

Procurement 4.0 and organizational performance in the Malaysian construction industry

Khai Loon Lee, Afiq Muqri Bin Shaharud-din
Universiti Malaysia Pahang, Malaysia

ABSTRACT

Procurement 4.0 is the result of the industrial revolution (IR) 4.0 technologies implemented into the organization. The incorporation of IR 4.0 with the procurement system in the Malaysian construction industry is still low because of the lack of expertise available to adopt the technology. Therefore, this study investigated relationships between procurement 4.0 elements, organizational performance, and mediating effect of intention to optimize the procurement process. To support this study, resource-based view theory and theory of planned behaviour were applied. This study focuses on 5267 G7 Malaysia construction companies. 413 online survey questionnaires were distributed using cluster random sampling techniques, and 134 responses were successfully acquired, representing 32.45% of the response rate. SmartPLS was used to analyze the data. Seven hypotheses are supported, while three are not supported. The mediating effect of intention to optimize the procurement process is significant only in the relationship between procurement 4.0 strategy and organizational performance.

KEYWORDS

Construction industry; Industrial revolution 4.0; Malaysia; Organizational performance; Procurement 4.0

REFERENCES

1. Ab Hamid, M. R., Sami, W., & Mohmad Sidek, M. H. (2017). Discriminant Validity Assessment: Use of Fornell & Larcker criterion versus HTMT Criterion. *Journal of Physics: Conference Series*, 890, 1–5. doi:10.1088/1742-6596/890/1/012163
2. Adeitan, D. A., Aigbavboa, C. O., Emem-Obong Agbenyeku, E., & Bamisaye, O. S. (2019). Industry 4.0 and Construction Supply Chain Management, *Periodica Polytechnica Budapest University of Technology and Economics*, 368–375. 10.3311/CCC2019-053

3. Afeez, B. M., Maxwell, O., Otekunrin, O. A., & Happiness, O. I. (2018). Selection and Validation of Comparison Study of Normality Test. *American Journal of Mathematics and Statistics*, 8(6), 190–201. doi:10.5923/j. ajms.20180806.05
4. Ahmed, A., Khuwaja, F. M., Brohi, N. A., & Othman, I. (2018). Organizational Factors and Organizational Performance: A Resource-Based view and Social Exchange Theory Viewpoint. *International Journal of Academic Research in Business & Social Sciences*, 8(3). doi:10.6007/IJARBSS/v8-i3/3951
5. Ahmed, A., & Othman, I. (2017). Relationship between organizational resources and organizational performance: A conceptualize mediation study. *European Online Journal of Natural and Social Sciences*, 6(1), 10–27.

