sub-hypothesis testing

Test results	Table $\chi^2_{0/95,4}$	Calculated χ^2	Question
H_0 hypothesis is rejected	9.49	207.61	12
H_0 hypothesis is rejected	9.49	158.68	13
H_0 hypothesis is rejected	9.49	347.18	14
H_0 hypothesis is rejected	9.49	243.57	15

Since the calculated χ^2 is greater than Table χ^2, hypothesis H_0 is rejected and rejecting the hypothesis H_0 for each variables of second hypothesis at error probability level of $\alpha = 0.05$, the trend (dependency) is confirmed for the second sub-hypothesis.

The Third Sub-hypothesis

H_0: There is no significant relationship between implementation of recommendation system and Iran Telecommunication Company's problem solving improvement

H_1: There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's problem solving improvement

Table 6: Empirical frequency of the third sub-hypothesis

Total	Very high	High	Medium	Low	Very low	Question	Question
280	16	108	122	10	24	To what extent do you use recommendation system to solve problems?	16
280	17	110	101	28	24	To what extent is recommendation system effective on solving your unit problems?	17
280	10	90	128	27	25	To what extent company problems have been resolved using recommendations system?	18
840	43	308	351	65	73	Total	

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Table 7: Results of third sub-hypothesis testing

Test results	Table $\chi^2_{0/95,4}$	Calculated χ^2	Question
H_0 hypothesis is rejected	9.49	210.71	16
H_0 hypothesis is rejected	9.49	147.68	17
H_0 hypothesis is rejected	9.49	183.18	18

Since the calculated χ^2 is greater than Table χ^2, hypothesis H_0 is rejected and rejecting the hypothesis H_0 for each variables of third hypothesis at error probability level of α=0.05, the trend (dependency) is confirmed for the third sub-hypothesis.

Main Hypothesis

H_0: There is no significant relationship between implementation of recommendation system and employee performance.

H_1: There is significant relationship between implementation of recommendation system and employee performance.

Table 8: Empirical frequency of main hypothesis

Total	Very high	High	Medium	Low	Very low	Question	Question
280	13	86	133	15	33	To what extent you have trained related to recommendation system and method?	1
280	13	112	113	20	22	To what extent is there the relationship between employee performance and implemented recommendations?	2
280	8	95	136	20	21	To what extent is employee participation in decision-making effective on Iran Telecommunication Company?	3
280	104	104	36	12	24	To what extent are recommendations effective on annual evaluation of employees?	4
1120	138	397	418	67	100	Total	

Table 9: Results of main hypothesis testing

Test results	Table $\chi^2_{0/95,4}$	Calculated χ^2	Question No.
H_0 hypothesis is rejected	9.49	194.43	1
H_0 hypothesis is rejected	9.49	190.82	2
H_0 hypothesis is rejected	9.49	227.61	3
H_0 hypothesis is rejected	9.49	142.29	4

Since the calculated χ^2 is greater than Table χ^2, hypothesis H_0 is rejected and rejecting the hypothesis H_0 for each variables of main hypothesis at error probability level of α=0.05, the trend (dependency) is confirmed for the main hypothesis.

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Table 10: The effect of implementing recommendation system on each factor

Calculated χ^2	Hypothesis title	Hypothesis
22.39	There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's employee performance.	Main
20.50	There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's employee occupational satisfaction.	First sub-hypothesis
53.73	There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's client service quality.	Second sub-hypothesis
28.39	There is significant relationship between implementation of recommendation system and Iran Telecommunication Company's problem solving improvement.	Third sub-hypothesis

Calculated X^2 based on above table of hypotheses imply that implementation of recommendations system has the greatest effect on client service quality, problem solving improvement, employee performance and employee occupational satisfaction, respectively.

RESULTS AND DISCUSSION
The first sub-hypothesis
The first sub-hypothesis entitled the relationship between implementation of recommendation system and employee occupational satisfaction in Iran Telecommunication Company was raised for statistical sample with questions of 5, 6, 7, 8, 9, 10 and 11 in questionnaire and this hypothesis was accepted after collecting the responses using Karl Pearson Chi test at error probability level of α=0.05. According to Tables (2) and (3), it was identified that implementation of recommendations system is associated with occupational satisfaction.

The Second Sub-hypothesis
The second sub-hypothesis entitled the relationship between implementation of recommendation system and client service quality in Iran Telecommunication Company was raised for statistical sample with questions of 12, 13, 14 and 15 in questionnaire and this hypothesis was accepted after collecting the responses using Karl Pearson Chi test at error probability level of α=0.05. According to Tables (4) and (5), it was identified that implementation of recommendations system is associated with client service quality.

The Third Sub-hypothesis
The third sub-hypothesis entitled the relationship between implementation of recommendation system and problem solving improvement in Iran Telecommunication Company was raised for statistical sample with questions of 16, 17 and 18 in questionnaire and this hypothesis was accepted after collecting the responses using Karl Pearson Chi test at error probability level of α=0.05. According to Tables (6) and (7), it was identified that implementation of recommendations system is associated with problem solving improvement.

The Main Hypothesis
The main hypothesis entitled the relationship between implementation of recommendation system and Iran Telecommunication Company's employee performance was raised for statistical sample with questions of 1 and 2 in questionnaire (Appendix A) and this hypothesis was accepted after collecting the responses using Karl Pearson Chi test at error probability level of α=0.05. According to Tables (8) and (9), it was identified that implementation of recommendations system has effected on Iran Telecommunication Company's employee performance.

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Recommendations

1. Holding briefings, seminars, conferences and training courses for managers and supervisors in order to be aware of recommendation system advantages so that managers believe that employee can offer good recommendations through providing useful recommendations of employee and savings based on their recommendations.

2. Holding briefings for employee in order to learn how to submit recommendations as well as areas where they can recommend.

3. We must be aware of managers and supervisors attitudes towards their subordinates in order to implement recommendation system. If they view their subordinates as people who have their own ideas and thoughts, this system will be successful, but if assume them as passive and without thinking people, there will be no hope for system success. As a result, it is necessary to hold seminars and training courses for managers in order to change their attitude.

4. In organizations that have decided to implement the recommendation system, a very active process of responding to recommendation must be designed and implemented. This responding process must be in a manner that responses to recommendations are rational so that recommenders are satisfied with the answer as soon as possible.

5. As a response to recommendation can indicate acceptance or rejection of a recommendation, we must give reasonable answer to rejected recommendations and Executive Committee must be careful in responding to the recommendations.

6. Attention to provided recommendations by employee and fair and timely rewarding to accepted recommendations will be effective in increasing motivation.

7. Organizations must encourage employees to provide recommendations in their own domain.

8. Experts and knowledgeable persons must be used in order to evaluate the recommendations.

9. Recommendations must be evaluated easily, regulations and guidelines for payment of bonuses must be easily usable, evaluation and responding time must be short in order to have a successful system.

10. Good chances must be provided for employees to show their capabilities.

11. The organizations that intend to implement their recommendation system, and also have a significant client, receiving their recommendations can have a significant role in the increase of clients' satisfaction.

12. Customers and clients of organization must be assured by management that their recommendations are reviewed and suitable rewards will be given to executive recommendations.

13. Customers and clients must be aware of the fact that there is recommendation system in organization and advertising will be done locations of interest.

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