



# The relationship between managers' risk ability and organizational innovation in port headquarters and maritime of Hormozgan

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**Abstract:** The aim of this study is to evaluate the relationship between managers' risk ability and organizational innovation in port headquarters and maritime of Hormozgan. Methodology of this study is descriptive – correlational type and statistics population of this study includes all of employees (700 people) and managers (46 people) of port headquarters and maritime of Hormozgan that statistical sampling was used for managers and simple random was used for employees. Organizational innovation questionnaire with reliability of 0/96 and viability of 0/89 and risk ability with reliability of 0/89 and viability of 0/89 were used to collect data. Pearson and Spearman correlation coefficient and multi-variation regression were used. Results showed that there is a direct and meaningful relationship between managers' risk ability and organizational innovation in port headquarters and maritime of Hormozgan. There is a direct and meaningful relationship between understood risk and relational risk of managers and organizational innovation. Relational risk of managers is the most important predictor of organizational innovation.

**Keywords:** risk ability, managers, organizational innovation

## INTRODUCTION

Development and speed of changes in all over the world caused that creativity to become important further than before; countries can adapt themselves with new conditions just by innovation and go on along with alterations. Naturally, some organizations are more successful in the competition with others in present complex world that could use from going-on opportunity in the best way (Mohammadi, 2005: 11).

Creative and innovative organizations are some organizations that follow features in terms of structure, culture and human resources: structure could have an effect on innovation positively in terms of structural dimension. Some organizations which have organic structure, have developed in horizontal level in terms of more organizational hierarchy, work is less formal and making decision is decentralized, so, organization has more adaption and flexibility and can accept innovation and make himself adapt with them. Secondly, they have similarity to cultural innovator organizations in terms of culture, encourage them to experience, and compensate both the success and failure, get experience from mistakes, accept ambiguity, be patient in impractical cases, have less external controls, be patient in risky works, be patient in conflicts, rely on results more than problems and also be in reaction with environment seriously and reply rapidly to environment requirements. In third dimension, human resources innovator organizations act in terms of human resources development actively, provide high job security for their employees, teach others to be changeable and support new thinking providers (Safari, 2011: 61). Herrmann model (2006: 23) is used for organization innovation in this study. He states three dimensions for organizational innovation which include manufacturing innovation, process innovation and administrative innovation.

So, innovation accounts as one of the main advantages for company's life with complexity and competition by development. All of the organizations require new and innovative ideas to survive. New and innovative ideas are blown like a spirit in organization body and save it from inexistence and annihilation. Innovation appearance not only enables organizations to gain competitive advantage than competitors, but also provides a usable tool to promote organization success (Dehghan Najm, 2009: 48). Managers' risk ability is one of factors that can cause to provide new and creative ideas in organization.

It seems that different evolution in all cultural, political, social and other domains are owe those have risk power; because they have the audacity and courage and are threatened, and step forward the unknown world and this is how they are doing new discoveries and create many changes in the society (Mousavian et al., 2009: 110).

Willemon and Cicero (1970) categorize risk into two groups. One risk that refers to managers and other is professional risks. Managers Risk is uncertainty to achieve the objectives due to the time and cost by desired quality. Professional Risk refers to uncertainty to the future success and progress in work and in most cases is not paid much attention to this risk. "Managers are hired to create event" and managers are successful in this task that have more creativity. Mac Kland believes that risk-taking is a feature of Creative and Producer Economy Director (according to Asghari et al., 2007: 74).

Andrews (2008) is divided organization risk managers into two types relational and perceived risk power in a general division. Risk power is one of discussed topics in today's life, especially in economic activities. In terms of social conventions, people who are creative and known as entrepreneurs and inventive, are with a high percentage of risk (according to Mansour, 2013: 45). Perceived risk is a topic assessment that a person makes sense according to the probability of damage caused by a decision or an action and cannot be real. In other words, in fact it is the perceived risk that is effective on options assessment and decisions in relations management. The relational risk means the probability of damage due to lack of full commitment of both parties in a relationship (Das TK, Teng, 2001: 83).

Risk has merit in every area that one of these areas is trade and the ports of the country due to the economic and commercial importance in these contexts. Reasons for the existence of risks in ports can be justified by type of operation. Because harbors' transit on one hand, and business assets which are responsible for them on the other hand, carry out their trade and transport using these funds. It can be said that scientific and good management of imported or exported products can be one of the most important factors for the success of ports and maritime of country. On the other hand, critical success factors in managers' decision making is accounted into risk and uncertainty (Fartookzadeh and God, 2010: 159), so risk managers of ports and seafaring are of great significance.

Saleh and Wang (2015) showed that the reward system is an appropriate tool to strengthen favorable innovation and the development behaviors in the organization. They showed that rewards in an innovative organization are awarded to factors such as risk-taking, willingness to change, openness and information sharing. Lee (2008) in a study concluded that risk appetite and the average risk strength in the organization and, especially perceived risk have a direct relationship with organizational innovation. But risk without proper management and in a high level result in innovation reduction and effectiveness in the organization. Williamson (1991: 81) in his study concluded that there is a relationship between relational risk managers and organization innovation in large companies.

Mousavi Shahroudi et al. (2010) performed a study entitled "The role of risk management in increasing the effectiveness of creativity, innovation and entrepreneurship in the organization". The results showed that creative, innovative and entrepreneurial people convert achievements to opportunities by risk aptitude. Identify and manage risk is one of the new approaches to management, that can be used to strengthen, promote effectiveness and organizational innovation. Siadat and colleagues (2013) performed a study titled "Iranian organizations to identify variables affecting the realization of innovation and strategies for its development". The results showed that the most important factors affecting organizational innovation is risk taking, flex, creativity, confidence, tolerance for ambiguity, a young creative staff and organizational support of the creative staff, issues of motivation, delegating to staff, valuable counting staff, creating flexibility and performance evaluation system reform, reward good practices, organizational culture supportive of innovation

to create a support structure, organizational support, transformational leadership style, organizational trust, social capital, corporate communications, management style, learning organizational and intellectual capital.

To clarify certain aspects of the subject, a point that is still in mystery about the risk of social and psychological sociology is why the risk is not the same people and managers in different organizations? And whether managers who have higher risk, have more effective organizations or vice versa? Since each organization is committed to innovation to achieve its goals, and organizations that do not have enough innovation, act traditionally even in the performance of the duties. One of the features of the personality of the manager who can make a difference in organization is the risk power of the manager, however, this assumption should be based on a field research study to decide whether certain high risk managers will be more innovative in the organization or not. The basic question of this study is whether there is a relationship between risk management research and innovation in general offices and ports seafaring of Hormozgan province.

### Methodology

The research is descriptive research in which correlational method is used. The study consisted of all employees (700) and managers (46 people), General Directorate of Ports and Sailing province in 2014 that their number is 746 people. The sample size according to Cochran model is for the sample of 248 employees who were selected by simple random sampling. A sample of 46 managers was selected by Census method. In this study, two questionnaires were used that organizational innovation has 28 questions with components of product innovation, organizational innovation, process innovation and administrative innovation and reliability of 96/0 and validity of 89/0 and another questionnaire contains 13 questions to take risks with power components and power relationship risk of perceived risk and 89/0 and 89/0 reliability validity respectivel. Data were collected were analyzed using software with Pearson's correlation coefficient and multiple regression spss20.

### Findings

Descriptive statistics of variables are shown in Table 1 (Table 1).

Table 1. Mean and standard deviation of variables

Variable	Mean	Standards deviation
Organizational innovation	111/71	11/85
Producer innovation	40/26	4/974
Process innovation	35/59	3/980
Administrative innovation	35/85	4/324
Risk	40/08	8/591
Perceived risk	19/71	5/113
Relational Risk	20/36	4/113

Table 2: Pearson correlation test statistics relating to the relationship between risk managers (perceived risk, correlation risk) and innovation

Variable	Organizational innovation		
Test	Pearson	Meaningful	$r^2$
Managers risk	0/204	0/001	0/042
Perceived risk	0/144	0/023	0/021
Relational risk	0/228	0/001	0/052

Data analysis shows that Pearson's correlation coefficient test between risk-taking and innovation managers to 204/0 with p- value (significantly) less than 001/0 and 05/0 is smaller than the significance level, as a result, there is a significant correlation between the risk management and innovation in the General Directorate of Ports and Sailing of Hormozgan province. Pearson's correlation coefficient test is between perceived risk and innovation is equal to 144/0 with p- value (significantly) 023/0 and 05/0 smaller than the significance level, as a result, there is a significant and direct correlation between perceived risk managers and Innovation Directorate General of Ports and Sailing of Hormozgan province. Pearson's correlation coefficient test is a relationship between risk and innovation to 228/0 with p- value (significantly) less than 001/0 and 05/0 is smaller than the significance level, as a result there is a significant correlation between risk management and innovation in the General Directorate of Ports and Sailing of Hormozgan province. According to the results of  $r^2$ , it can be said that 4.2 percent of changes in organizational innovation is justified by risk managers. 1.2% Changes in organizational innovation is justified by the perceived risk managers. 2.5% Changes in organizational innovation is justified by the risk of relationship managers (Table 2).

Table 3: coefficients of the regression and analysis of variance model relationship between perceived risk and risk management and organizational innovation

Changes references	sum squares	ofDegree freedom	ofMean squares	of R	$R^2_{adj}$	Amount of F	sig
Regression	1832/59	2	916/29				
Remain	32885/65	245	134/22	0/230	0/045	6/82	0/001
Total	34718/24	247	-				

  

variable	estimation of B	□cale error	standard of B	estimation amount of t	p -sig
Constant	101/757	3/732	-	27/268	0/001
Perceived risk	-0/138	0/268	-0/047	-0/516	0/607
Relational risk	0/620	0/216	0/262	2/876	0/004

Since the p value calculated from test (001/0) 05/0 is less than significant level, therefore, at this level,  $H_0$  is rejected, and as a result, a linear regression model is significant, it means there is a significant linear relationship between risk perception and risk management and organizational innovation. According to calculated p value, the test of regression coefficients  $H_0^2$  (risk relationship), in the 05/0 rule, so the risk relationship managers of organizational innovation can be traced, but the perceived risk managers cannot be

predicted significant organizational innovation and the most important predictor of organizational innovation, risk managers association (Table 3).

### Discussion and conclusion

The results showed that there is a significant relationship between risk managers and organizational innovation. These results are consistent with findings of Siadat et al. (2013) which showed that the most important factors affecting aligned on organizational innovation are risk-taking, flexibility and creativity. The results are matched with research findings of Wang (2015) and Mousavi Shahroudi et al. (2010) showed that one of the new approaches to management to strengthen risk management, effectiveness and innovation organizations. So we can say that if managers have the strategic thinking and quick thinking to understand the appropriate strategies and methods will be able to achieve the goals of the organization and use appropriate guidance. Managers, who are competent, benefit from professional abilities and skills, have stronger incentives to solve current issues, accept more responsibility, and ultimately, are caused to improve the productivity in the organization. Director is one of the most important factors for change in the organization and realization of the desired goals. In fact, if we don't have creative, knowledge workers, opportunity recognition and explanation of issues managers, we will lose lots of opportunities. Accordingly, managers who have a high risk appetite, will have ability to meet the needs of employees, to improve the organization and its success, delivering new products and innovation.

It can be said when Power Manager is trading and taking macro risks in the action and making sure the right decision, organizations in terms of the hierarchy are more widespread in the horizontal plane, things are less formal and decision-making is decentralized, the organization becomes more flexible and adaptable and can more easily accept innovation they adapt by themselves. Based on managers who have high power of risk on evaluation of options and making decisions, organizations will take new decisions on new and improved ways of delivering services staff productivity and improve organizational performance.

The results of the research findings are matched with citing Mousavi et al. (2010) and Williamson (1991) that showed there is a significant relationship between risk managers and business effectiveness and organizational innovation in large companies. So we can say that when the risk of Institutional Relations and Power Manager have the authority to colleagues, the organization rewards the successes and failures, gets the experience gained from their mistakes, accepts ambiguity, in practical affairs is patient, external controls are little clement are at stake, the patient is entitled, more test results from the means are insisted and to engage seriously is insisted and quickly responds to needs are provided. The managers who are at high risk of Institutional Relations and Participation in the new deputies in new decisions, organization creates open space, experiment, take risks and above all constructive cooperation and challenges for change and innovation will create organizational units.

According to the results of Directors, encouraging and creating risks to the organization and eliminating the atmosphere of risk aversion are recommended. Managers suggested that having new ideas with the organization, can create high development and innovation. High risk managers through evaluating options and having decision-making power in the organization, make new decisions in the field of new and improved methods of service delivery, employee productivity and improve organizational performance. Managers make risk in institutional relations and participate in decision-new deputies to create the risks and challenges of constructive partnership for change and innovation in organizational units. Based on these findings, we can say that Iranian organizations have to develop cultural innovation, infrastructure, macroeconomic, social contexts, organizational support, laws and regulations in support of innovation, research and risk appetite cores provided in the organization as organizations move toward innovation.

### References

1. Asghari, M. Khansari, R, Siahkar Zadeh, M, S, 2007, Credit risk portfolio model and infrastructure for their application in the banking industry, First International Congress on Risk Management.
2. Dehghan Najm, Mansour (2009). Knowledge management and its role in organizational innovation. Engineering and related industries, Volume 1, Issue 18: 52-47.

3. Siadat, Seyed Ali; Choupani, Heidar; Kazem Pour, Maryam; Maleki Hasan Vand, Moslem (2013). Identify factors affecting the realization of innovation in Iranian organizations and strategies for its development, initiative and creativity in the humanities journal, Volume 3, Issue 1, Pages 71 -110
4. Safari, S, Tond Nevis, F, Hadawi, F, 2011, the relationship between organizational structure and innovation experts working in Iran Physical Education Organization. Our research and motor behavior (movement Science), (9) (11) (s 17)): 53-62.
5. Fartouk Zadeh, H, R, Elahi, M. 2010, Identifying and prioritizing strategic risks in the banking case study of Bank Mellat, the Islamic Economics Research Journal, Volume 10, Number 37, Ss147-172.
6. Mohammadi, N, 2005, creativity in management. Tadbir Monthly, (161) 19, 7-11.
7. Mansouri, Kh. 2013. Risk in the life of Islam.
8. Mousavi Shahroudi, Seyed Mohammad; Amery, Majid, Mahmoudi, Narges (2010). The role of risk management in increasing the effectiveness of creativity, innovation and entrepreneurship in the organization, Shiraz, First International Conference on Management and Innovation,
9. Mousavian A, Mousavi Bioki M. 2009. Credit Risk Management in Islamic Banking through credit default swaps. Islamic Economics, No. 33: 95-126.
10. Andrews L, Boyle M. 2008. Consumers' accounts of perceived risk online and the influence of communication sources", Qualitative market Reaearch: An International Journal, 11 1: 59-75.
11. Das TK, Teng B.S. 2001. Trust, Control and Risk in Strategic Alliances. Organization Studies, 22,251-83.
12. Lee, Y. (2008). An investigation and critique of competencies needed by human resource development (HRD). Unpublished doctoral dissertation, Department of Educational Leadership and Policy Studies.
13. Saleh, S.D. and Wang, C.K. (2015), "The management of innovation: strategy, structure and organizational climate", IEEE *Transactions on Engineering Management*, (40) 1, 497-510
14. Williamson OE. 1991. Strategizing, Economizing, and Economic Organization. Strategic Management Journal,12,75-94.