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DOES AIR POLLUTION AFFECT ENTERPRISES’ DIGITAL TRANSFORMATION?

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Abstract

Decades of rapid economic development have brought serious environmental pollution problems. Air pollution has an impact on personal life as well as society. This paper aims to explore the impact of air pollution on the digital transformation of enterprises. This paper empirically examines the impact of air pollution on enterprises’ digital transformation by analyzing samples of China’s Shanghai and Shenzhen A-share listed companies from 2014 to 2022. The study reveals that air pollution hampers enterprises’ digital transformation. The mechanism test demonstrates that air pollution inhibits digital transformation by diminishing the quality of management human capital, business benefits and the level of regional digital infrastructure. The main strength of this paper lies in its empirical analysis and the integration of macro-regional and micro-enterprise perspectives. This paper expands and enriches existing research on the economic consequences of air pollution and influencing factors affecting digital transformation while uncovering the mechanisms through which air pollution impacts this process. It provides new empirical evidence for promoting digital transformation within enterprises as well as for improving air quality.

Key words: air pollution, business benefits, digital transformation, quality of management human capital, regional digital infrastructure

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