

Original Article (Quantified)

# Examining the effect of knowledge-based leadership on organizational innovation with the mediating role of illusion of control and rationality

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**Abstract**

The aim of this study is to understand the effect of the variable of knowledge-based leadership on organizational innovation in Sepah Bank after the merger. A descriptive-applicable research model was used in this study, its method was survey, and the statistical population was 110 managers and experts of Sepah Bank headquarters after the merger. The required sample size was selected by simple random sampling method, consisted of 87 people through Morgan table; data was selected and collected from a researcher-made questionnaire, and Likert scale was used for measurement. The statistical method used in this study was the structural modeling method based on the partial least squares approach and Smart PLS3 software. The defined hypotheses were tested and the mutual relationship between knowledge-based leadership, illusion of control, and rationality on innovation was examined. The research findings indicate that with a confidence interval of 95% and path coefficients greater than 0.4, the effect size for all independent constructs on dependent constructs is strong, and knowledge-based leadership can lead to rationality and knowledge in the organization, and if environmental signals are not paid attention to, knowledge-based leadership creates an illusion of control in the organization; and if the illusion of control is managed in the organization and knowledge-based leadership is strengthened in the organization, the organization is on the path to innovation.

**Keywords:**

Knowledge-based leadership,  
Illusion of control,  
Innovation,  
Rationality

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## Extended abstract

### Introduction

In today's world with a completely complex and dynamic environment, organizations need to design and implement strategies that can be used to improve their performance. The requirements that have emerged in the management literature, such as the necessities of leadership in the knowledge age and the fundamental change in approaches to organizational leadership, make it necessary to go beyond traditional perspectives. Although until recently, the discussion about knowledge management was an interesting topic in the center of thought; today knowledge-based leadership has attracted the attention of active thinkers in the field of management (Homayounfar et al, 2023). According to many researchers, a wide range of thematic literature explains the importance of knowledge-based leadership and knowledge management, and the role it plays in the competitiveness of large enterprises and small and medium-sized organizations. Organizational knowledge management capacity is rapidly becoming a vital executive skill of this era. Knowledge-based leadership is considered to be the driver of the relationship between the components of intellectual capital management of the organization, and many researchers consider intellectual capital to be the most important strategic asset in evaluating organizational performance. Therefore, contemporary management researchers often believe that the acquisition of new knowledge depends on the evolution of leadership activities, and adapts to changing organizational conditions (Safar Mohammadlou et al, 2022).

Langer believes that leaders are forced to know what needs to be done for the common benefits, and that management must have a higher purpose and ask whether their decisions are good for society as well as for their company; approaches very different from past models. Therefore, rationality enables individuals and social communities to learn and behave well in specific situations in order to achieve a common advantage, without the need to consider or even pretend to be in those situations. When individuals are exposed to the empowerment bias, they feel that they have more control over their environment than they actually do (Bélanger et al, 2018). Therefore, a very important question that arises is: by mediating the two variables of illusion of control and rationality, can knowledge-based leadership affect organizational innovation?

### Theoretical Framework

#### Knowledge-Based Leadership

Knowledge-based leadership means guiding people through a knowledge channel; that is, organizational leaders must guide knowledge workers to learn and use knowledge and ultimately achieve overall knowledge-related goals (Qalich Lee et al, 2020).

#### Illusion of Control

"Illusion of Control" is defined as the expectation of the probability of personal success higher than the objective probability. Illusion is defined in many sources as a kind of distortion in the senses and perceptual abilities; a strong tendency for people to believe that their activities cause things to happen, even if they have no influence on them. (Kim et al, 2014).

#### Rationality

Reason (wisdom) is defined as knowledge obtained by having many experiences in life. On the other hand, it considers knowledge as information, understanding or skill obtained from experience or education or awareness of something, and speaks of reason as insight. The word epistemology is a word derived from two ancient Greek words, namely "epistem" meaning knowledge and "logy" meaning speech or theory. The word "epistem" has been translated into English as "knowledge" and in Arabic as "science". Defining knowledge management, like knowledge itself, is difficult. Theoretical insights on how to manage knowledge are available

from several disciplines such as economics, philosophy and epistemology, computer science, and sociology (Chang et al., 2015).

### **Innovation**

In contemporary organizational studies, innovation is considered a panacea for organizational survival. Therefore, it seems that pursuing practical wisdom to improve organizational innovation performance is essential for the sustainability of organizational competition (Ding et al, 2019).

Homayounfar et al, (2023) in the article "The Role of Knowledge-Based Leadership in Innovative Performance in the Public Sector" acknowledged: today, the success of organizations depends more than ever on gaining competitive advantage through innovative performance resulting from knowledge-based performance. Accordingly, the present study examined the role of knowledge-based leadership in innovative performance in government organizations in Gilan province. Based on the findings, the effect of knowledge-based leadership on knowledge documentation ( $r=0.58$ ), the effect of knowledge-based leadership on knowledge application ( $r=0.39$ ), and the effect of knowledge-based leadership on knowledge creation ( $r=0.41$ ) is significant. However, the effect of knowledge-based leadership on knowledge transfer is not significant. Based on the results of the indirect paths of the research model, knowledge-based leadership has the greatest indirect effect on the innovative performance of companies through the variables of knowledge storage and transfer. Therefore, by emphasizing knowledge storage by the organization's management, knowledge transfer and innovation will increase the most.

Pourrashidi, Zahra., (2021)) in the article "The Mediating Role of Knowledge Management and Organizational Learning in the Effect of Human Resource Development Activities on Employee Innovation (Case of Kerman Shahid Bahonar University Employees)" acknowledged; human resource development activities have a positive and significant effect on knowledge management. Human resource development activities have a positive and significant effect on the organizational learning of employees. Organizational learning of employees has a positive and significant effect on their innovation. Knowledge management has a positive and significant effect on employee innovation. Human resource development activities have a positive and significant effect on employee innovation. Finally, knowledge management and organizational learning have a mediating role in the effect of human resource development activities on employee innovation.

### **Research Methodology**

A descriptive-applicable research model was used in this study, its method was survey, and the statistical population was 110 managers and experts of Sepah Bank headquarters after the merger. The required sample size was selected by simple random sampling method, consisted of 87 people through Morgan table; data was selected and collected from a researcher-made questionnaire, and Likert scale was used for measurement.

### **Research Findings**

The statistical method used in this study was the structural modeling method based on the partial least squares approach and Smart PLS3 software. The defined hypotheses were tested and the mutual relationship between knowledge-based leadership, illusion of control, and rationality on innovation was examined. The research findings indicate that with a confidence interval of 95% and path coefficients greater than 0.4, the effect size for all independent constructs on dependent constructs is strong, and knowledge-based leadership can lead to rationality and knowledge in the organization, and if environmental signals are not paid attention to, knowledge-based leadership creates an illusion of control in the organization; and



if the illusion of control is managed in the organization and knowledge-based leadership is strengthened in the organization, the organization is on the path to innovation.

### **Conclusion**

The present study was conducted with the aim of understanding the effect of the knowledge-based leadership variable on organizational innovation in Sepah Bank after the merger. The results of this research are consistent with the results of Homayounfar et al, (2023), Qalich Lee et al, (2020), Pourrashidi, Zahra., (2021), Bruno (2019), Ding et al, (2020), and Naqshbandi et al, (2018).

Peter Drucker believes that knowledge is a source of template for creating competitive advantage of organizations. On the other hand, Bruno believes; knowledge and rationality provide the ability to respond to new situations (Bruno, 2019).

According to the results of the research, it is recommended:

- Development and/or acquisition of tools and technologies in aggregating and obtaining value from customer knowledge
- Development and expansion of IT in aggregating and obtaining value from customer knowledge
- Development and management of customer knowledge base
- Application of knowledge sharing technologies for innovation