

The Impact of Digital Leadership on Green Innovation of Manufacturing Enterprises

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Introduction

Under the background of the strategic goal of “carbon peak, carbon neutrality” and the new era of green development, the green innovation and transformation and upgrading of manufacturing enterprises have become the top priority. This means that China promises to achieve the goal of “carbon neutrality” in half the time of Western countries. In addition, in March 2021, China’s “14th Five-Year Plan” put forward the concept of green transformation based on the strategic goal of “double carbon”, clearly pointed out that we should vigorously develop green technology innovation and promote the green transformation of key industries and important fields. The disappearance of demographic dividend, the upgrading of market consumption, the development of Internet technology, trade globalization and other factors have broken the relatively independent traditional market. More than 90% of traditional enterprises have failed in digital transformation, and traditional manufacturing enterprises are more serious.

Research Questions

There are few studies on digital leadership and digital transformation in the current literature. Among them, digital leadership has an important impact on enterprises’ effective response to the challenges of digital transformation. Existing research has focused on the impact of digital leadership on digital transformation, and rarely addressed the issue of how digital leadership affects corporate green innovation. With the increasingly prominent role of executives’ cognition in organizational digital transformation, it is of great theoretical and practical significance to explore the impact of leaders’ digital leadership on corporate green innovation.

Tables

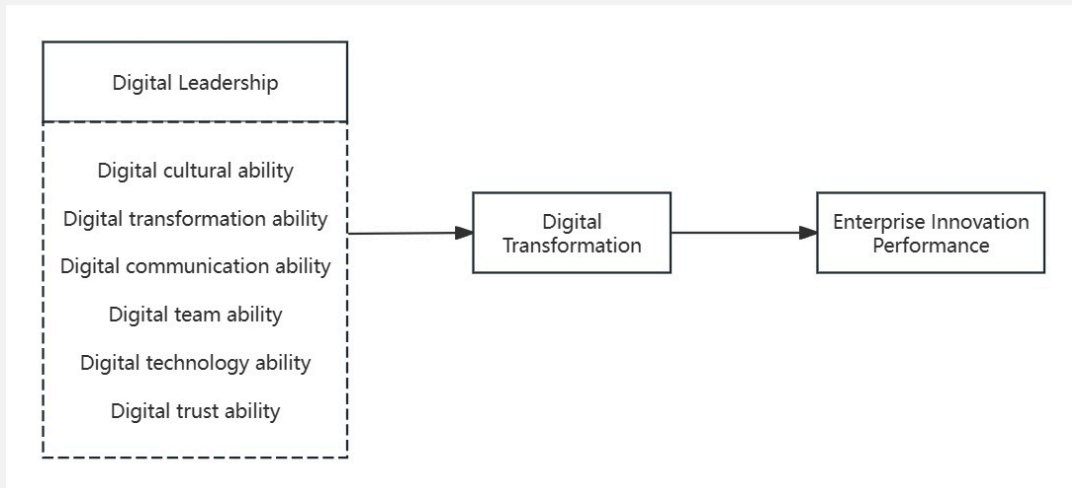
Table 1. A review of the definition of digital leadership concept

scholar	The Concept of Digital Leadership
Avolio	Under the mediation of information technology (ICT), the social impact process embedded in the proximal and distal contexts that promotes changes in attitudes, emotions, thinking, behavior and performance of individuals, groups and organizations.
Van Wart	Effective use and integration of information technology and traditional communication technology, it means the cognition and understanding of the current information and communication technology, for themselves and the organization to selectively adopt emerging information and communication technology, and the use of these information and communication technology technical ability.
Roman and Van Wart	Digital leadership is a series of technology-mediated social impact processes aimed at changing attitudes, emotions, thinking, behavior and performance. This process depends on leaders ' clear and appropriate communication skills, providing sufficient social interaction, motivating and managing change, establishing and maintaining responsible teams, explaining knowledge related to information and communication technology, and cultivating a sense of trust in the virtual environment.
BENITEZ	Digital leadership refers to the ability of leaders to use a variety of skill combinations to lead and manage personnel and transform enterprises in a digital way.

Table 2. A review of the definition of digital leadership dimension

scholar	Digital leadership dimension
Roman	The six dimensions of E-communication, E-social, E-change, E-team, E-tech and E-trust are discussed.
Li Yanping and Miao Li	Digital strategic thinking, digital environment control, digital organizational change, digital talent development, digital communication and social five dimensions.
Ju Yanpeng	Five dimensions : digital communication ability, digital social ability, digital change ability, digital team ability, digital trust ability.

Figures



Conclusion

Based on the theory of dynamic capabilities, this paper reveals the relationship between leader digital leadership and enterprise green innovation. The study finds the following.

First, leaders' digital leadership has a positive impact on the digital transformation of enterprises. Although digital transformation is a leading project, not all leaders can effectively promote digital transformation. Starting from the behavioral characteristics of leaders, this paper reveals the important role of leaders' digital leadership in the digital transformation of enterprises. Leaders with high digital leadership can quickly adapt to the changes in the digital environment and take effective actions to promote digital transformation.

Second, digital transformation plays an important mediating role in the relationship between digital leadership and corporate green innovation. This shows that digital leadership affects the promotion of green innovation by promoting the digital transformation of enterprises. Digital transformation is the key path for leaders' digital leadership to influence enterprises' green innovation. Digital leadership accelerates the speed of digital transformation of enterprises. Therefore, this paper guides the construction of leadership system in the digital era from the cognitive level.