The Relationship between Quantum Management and Organizational Agility in Ministry of Roads and Urban Development of Golestan Province, Iran

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Citation: Sazesh, A. and Siadat, S. A. (2018). The Relationship between Quantum Management and Organizational Agility in Ministry of Roads and Urban Development of Golestan Province, Iran. Dutch Journal of Finance and Management, 2(2), 51. https://doi.org/10.29333/djfm/5827

Published: September 7, 2018

ABSTRACT

This study examined the relationship between quantum management and organizational agility in Ministry of Roads and Urban Development of Golestan province, Iran. It was a correlation-descriptive study and the statistical population was all employees of the Ministry of Roads and Urban Development Office of Golestan province, Iran in 2014. 166 individuals were selected as the sample and finally 154 questionnaires were analyzed. Data was analyzed using correlation and regression analysis. The results indicated that there was a significant positive relationship between the quantum management and organizational agility except quantum sense in the Ministry of Roads and Urban Development of Golestan province, Iran. Based on regression analysis, the organizational agility was affected by quantum management and if the managers of the Ministry of Roads and Urban Development of Golestan province, Iran use the quantum managing, it can be predicted that the organizational agility will be increased.

Keywords: organizational agility, improved performance, strategy

INTRODUCTION

The current period of human life is an amazing transformation. Organizations as a subset of human life should be ready for their survival and development in the face of such great developments; otherwise, they will wheel out of a competitive world. The purpose of this preparation is not the preparation technology and equipment, but the employees of the main assets and valuable preparation. In the new world organization, the organization must continually and constantly change and can maintain its competitive and traditional principles of organization, such as bureaucracy do not have a position of command and control. Bureaucratic control strategies based on the implementation of the rules, regulations, instructions, hierarchy of authority and standardization activities for the homogenization of employee behaviors are ineffective and human resources for the development of their talents and creativity needs freedom to be able to their potential and their organizations to solve problems (Abdolahi and Naveh-ebrahim, 2006). In such circumstances, managers do not have much opportunity to control staff and must spend most of your time and energy identifying the internal and external environment and other daily tasks of their staff’s. So, they should apply management practices that have the greatest efficiency for the organization. The agility among the staffs can be important in the trend of growing. Agility is the ability of the organization to change and opportunities that can be exploited on the basis of the changes. The agile organization is an organization that can change and adapt to environmental changes such as a successful strategy (Molahoseyni and Mostafavi, 2007).
Goldman et al believed that the organizational agility was to give value to the customer, ready to deal with the changes, according to the skills and build partnerships in the staff (Ebrahimian-jelodar and Jelodar, 2011). Thus, this study seeks to answer the question whether there was a relationship between the quantum management and organizational agility in the Ministry of Roads and Urban Development of Golestan province, Iran.

**METHODOLOGY**

It was a correlation-descriptive study and the statistical population was all employees of the Ministry of Roads and Urban Development of Golestan province, Iran in 2014 who were 295 individuals and among them 166 individuals were selected randomly as the sample based on Morgan table and finally 154 questionnaires were analyzed. The independent variable was quantum management and the dependent variable was organizational agility. The study was performed on the stage after the presentation of introductory remarks on measuring and purpose of the test and how to respond to tests were explained in detail for participants. For the ethical considerations, after obtaining the consent of the people and the necessary knowledge, they were assured that the information will be used only to this study and will be protected from any misuse. To measure the variables, questionnaires were used as follows:

**Quantum Management Questionnaire:** This questionnaire has 21 questions and was provided by the researcher with Likert five scales options of (strongly agree, agree, no comment, disagree and strongly disagree) which scored 5-4-3-2- 1. The questionnaire has been developed based on seven factors to describe quantum (the ability to see the target), quantum thinking (the ability to think in a manner inconsistent), quantum sense (the ability to feel alive and life-giving), quantum cognition (the ability to know the creative and intuitive way), quantum action (ability to act in a responsible manner), the quantum existence (ability to communicate consistently), and quantum trust (the ability to trust the process of life) (Aghababayi, 2014). The distribution of the questionnaire based on quantum management component of the study is presented in Table 1.

In this study, the validity was assessed and the validity of the questionnaire was calculated 0.71 based on Kendall coefficient, indicating the appropriate validity. In this study, to assess the reliability of the questionnaire after conducting a preliminary study to determine the variance of the questions were calculated 0.84 based on Cronbach’s alpha coefficient.

**Organizational agility questionnaire:** this questionnaire was prepared by Worley and Lawler (2010). This questionnaire consists of three components: strong strategy, adaptable organizational design and leadership and common identity, and 30 closed questions were dedicated for the whole Likert five points (very high - high – partly- low - very low), which received the score of 5-4-3-2-1. The distribution of the questionnaire by the components is presented in Table 2.

Concurrent validity of the organizational agility questionnaire by Worley and Lawler (2010) was 71.0 and its reliability was reported 0.82. In the present study to assess the reliability of the questionnaire, after a preliminary study to determine the variance of questions, Cronbach’s alpha coefficient was calculated by the ratio was 0.86 (Ebrahimian-jelodar, 2011). Correlation and regression analysis were used to analyze the data. In all analyzes, the significance level was considered p <0.05.

| Component             | The number of questions | Questions | Reliability |
|-----------------------|-------------------------|-----------|-------------|
| Quantum View          | 3                       | 1-2-3     | 0.80        |
| Quantum Thinking      | 3                       | 4-5-6     | 0.86        |
| Quantum sense         | 3                       | 7-8-9     | 0.88        |
| Quantum cognition     | 3                       | 10-11-12  | 0.82        |
| Quantum action        | 3                       | 13-14-15  | 0.84        |
| Quantum trust         | 3                       | 16-17-18  | 0.80        |
| Quantum existence     | 3                       | 19-20-21  | 0.84        |
| Total                 |                         |           | 0.84        |

| Component                        | Questions numbers | Question | Reliability |
|----------------------------------|-------------------|----------|-------------|
| High strategy                    | 9                 | 1 to 9   | 0.84        |
| adaptable organizational design  | 10                | 10 to 19 | 0.80        |
| leadership and common identity   | 11                | 20 to 30 | 0.88        |
| Total                            |                   |          | 0.86        |
The aim of this study was to investigate the relationship between quantum management and organizational agility in Ministry of Roads and Urban Development of Golestan province, Iran. The results showed that there was a significant and positive relationship between the quantum management and the scale of it with the organizational agility in Ministry of Roads and Urban Development of Golestan province, Iran. Based on the regression analysis, organizational agility was affected by quantum management and if the managers of the Ministry of Roads and Urban Development of Golestan province, Iran use components of quantum management, it can be predicted that the organizational agility of the employees will be increased. So, to build a regression equation, organizational agility of employees in the quantum management should be considered. The coefficient of determination showed that 0.24 of the organizational agility’s scores was affected by quantum management.

The relationship between the scales of the quantum management and organizational agility has been studied. The results showed that the entire following scales of quantum management except quantum sense had significant and positive relationship with organizational agility (Table 4).

### RESULTS

The results of Kolmogorov–Smirnov showed the normal distribution of data ($p>0.05$). The relationship between quantum management and organizational agility were examined using Pearson correlation. The results showed a positive and significant relationship between these two variables ($r = 0.12$, $p<0.001$). The results of regression analysis are presented in Table 3. According to the results, organizational agility is affected by quantum management and if the managers of Ministry of Roads and Urban Development of Golestan province, Iran use components of quantum management, it can be predicted that the organizational agility of the employees will be increased. So, to build a regression equation, organizational agility of employees in the quantum management should be considered. The coefficient of determination showed that 0.24 of the organizational agility’s scores was affected by quantum management.

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### DISCUSSION AND CONCLUSION

The aim of this study was to investigate the relationship between quantum management and organizational agility in Ministry of Roads and Urban Development of Golestan province, Iran. The results showed that there was a significant and positive relationship between the quantum management and the scale of it with the organizational agility in Ministry of Roads and Urban Development of Golestan province, Iran. Based on the regression analysis, organizational agility was affected by the quantum management and if the managers of the Ministry of Roads and Urban Development of Golestan province, Iran use the components of quantum management, it can be predicted that the organizational agility of employees will increase. The findings of this research were consistent with the results of Taghipour (2013), Aghababai (2013), Khosravi et al (2012), Naami and Pirayi (2011), Ghayour and Golestan (2011), Mokhtari (2008), Salanova et al (2014 ), Chabrak (2014), Breu et al (2013), Hopp and Van oyen (2013), Plonka (2013), Oxin (2012), Sumukadas and Sawhney (2012). Quantum management skills are rooted in the scientific point of view new management, that the world as a complex system, live communication, and the clause has been introduced instead of the machinations and time; these skills face the twenty-first century organizations and especially professionals considered the need to become leaders in the development of quantum thinking, they need to discover their mental models and then test them with new knowledge and the ability to achieve business and organizational. Presenters can also develop new and innovative scientific approaches to conflict resolution and make the introduction. Team building activities are not always true. Peace is not always desirable. Creating a slight imbalance is the characteristics and requirements of the 21st century. As administrators of the organization and operations managers and learn skills, they change the work environment static quantum organizations, dynamic and flexible work. Organizations that are in the era of chaos, creative, transformational power of quantum are ready for use so that they can create enthusiasm high job on the staff, followed by the agility of the organization strengthened (Debal, 2003). Thus, quantum management as a new management style has the ability to familiarize employees with new job knowledge and using effective strategies to increase the enthusiasm for their job, followed by the agility of its positive effects. According to the results to senior management and the Ministry of Roads and Urban Development of Golestan province, Iran, it is recommended in the form of

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**Table 3.** The results of regression to predict organizational agility on quantum management

| Source          | Non-standard coefficient Beta | SD | Regression coefficient t | The coefficient of determination | Sig. |
|-----------------|-------------------------------|----|--------------------------|----------------------------------|------|
| organizational   | 0.11                          | 0.03| 0.27                     | 3.55                             | 0.24 | 0.001 |

**Table 4.** The correlation between the variables

| organizational   | Quantum View | Quantum Thinking | Quantum sense | Quantum cognition | Quantum action | Quantum existence | Quantum trust |
|------------------|--------------|------------------|---------------|-------------------|----------------|--------------------|---------------|
| agility          | r            | 0.17             | 0.45          | 0.12              | 0.32           | 0.3                | 0.28          | 0.18         |
|                  | p            | 0.03             | 0.001         | 0.15              | 0.001          | 0.001              | 0.001         | 0.02         |
workshops to all staff training to maintain and fertile organizational agility is hereby directors also proposes that the authorization be done consciously to personnel with the knowledge and agility so that organizations be maintained.

REFERENCES

Abdolahi, B. and Nave-ebrahim, A. R. (2006). Employee empowerment golden key human resource management. Tehran: Nation.

Breu, K., Hemingsway, C. J., Strathern, M. and Bridger, D. (2013). Workforce agility: the new employee strategy for the knowledge economy. Journal of Information Technology, 17(1), 21-31. https://doi.org/10.1080/02683960110132070

Chabrak, H. (2014). Assessment and management of organizational change and job enthusiasm. Journal of Sustainable Organizations, 12(2), 123-131.

Debal, E. L. (2003). Self-determination in a work organization. Journal of Applied Psychology, 74, 580-590. https://doi.org/10.1037.0021-9010.74.4.580

Dijkstra, T. M., Dierendonck, D., Evers, A. and De Dreuw Carsten, K. W. (2005). Conflict and well-being at work: the moderating role of personality. Journal of Managerial psychology, 20(2), 87-104. https://doi.org/10.1108/02683940510579740

Ebrahimian-jelodar, S. Y. and Jelodar, S. M. (2011). Organizational agility: Speed responsiveness and organizational flexibility. Police Human Development Magazine, 39, 13-34.

Ghayur, A. and Golestan, S. (2011). Quantum management approach learning organization at the University of Mashhad Imam Reza. Ferdosi magazine, 15(5), 68-82.

Hopp, W. J. and Van Oyen, M. P. (2013). Agile Workforce evaluation: a framework work for cross-training and Coordination. IIE Transactions, 36(10), 919-940. https://doi.org/10.1080/07408170490487759

Khosravi, A., Abtahi, S. H., Ahmadi, R. and Salimi, H. (2012). Factors enabling agility manpower Delphi electronics industries. Quarterly improve the management, 6(4,18), 129-153.

Mokhtari, E. (2008). Analysis of the application of quantum management in nursing leadership. M.Sc Thesis. Tehran University.

Molahoseyni, A. and Mostafavi, S. H. (2007). Assessing organizational agility by using fuzzy logic. Monthly management, the eighteenth year, 18(186), 3-5.

Naami, A. Z. and Pirayi, S. (2011). The relationship between job motivation and determination to work with enthusiasm. Journal of career counseling organizations, 3(9), 23-41.

Plonka, F. S. (2013). Developing a lean and agile work force. Human factors and Ergonomics in Manufacturing. 7(1), 11-20. https://doi.org/10.1002/(SICI)1520-6564(1997247:1<11::AID-HFM2>3.0.CO;2-J

Salanova, M., Leorens, S., Peiro, J. M. and Schaufeli, W. B. (2014). The mediating role of job engagement. Journal of managerial psychology, 27, 600-619.

Sumukadas, N. and Sawhney, R. (2012). Job engagement, Leadership and Workforce agility through employee involvement. IIE Transaction, 36(10), 1011-1021. https://doi.org/10.1080/07408170490500997

Taghipour, A. (2013). Designed to fit the model of the causal relationship between organizational culture and job engagement, job motivation and innovative practices with a master’s Kramshakhty. M.Sc thesis. Shahid Chamran University.