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## Does board gender diversity matter in IT investment?

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There has been a broad push to increase diversity on the board of public corporations in the past few decades. Several studies, therefore, have examined the impact of board gender diversity on the financial or strategic benefits to the firm or managerial decisions (e.g., Wowak et al. 2021).

Due to the remarkable investment in IT, substantial information systems (IS) research has long been curious about the business value of IT investment (e.g., Mithas et al. 2012). This stream of research suggests that the impact of IT investment is positive on average, though this effect varies across firms (Mithas et al. 2012), implying that firms' decisions on IT investment are not efficient (Dong et al. 2021). Surprisingly, however, the current IS research has predominately emphasized the impact of IT investment on firm performance and has almost taken the level of this investment as "given" (Dong et al. 2021). Studies on the antecedents of IT investment are limited with few exceptions (e.g., Dong et al. 2021) and are even considered a "blind spot" (Anand et al. 2020).

Given the inefficient IT investment, the current study examines the role of corporate governance on IT investment. Specifically, we focus on the role of female board representation (FBR) in IT investment. FBR is the proportion of female board members (Wowak et al. 2021). Understanding this gender issue also responds to Gorbacheva et al.'s call (2019) by investigating the implications of gender diversity in the IS field. Thus, our research question is: Does board gender diversity matter in IT investment?

To address our research question, we merged three data sources: Computer Intelligence technology database for IT investment data, Institutional Shareholder Services for board information, and Compustat for firm performance-related data. Our final sample has an unbalanced panel of 10,945 firm-year observations with 1,381 firms from 2007 to 2019. Our result suggests that FBR is positively associated with IT investment. This finding is consistent with prior organizational studies that diverse boards are more likely to discuss more challenging issues (e.g., IT investment) and have more informed discussions.

### References

Anand, A., Sharma, R., and Kohli, R. 2020. "The Effects of Operational and Financial Performance Failure on Bi&A-Enabled Search Behaviors: A Theory of Performance-Driven Search," *Information Systems Research* (31:4), pp. 1144-1163.

Dong, J. Q., Karhade, P. P., Rai, A., and Xu, S. X. 2021. "How Firms Make Information Technology Investment Decisions: Toward a Behavioral Agency Theory," *Journal of Management Information Systems* (38:1), pp. 29-58.

Mithas, S., Tafti, A., Bardhan, I., and Goh, J. M. 2012. "Information Technology and Firm Profitability: Mechanisms and Empirical Evidence," *MIS Quarterly* (31:1), pp. 205-224.

Wowak, K. D., Ball, G. P., Post, C., and Ketchen Jr, D. J. 2021. "The Influence of Female Directors on Product Recall Decisions," *Manufacturing & Service Operations Management* (23:4), pp. 895-913.