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AN EMPIRICAL STUDY ON DIGITALIZATION PROMOTING THE HIGH-QUALITY DEVELOPMENT OF MANUFACTURING ENTERPRISES FROM THE PERSPECTIVE OF INNOVATION ECOSYSTEM

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Abstract

With the growth of the digital economy and new technological advancements, data as a novel factor of production is becoming increasingly important for promoting innovation and development. The interactive integration of digital technology with societal progress also enables closer cooperation between innovation entities. Ecological coordination of digital innovation has gradually emerged as the predominant form of technological output and knowledge translation. Concurrently, digital transformation and innovation of the real economy crucially support implementing major national development strategies and constructing an innovative country. Using literature analysis, theoretical analysis, and empirical research, this paper summarizes theories of digital-driven innovation, especially joint innovation domestically and abroad. Using the methods of fixed effect model, intermediary mechanism test and heterogeneity test, this paper explores the effect and path of enterprise digitalization affecting the innovation and total factor productivity of manufacturing enterprises. It utilizes Chinese A-share manufacturing listed companies from 2012-2022 as a sample to explore how digitization impacts enterprise innovation. The study found that digital technology propels enterprise innovation and has a greater effect on joint innovation between companies. Facing high economic uncertainty, the positive influence of innovation output on high-quality enterprise development is more pronounced. Accordingly, this paper reasonably recommends improving independent innovation abilities, harnessing joint innovation effects of the ecosystem, and constructing a supportive government innovation environment.

Key words: cooperative innovation, digital innovation, high-quality development, innovation ecosystem, manufacturing

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