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CEO Risk-Taking Incentives and IT Innovation: The Moderating Role of a CEO's IT-Related Human Capital

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Abstract

Despite the importance of information technology (IT) innovation in today's digitalized world, little research attention has been paid to examining how firms can incentivize IT innovation. To fill this gap, the current study investigates the impact of managerial incentives provided to chief executive officers (CEOs) on IT innovation, measured by the number of IT patents. In particular, we examine the role of risk-taking incentives provided to CEOs, captured by the sensitivity of CEO wealth to stock return volatility (i.e., *Vega*). *Vega* can motivate CEOs to engage in risky IT innovation projects by aligning their wealth with firm-specific risk. In so doing, we focus on how CEOs' IT-related human capital (i.e., IT education and IT experience) moderates the relationship between *Vega* and IT innovation. Our empirical analyses reveal that a higher *Vega* encourages CEOs to support more IT innovation; more importantly, the impact of *Vega* on the amount of IT patents is stronger for firms with CEOs who have higher levels of IT education and IT experience. Our study contributes to research and practice by conceptualizing a CEO's IT-related human capital and validating its moderating role in the relationship between risk-taking incentives provided to the CEO and the amount of IT innovation.

Keywords: IT innovation, IT patents, agency theory, managerial incentives, risk-taking incentives, *Vega*, IT human capital, IT education, IT experience