

A Study: How Do Innovation and Effectiveness Correlate with the Employees' Performance?

¹Parviz Saeidy and ²Amir Hassan Susaraie

¹Aliabad Katoul Branch, Islamic Azad University, Aliabad Katoul Iran

²Master of Public Administration at Islamic Azad University, Aliabad Katoul, Iran

Abstract: Being qualitative-evaluative in terms of data collection, this study is meant to explore and inspect the correlation between innovation and effectiveness and the employees' performance at Iranian chipboard production industries in Gulistan province. After reviewing the related literature, parameters and factors affecting the correlation between innovation and effectiveness and the employees' performance were identified and extracted and then using a questionnaire prepared by the researcher the parameters extracted from the theoretical fundamentals were listed based on an initial framework. All employees of chipboard industries with a total number of 360 make the statistical population of the study, among which some 186 people were determined as samples using Krejcie and Morgan table. The results showed that there is a strong correlation between effectiveness and the employees' performance and a poor one between innovation and the employees' performance.

Key words: Innovation • Effectiveness • Employees' performance

INTRODUCTION

Any organization needs to be innovative and efficient to survive. Organizations wanting innovation and effectiveness will gradually be removed from the global competition stage. Today, innovative and efficient organizations have employees with enhanced performance. Any organization requires proficient employees to go innovative and achieve its pre-planned goals.

As organizations are usually huge, scattered at different areas doing different operations, measurements therein is not so easy a task on the whole. They follow different objectives and get different results. To evaluate and quantify the performance of an organization, several methods and parameters have been developed of which each makes a different measure of the effectiveness of that organization.

For an organization competing in a changing, unstable environment, innovation (development, communication and alteration of ideas and response to them) is considered to be a crucial factor through which the organization may grow, make achievement and survive. Globalization process accelerated competition for resources and the market, while organizations compete for such intangible assets as human resources.

Competitions for sales market have also been increased via offering products with new-fangled qualities (high performance). Individual innovation of the employees at work lays the foundation for any organization to improve its performance. So, checking this innovation for motivations and drivers involved is particularly important.

Innovation is defined as an activity aimed to develop, communicate and alter ideas while responding to new ones. Other scholars offered similar definitions indicating that innovation involves not only the conscious creation of new ideas, but also introducing and employing the same ideas and is meant to improve the organizational performance .

Understanding the objectives that organizations go for is of the first steps to be made understanding their effectiveness. These objectives have to reflect *raison d'être* of the organization and what it is going to achieve. Objectives have been defined as "future desired condition of the organization". Effectiveness of the organization means the degree or the extent to which the organization managed to achieve its projected objectives It has a general implication which implicitly involves many variables (at organization level and its bureaus). In determining the effectiveness of an organization, the extent that multiple objectives (formal or applied) has

been met by is evaluated or measured. Applied objectives are of the main objectives to be taken into account in this method. If applied objectives are preferred (to formal ones) for use, much better results will be obtained. As objectives mirror the management of an organization at top levels, the most useful information can be extracted from coalition between top managers of the organization. Schumpeter confirm innovation believing that it is a key factor in risky businesses. Majchrza *et al.* and Daneels claim that most of large organizations are able to get enormous organizational powers through innovation. Small companies, one the other hand, having limited resources may preserve some capacities via innovation projects assert that while large companies have inactive resources to compensate for losses, small ones are failed by risks intrinsic to new products. Large organizations mostly know on experience how to add to their organizational powers via innovation. Small companies, particularly novice ones, lack this organizational proficiency and pay attention to threats caused by innovation in that it is a risky or, at least, a temporary useless task

In addition, experimental studies repeatedly discussed the link between achievement and innovation. Researches undertaken describe achievement as innovation. To evaluate or measure the effectiveness of an organization using objective-based method, first its production objectives should be recognized and, then, the amount of the objectives met should be measured. This is a logical method as organizations constantly try to meet a certain level or extent of production, profit or customer's expectations.

On the importance of innovation, it can be argued that all achievements made by man lend themselves to innovation and finding new ways to accomplish tasks. Studying the history of scientific achievements, one may easily find out that great inventors like Bell, Morse, Colt, etc. managed to change the way of human life with their innovation. Academically, researches also revealed that innovation makes the common ground between science and technology (and creative ideas are the harbinger of all innovations).

Group creativity lays the starting point for innovation. In fact, creativity is assumed to be a necessary, but not unavoidably enough, condition for innovation. Scope of innovations has extended beyond product and service level to the level of organization and even of the society. That innovation at production environment acts as a function of uncertainty between

product and process, has always been the subject of the related literature. Prior studies indicate that innovation comes from great ideas revolutionizing companies and stirring up the markets. But most innovative companies make distinction between major (radical) and minor (gradual) innovations. [1-8]

In other words, commitment to minor innovations which occur gradually refers to the so-called continuous improvement or *Kiazen*. For continuous improvement to be effective, strategic objectives of the organization and those of the employees should be aligned. There are three approaches across industries which include structural, creative and dynamic approaches [9-15]

Methodology: The current research is an applied survey in terms of nature and objectives and, as regards data collection, a descriptive-correlative one. From among the tools available for data collection, library studies and questionnaires have been used in this research. Three questionnaires prepared by the researcher were applied. Questionnaire No. 1 deals with innovation, Questionnaire No. 2 with effectiveness and Questionnaire No. 3 with the employees' performance. Expert opinions on the issue were used to decide on the validity of the questionnaires. Similarly, Cronbach's alpha test was used to estimate the reliability and the following alpha values, indicating the strong reliability of the three questionnaires, were obtained: 0.932 for innovation questionnaire, 0.911 for effectiveness questionnaire and 0.83 for the employees' performance questionnaire. Pearson Correlation Coefficient Test was used for data analysis.

Testing First Hypothesis:

- H_0 : There is NOT significant correlation between innovation and the employees' performance.
- H_1 : There IS significant correlation between innovation and the employees' performance.

Table 1 explains Pearson Correlation Coefficient Test in which the first number, equal to 0.21, stands for correlation coefficient between the two variables involved; that is, innovation and the employees' performance. Therefore, correlation between innovation and the employees' performance is direct but poor. The second and the third numbers in the table indicate the level of significance ($1-0.04 = 0.96$) of the correlation coefficient obtained from the test and the number of the samples under study (186), respectively. Based on the

Table 1: Results of testing correlation between innovation and the employees' performance

Innovation	Employees' performance	Correlations	
.211*	1	Pearson Correlation	Employees' performance
.04		Sig. (2-tailed)	N
186	186		
1	.211*	Pearson Correlation	Innovation
186	.04	Sig. (2-tailed)	N
186			

Table 2: Results of testing correlation between effectiveness and the employees' performance

Innovation	Employees' performance	Correlations	
.881*	1	Pearson Correlation	Employees' performance
.021		Sig. (2-tailed)	N
186	186		
1	.881*	Pearson Correlation	Effectiveness
186	.021	Sig. (2-tailed)	N
186			

correlation coefficient value, it can be argued that there is no significant correlation between innovation and the employees' performance. It means that correlation between the employees' performance and innovation is direct but poor and thus H_0 hypothesis is confirmed.

Testing First Hypothesis:

H_0 : There is NOT significant correlation between effectiveness and the employees' performance.

H_1 : There is significant correlation between effectiveness and the employees' performance.

Table 2 explains Pearson Correlation Coefficient Test in which the first number, equal to 0.881, stands for correlation coefficient between the two variables involved; that is, effectiveness and the employees' performance; and, thus, correlation between organizational performance and productivity is direct and strong. The second and the third numbers in the table indicate the level of significance ($1 - 0.021 = 0.98$) of the correlation coefficient obtained from the test and the number of the samples under study (186), respectively. Based on the correlation coefficient value, it can be argued that there is a strong significant correlation between the employees' performance and effectiveness at chipboard industries. It means that H_1 hypothesis is confirmed. [16-24].

DISCUSSION AND CONCLUSION

Findings of the study proved that correlation between the employees' performance and innovation is direct but poor. In fact, development of ideas, products and services may not always result in improved performance of the employees; but rather, their participation is assumed to be of the factors leading to achievement. As confirmed by the previous studies, innovation comes from great ideas revolutionizing companies and stirring up the markets. The findings revealed that there should be a significant correlation by 99 percent between effectiveness and the employees' performance at chipboard industries. Strength of the correlation estimated at 88 percent was considered to be direct and strong.

Actually, organizations need to have employees with high performance to achieve their pre-planned objectives and turn into effective organizations. As a result, correlation between effectiveness and the employees' performance has been confirmed by the study.

Different studies on innovation dealt with the importance of this element for the achievement of organizations and their competitive position, made varied categorizations from different perspectives and obtained different results.

REFERENCES

1. Acs, Z.J. and D.B. Audretsch, 1988. Innovation in large and small firms: an empirical analysis. *American Economic Rev.*, 78(4): 678-690.
2. Allen, K., 2003. *Bringing new technology to market*, prentice Hall, Upper Saddle River. Nj.,
3. Amabile, T.M., 1996. *creativity in context*, West View Press.
4. Berggren, E. and T. Nacher, 2001. Introducing new products can be hazardous to your company: use the right new-solutions delivery tools. *Academy of Management. Executive*, 15(3): 92-101.
5. Bijker, W.F., T.P. Hughes and T. Pinch, Eds 1990. *the social construction of technological systems*. MIT press, Cambridge, MA, pp: 17-50.
6. Block, Z. and I. MacMillan, 1993. *Corporate Venturing*. Harvard Business Press, Cambridge, MA.
7. Crawford, C.M., 1987. New product failure rates - facts and fallacies. *Research Manage.*, 22(5): 9-13.
8. Danneels, E., 2002. The dynamics of product innovation and firm competences. *Strategic Management J.*, 23(12): 1095-1121.

9. Davidsson, P., 2004. *Researching Entrepreneurship*. Springer, Boston, MA.
10. Etzioni, P. *Modern organizations* and Gary D. Sander fun, 1983. Efficiency in social service organizations, "Administration and Society" 14: 44-68.
11. Gannon, Shaun, 2004. Innovation notes continuous improvement. University of Brighton center, New Letter, pp: 3.
12. James L. Price, 1972. The study of organizational effectiveness, the Sociological Quarterly. 13: 3-75.
13. Janssen, O., E. Van de vliert and M. West, 2004. The bright and dark sides of individual and group innovation : a special issue introduction, J. Organizational Behavior, 25: 2 .
14. Johannes M. Pennings and Pauls. Good man, "Toward a workable frame work", in pauls. Goodman, Joohannes M. Pennings, etal. *New perspectives on-organizational effectiveness(Dsn Gtsnvivo: Jossey-Bass,1979)*, pp: 152.
15. Kuaiak anderew, 2005. *Innovation science: A primer*. the university of Iowa, Iowa City, IA.
16. Li, H. and K. Atuahene-Gima, 2001. Product innovation strategy and the performance of new technology ventures in China. *Academy of Management J.*, 44: 6.
17. Majchrzak, A., L.P. Cooper and O.E. Neece, 2004. Knowledge reuse for innovation. *Management Sci.*, 50(2): 174-188.
18. Nohria, N. and R. Gulati, 1996. Is slack good or bad for innovation? *Academy of Management J.*, 39(5): 1245-1264.
19. Nooteboom, B., 1994. Innovation and diffusion in small firms: theory and evidence. *Small Business Economics*, 6(5): 327-347.
20. Piscataway, NJ.
21. Richard H. Hall and Johnp. Clarek, 1980. "An Ineffective Effectiveness study and some suggestions for future research", the sociological Quarterly, 21: 119-34.
22. Schumpeter, J.A., 1982. *The Theory of Economic Development: an Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*. Transaction Publishers.
23. Scott, S.G. and R.A. Bruse, 1994. Determinants of innovative behavior: a path model of individual innovation in the work place, *Acade My of Management J.*, 37: 3.
24. Vossen, R.W., 1998. Relative strengths and weaknesses of small firms in innovation. *International Small Business J.*, 16(3): 88-94.