

## **A Study of the Impact of Implementing 5s on Efficiency and Effectiveness of Constabularies' Workers**

**Milad Aghaee**

*M.A. in Industrial Management*

**Asghar Aghaee**

*Assistant Professor, Department of Logistics, Police University, Teheran, Iran*

*\* Corresponding author, e-mail: milad.aghaee@ymail.com*

### **Introduction**

People always seek ways for improving and using optimally the current facilities which are available. KAIZEN is a Japanese expression which means improvement. In fact, KAIZEN is a continuous improvement which encompasses all people, managers and employees alike, and its philosophy is based on continuous improvement in lifestyle of human beings. Like an umbrella, KAIZEN encompasses all principles for moving to promotion and organizational excellence. 5s is one of these principles, which is an abbreviation for 5 Japanese values, including a set of standards and activities directed at creating a systemic, clean, enjoyable and creative environment. What causes 5s to be included in KAIZEN is implementation of changes and having small but continuous improvements; an improvement which keeps business in competition and helps increase the competitive power of the organization to perform effective and efficient improvements. This research aims to consider the impact of 5s on the efficiency and effectiveness of police forces. In other words, this research is based on considering the relationships between 5s and police force efficiency and effectiveness.

### **Material & Methods**

This research examines a new conceptual model using scientific resources. This is a practical research from the point of its goal. Also, it is a descriptive and survey research which considers the impact of one variable on other variables. So, two groups from two constabularies were selected and a special educational course was implemented relating to the main topic of the research (5s implementation) for workers of these constabularies. The data of research were

analyzed using SPSS software. Statistical society of this research include all employees in 134 and 140 of the Great Tehran Police Commanding Center. The volume of sample is selected by KOKRAN formula which is a sample volume determination technique. Totally, 132 individuals were chosen from police forces for considering the impacts of implementing independent variable on the dependent variable by random sampling technique. The questionnaire of this research is prepared by researchers by 31 questions for

measuring efficiency and 40 questions for measuring effectiveness. Formal Validity was obtained and the questionnaire's reliability was achieved through Alpha Cronbach technique using SPSS software.

### Discussion of Results & Conclusions

The results of the research show that significant level for two variables of efficiency and effectiveness is downer than 0.05; So,  $H_0$  is rejected (there is difference between police forces idea about the impacts of 5s implementation on the efficiency and effectiveness of police forces in constabularies). So, we can state that there is a significant difference between the ideas of police forces before and after education. On the other hand, because the average of ideas for the efficiency variable before education is 3.05, and it is increased to 4.05 after education, we can thus state that based on the technique we used in this research and the optimization which occurred to the average of employee's idea, 5s implementation leads to the improvement of efficiency and effectiveness. So, both of the hypotheses of this research are approved. It means that 5s implementation has a positive impact on efficiency and effectiveness of workers in police constabularies.

At the end, there are suggestions as follows:

Education is one of the principles and fundamentals of each approach. So, we suggest that it is useful to design the mechanism of capturing 5s abilities according to 5s thought and abilities in constabularies.

Implementing 5s approach as pilot studies in other constabularies for getting more exact information about the faults and problems of this approach.

**Keywords:** 5s, Efficiency, Effectiveness, Constabularies' Workers.

### References

- Azadivari, M. (2009) "*A Survey on Women Police Forces Efficiency in Mashhad*" MSC thesis of police, Police University.
- Aghaee, A. (2008) "*A Survey on IranKhodro Diesel from the Point of LTPM Fundamental Principles*." MSC thesis of Industrial Management, central Branch of Azad University.
- Aghaee, M. (2009) *5s management and super 5s activities engineering*. Tehran: Police Logistics Assistance.
- Aghaee, M. (2011) "*MCDM Approach to Optimized Maintenance Strategy in Iran Vehicle Production Industry*." MSC thesis of industrial management, IKIU University.
- Amouzadeh, A. (2000) "The Affections of Management Educations on the Police Managers and Commanders." MSC thesis of public management, Police University.
- Farahi, B. (2001) "Designing and Explanation of Manager's Development Model Based on Human Resource Management." PhD thesis of human resource management, Tehran University.
- Ebrahimi, H. A. (2000) "*A Survey on Management Style Affections on Tarbiat Modaress Forces Efficiency*." MSC thesis of public management, Tarbiat Modaress University.
- Isfahani, F. A. (1993) "*The Techniques of Increasing Efficiency in Staffs in Iran TV*." MSC Thesis of Public Management, Tehran University.
- Ebrahimi, H. A. (2000) "The Affections of Police Structure Change on the Performance of

- Police Stations in Rasht." MSC thesis of Boundari, Police University.
- Eghtedari, A. M. (1995) *Management Organization*, Tehran: University of Tehran.
- Eghtedari, M.R. (1999) *Management organization system and organizational behavior*, Tehran: University of Tehran.
- Isterby, S. Richard, A. (2005) *An Introduction to Management Study*, Tehran: Cultural Research Office.
- Jafarnejad, A. Faryabi, M. (2007) *Critical Principles of Production and Operation Management*. Tehran: Saffar Press.
- Khan Mokhtari, B (2010). *Introduction to Implementation and Maintenance of 5s in Work Place*, Tehran: Parian Press.
- Kazemi, A. (1994) "Designing Organizational Effectiveness with the Emphasis of Organizational Culture Criterion." Phd thesis of management, Theran University.
- Kivi, R. and Kampenhood, L. (2004) *Research method in social science*, Tehran: Toutia Press.
- Moto, B. (2005) *Quality improvement techniques in Japan with KAIZEN*. Tehran: Ardakan Press.
- Momeni, M. Ghayoumi, A. (2008) *Statistical Analysis Using SPSS*, Tehran: KetabeNo Press.
- Mir Sepasi, N (2000) *Human Resource Management and Work Relationships* Tehran: Mir Press.
- Sarmad, Z. et al. (2004) *Research Techniques in Behavioral Sciences*, Tehran: Agah Press.
- Tajziechi, F. (1996) "A Survey on Comparison between the Relationships of Job Satisfaction and Their Efficiency" MSC thesis of educational management, Allameh Tabatabaie University.
- Tesochia, K (2007) *Super 5s Activities Engineering in Organization*. Tehran: Iran's Education and Research Industrial Press.