## Research on the Impact Mechanism of Transformational Leadership on Organizational Innovation Capacity

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**Keywords:** Transformational Leadership; Organizational Innovation Ability; Organizational Learning; Knowledge Management; Mediating

Abstract: This study aims to explore the mechanisms by which transformational leadership affects organizational innovation ability. Through a literature review, a theoretical model covering transformational leadership, organizational learning, knowledge management, and organizational innovation ability was constructed, and a structural equation model was used to analyze the relevant secondary data. The results show: Transformational leadership has a significant positive impact on organizational innovation ability. Between transformational leadership and organizational innovation ability, organizational learning plays a partial mediating role and knowledge management also plays a partial mediating role. Additionally, organizational learning and knowledge management are significantly positively correlated and both play a mediating role together. This study enriches the theoretical research on the relationship between transformational leadership and organizational innovation ability and reveals the mechanism of action, providing practical experience for enterprises to cultivate transformational leaders and enhance organizational innovation ability. Future research can further explore the moderating role of situational factors and the long-term impact of transformational leadership on organizational innovation ability from a longitudinal perspective.

#### 1. Introduction

In today's rapidly changing business environment, organizational innovation ability is a key element for enterprises to maintain a competitive advantage, and transformational leadership is a very important leadership style that is of great significance in promoting organizational innovation. In recent years, both the academic and practical communities have paid particular attention to the relationship between transformational leadership and organizational innovation ability.

The China Enterprise Confederation's "Top 100 Innovative Chinese Enterprises 2022" report shows that although the innovation capabilities of Chinese enterprises have been improving, there is still a gap compared with the world's leading level, and the data indicates that in 2021, the intensity of R&D investment (that is, the proportion of R&D investment to operating income) of Chinese enterprises reached 2.44%, Up from 2.12 percent in 2017, but still lagging behind innovation powerhouses like the United States and Japan, this highlights the urgency and importance of enhancing organizational innovation capabilities [1].

Transformational leadership, which stimulates the innovative potential of employees and drives organizational change, has unique advantages in enhancing organizational innovation capabilities. However, the academic community has not reached a consensus on the specific mechanisms by which transformational leadership affects organizational innovation capabilities, so this study intends to explore the mechanisms by which transformational leadership affects organizational innovation capabilities.

This study systematically reviewed the relevant literature to construct a theoretical model covering transformational leadership, organizational learning, knowledge management, and organizational innovation capabilities, and conducted a sample survey of middle and senior managers in 300 enterprises using questionnaires. After obtaining the data, the structural equation model was used to analyze the data to explore the intrinsic mechanism by which transformational leadership affects organizational innovation ability. This research result not only enriches the

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theoretical study of the relationship between transformational leadership and organizational innovation ability, but also helps enterprises cultivate transformational leaders and enhance their own organizational innovation ability.

# 2. The Theoretical Basis of transformational Leadership and Organizational innovation Capacity

### 2.1 Concepts and Characteristics of transformational leadership

There is a type of leadership called transformational leadership, which relies on inspiring and motivating followers to set aside personal interests and work towards organizational goals. Since Burns first proposed this concept in 1978, scholars such as Bass have further developed it. Transformational leadership focuses on how leaders influence and change the values, beliefs, and behaviors<sup>[4]</sup> of their followers by shaping visions, inspiring, providing personalized care, and offering intellectual incentives <sup>[2]</sup>.

The main characteristics of transformational leadership are as follows: Transformational leaders are visionary, capable of drawing up an inspiring organizational vision and inspiring followers to strive for that vision. Secondly, they are good at using their personal charisma and emotional appeal to inspire employees to go beyond themselves in pursuit of excellence. Furthermore, transformational leaders value personalized care, pay attention to the development needs of each employee and provide the necessary support and guidance. Finally, they encourage innovative thinking and use intellectual motivation to encourage employees to challenge the status quo to find new solutions<sup>[3]</sup>.

#### 2.2 The content and composition of an organization's innovation capacity

An organization has the ability to identify, acquire, integrate and apply new knowledge, new technologies and new methods, and transform these into new products, new services or new processes. This is the organization's innovation ability, which is the key source for an organization to maintain a competitive advantage in the long term. Moreover, it not only includes technological innovation, but also management innovation, marketing innovation, etc.

Organizational innovation capacity is mainly composed of the following aspects: Innovation resource capacity takes the lead, covering human resources, financial resources and technical resources, etc. Innovation process capabilities come second, involving the generation, screening, development and commercialization of ideas. Innovation culture capacity comes next, referring to an atmosphere within an organization that encourages innovation and tolerates failure. Innovation network capacity comes last, that is, the organization's ability to form innovation alliances with external partners. These capabilities are interrelated and mutually reinforcing, which together build up the organization's overall innovation capabilities<sup>[10]</sup>.

## 2.3 The relationship between transformational leadership and organizational innovation capabilities

Transformational leadership and organizational innovation are closely related because transformational leaders draw up compelling visions that inspire employees' enthusiasm for innovation and foster a good atmosphere for organizational innovation, and they encourage employees to challenge the status quo to think about new possibilities to promote the formation of innovative thinking, in addition, With personalized care, transformational leaders can identify and develop people with innovative potential, providing human resource support for organizational innovation.

Change leaders build open communication channels to facilitate the sharing and exchange of knowledge, thereby laying the information and knowledge foundation for organizational innovation, and they are good at integrating resources to provide the necessary support for innovation projects. Many empirical studies have shown a significant positive correlation between change leadership and organizational innovation ability, but the mechanism of this relationship remains to be explored

in depth. In particular, it is necessary to explore how transformational leadership affects organizational innovation capacity in both direct and indirect ways in different contexts<sup>[6]</sup>. (See figure 1)

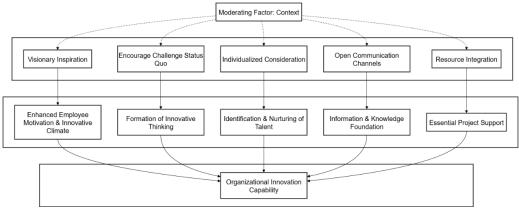


Figure 1 Mechanisms by which transformational leadership affects organizational innovation capacity

## 3. Regulatory Compliance Analysis of the Mechanisms by which transformational Leadership Affects Organizational Innovation Capacity

### 3.1 Direct impact Mechanism

The direct impact of transformational leadership on organizational innovation capacity is mainly reflected in the following aspects: After transformational leaders have depicted an attractive organizational vision, employees are motivated to innovate, and because of the clear direction and meaning of innovation, employees will be more proactive in participating in innovation activities. In addition, transformational leaders provide intellectual incentives that encourage employees to challenge existing assumptions and explore new ideas and methods, which directly boosts<sup>[7]</sup> the organization's innovation potential <sup>[11]</sup>.

The development needs of each employee are focused on and personalized by the transformational leader, and they also receive the necessary support and resources provided by the transformational leader. This personalized training approach can discover and cultivate innovative talents and directly enhance the organization's innovation capabilities. Ultimately, transformational leaders build an open and inclusive organizational atmosphere that encourages employees to try and tolerate failure, creating an innovative culture that provides a favorable environment for organizational innovation.

## 3.2 Indirect impact mechanisms

In addition to having a direct impact, transformational leadership also indirectly affects organizational innovation capabilities through some mediating variables, among which organizational learning is a relatively important mediating variable because transformational leaders encourage learning and promote knowledge sharing to enhance organizational learning capabilities, and the improvement of organizational learning capabilities can directly promote the improvement of organizational innovation capabilities. Knowledge management is also a key mediating variable, as transformational leaders who establish an effective knowledge management system will promote the acquisition, sharing and application of knowledge, thereby indirectly enhancing<sup>[12]</sup> organizational innovation capabilities.

Employee creativity, which may be an important mediating variable, is enhanced by transformational leaders stimulating employees' intrinsic motivation and fostering their creative thinking, and the improvement of employee creativity directly contributes to the overall innovation ability of the organization. These indirect influence mechanisms reveal the complex process by which transformational leadership affects organizational innovation ability and emphasize the importance of mediating variables. (See figure 2)

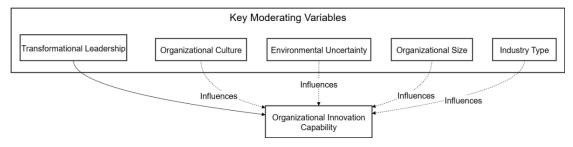


Figure 2 Model of the Impact Mechanism of transformational Leadership on organizational innovation Capacity

#### 4. Strategies for Transformational Leadership to enhance Organizational innovation Capacity

#### 4.1 Cultivate and develop transformational leaders

In today's rapidly changing business environment, it is crucial to cultivate and develop transformational leaders if you want to enhance your organization's innovation capabilities, as the China Enterprise Confederation released the "China Enterprise Innovation Capability Report" in 2022, which shows that the average annual growth rate of China's enterprise innovation capability index has reached 8.2% over the past five years, and transformational leadership is one<sup>[8]</sup> of the key factors driving innovation.

To cultivate and develop change leaders, organizations can adopt the following strategies: First, we should build a systematic leadership training system and focus on core competencies such as change management, innovative thinking, and strategic decision-making. Second, encourage leaders to engage in cross-industry and cross-cultural learning and exchange to broaden their horizons and improve their ability to cope with complex environments. Third, implement job rotation to enable leaders to accumulate diverse experiences in different positions and departments, thereby fostering a holistic perspective and systems thinking. Fourth, establish a mentorship system to accelerate the development of young leaders through the guidance and experience of senior leaders. With these initiatives, organizations can continue to build a team of leaders who are transformative and innovative, thereby laying a solid foundation for the improvement of their innovation capabilities.

## 4.2 Build an organizational atmosphere that supports innovation

For transformational leadership to play a role and drive the improvement of organizational innovation capabilities, building an organizational atmosphere that supports innovation is an important guarantee. Moreover, data from the National Bureau of Statistics shows that in 2021, the intensity of research and development expenditure of industrial enterprises above designated size in China reached 1.54%, an increase of 0.32 percentage points compared with 2017, indicating that enterprises are increasingly emphasizing innovation. But it's not enough to just invest money; it's also necessary to create an organizational atmosphere that is conducive to innovation.

Change leaders can build an organizational atmosphere that supports innovation by first promoting an open and inclusive culture that encourages employees to express different opinions and tolerates failure and learn from it. The company should establish an innovation incentive mechanism, set up innovation awards, and link innovation achievements to performance evaluations and career development to stimulate employees' enthusiasm for innovation. Then it should create an innovation exchange platform, such as regular new seminars and brainstorming sessions, to encourage cross-departmental and cross-field ideas. Finally, it should create a relaxed and enjoyable working environment by setting up creative spaces, leisure areas and other places for employees to relax and think. In this way, transformational leaders can create an organizational atmosphere that encourages innovation and supports experimentation, thereby creating favorable conditions<sup>[9]</sup> for the organization to enhance its innovation capabilities.

## 4.3 Optimize your organizational structure and processes

One of the key strategies for transformational leadership to enhance organizational innovation

capabilities is to optimize organizational structure and processes. According to the 2023 McKinsey Report on Digital Transformation of Chinese Enterprises, over 60 percent of Chinese enterprises have made innovative adjustments to their organizational structure and business processes in the past five years to adapt to the demands of the digital age. This trend highlights the importance<sup>[13]</sup> of organizational structure and process optimization for enhancing innovation capabilities.

Transformational leaders who want to optimize their organizational structure and processes can do this: First, The company should break the traditional bureaucratic structure and implement flat management to reduce decision-making levels and increase organizational response speed. Second, establish cross-functional teams and project-based management models to promote collaboration among different departments and integrate resources to accelerate the implementation of innovative projects. Third, adopt agile management methods such as Scrum or Kanban to enhance project management efficiency and flexibility. Finally, the use of digital tools and platforms such as collaborative office systems and knowledge management systems can optimize workflows and improve the efficiency of information transmission and decision-making. In this way, transformational leaders can build more flexible and efficient organizational structures and processes, thereby creating favorable conditions for the improvement of organizational innovation capabilities.

#### 4.4 Strengthen knowledge management and learning capabilities

The key strategy for transformational leadership to enhance organizational innovation lies in strengthening knowledge management and learning capabilities, according to the 2022 report of the China Entrepreneur Survey System. Over the past five years, the average annual growth rate of knowledge management investment by China's high-tech enterprises has reached 15.3%, indicating that enterprises are increasingly<sup>[5]</sup> attaching importance to knowledge management and learning capabilities.

The knowledge management and learning capabilities of an organization can be strengthened by transformational leaders through the following means: First, The organization should build a complete knowledge management system, such as knowledge bases, expert directories, etc., to facilitate employees' access to and sharing of knowledge. Second, promote a learning organization culture to encourage employees to keep learning and improving themselves, such as setting up learning funds and providing online course resources. Third, establish an internal knowledge-sharing mechanism, such as regular knowledge-sharing sessions and technical salons, to promote the explicit and dissemination of tacit knowledge. Fourth. Strengthen cooperation with external institutions such as universities and research institutes to introduce advanced knowledge and technology to expand the organization 's knowledge boundaries through these measures, the organization' s knowledge accumulation and learning ability can be enhanced and provide intellectual support for continuous innovation.

#### 5. Conclusions

This study explores the mechanism by which transformational leadership affects organizational innovation capacity through literature review and empirical research, thereby revealing the relationship among transformational leadership, organizational learning, knowledge management and organizational innovation capacity. The results show that transformational leadership has a significant positive impact on organizational innovation capacity, and organizational learning and knowledge management play important mediating roles in this process.

Based on the findings, this paper presents four strategies for enhancing organizational innovation capabilities: developing transformational leaders, building an innovative organizational atmosphere, optimizing organizational structure and processes, and strengthening knowledge management and learning capabilities. These four strategies provide specific guidance for enterprises to cultivate transformational leaders and enhance organizational innovation capabilities in practice.

The moderating effect of contextual factors on the relationship between transformational leadership and organizational innovation ability and the long-term impact of transformational

leadership on organizational innovation ability can be explored through further research in the future, and longitudinal studies can also be used to examine the long-term impact. In addition, if cross-cultural comparative studies are carried out, there may be new discoveries about the mechanisms of transformational leadership in different cultural contexts

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