

DAFTAR PUSTAKA

- Abduh, M., Sukardi, S. N., Wirahadikusumah, R. D., Oktaviani, C. Z., & Bahagia, S. N. (2023). Maturity of procurement units for public construction projects in Indonesia. *International Journal of Construction Management*, 23(13), 2171–2184.
- Alankarage, S., Chileshe, N., Samaraweera, A., Rameezdeen, R., & Edwards, D. J. (2023). Organisational BIM maturity models and their applications: a systematic literature review. *Architectural Engineering and Design Management*, 19(6), 5.
- Alnajjar, O., Atencio, E., & Turmo, J. (2025). A Systematic Review of Lean Construction, BIM and Emerging Technologies Integration: Identifying Key Tools. *Buildings*, 15(16), 2884. <https://doi.org/10.3390/buildings15162884>
- Al-Roumi, H., & Al-Sabah, R. (2024). Exploring the rate of adoption and implementation depth of building information modeling (BIM): A case of Kuwait. *Journal of Engineering Research (Kuwait)*, 12(1), 86–99.
- Azhar, S. (2011). *Building Information Modeling (BIM): Trends, Benefits, Risks, and Challenges for the AEC Industry* (Vol. 11, Number 3).
- Baraldi, A. N., & Enders, C. K. (2010). An introduction to modern missing data analyses. *Journal of School Psychology*, 48(1), 5–37.
- Barison, M. B., & Santos, E. T. (2010). BIM teaching strategies: an overview of the current approaches. *Proc., ICCBE 2010 International Conference on Computing in Civil and Building Engineering*.
- Barlish, K., Sullivan, K., Kashiwagi, D., & Badger, W. (2011). *How To Measure the Benefits of BIM A Case Study Approach*.
- Bryde, D., Broquetas, M., & Volm, J. M. (2013). The project benefits of building information modelling (BIM). *International Journal of Project Management*, 31(7).
- Chatsuwan, M., Manajitt, B., Masayuki Ichinose, A., & Alkhalaf, H. (2024). *A Review of BIM Maturity in Standards and Guidelines Across Asia*.
- Coates, S., Arayici, Y., & Kagioglou, M. (2010). *The key performance indicators of the BIM implementation process*. <https://www.researchgate.net/publication/45675991>
- Cohen, J. (1988). Set correlation and contingency tables. *Applied Psychological Measurement*, 12(4), 425–434.
- Eastman, C. M. . (2008). *BIM handbook : a guide to building information modeling for owners, managers, designers, engineers, and contractors*. Wiley.
- Eastman, C., Teicholz, P., Sacks, R., & Liston, K. (2011). *BIM Handbook: A Guide to Building Information Modeling for Owners, Managers, Designers, Engineers and Contractors*. Wiley. <https://books.google.co.id/books?id=aCi7Ozwkoj0C>
- Esnaashary Esfahani, M., Rausch, C., Haas, C., & Adey, B. T. (2020). Prioritizing Preproject Planning Activities Using Value of Information Analysis. *Journal of Management in Engineering*, 36(5).
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- Ferraz, C., Loures, E. R., & Deschamps, F. (2020). BIM maturity models evaluated by design principles. *Advances in Transdisciplinary Engineering*, 12, 504–513.
- Fox, N. J., & Alldred, P. (2016). *Sociology and the new materialism: Theory, research, action*. Sage.
- Giménez, Z., Hernández, H., Leyva Londoño, J. P., Castro Bedoya, P. A., & Garcia-Lopez, N. P. (2025). Analyzing the relationship between the level of BIM maturity and the value generated in construction projects in Colombia. *Ain Shams Engineering Journal*, 16(5). <https://doi.org/10.1016/j.asej.2025.103351>

- Gustian, E., Milyardi, R., & Lesmana, C. (2022). Analysis of Benefits and Barriers Factors in the Implementation of Building Information Modeling (BIM) in Building Construction for Contractor. *Jurnal Teknik Sipil Dan Perencanaan*, 24(2), 158–167.
- Hair, J. F. (2010). *Multivariate data analysis hair black babin anderson*. Springer, Berlin Heidelberg Berlin Heidelberg.
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107–123.
- Hardin, B., & McCool, D. (2015). *BIM and construction management: proven tools, methods, and workflows*. John Wiley & Sons.
- Hendrickson, Chris., & Au, Tung. (20081998). *Project management for construction : fundamental concepts for owners, engineers, architects, and builders*. Carnegie Mellon University.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20.
- Institute of Building Sciences, N. (1999). *UNITED STATES NATIONAL CAD STANDARD® Version 4.0*.
- Kassem, M. (2013). *A PROPOSED APPROACH TO COMPARING THE BIM MATURITY OF COUNTRIES*.
- Kassem, M., Kelly, G., Dawood, N., Serginson, M., & Lockley, S. (2015). BIM in facilities management applications: A case study of a large university complex. *Built Environment Project and Asset Management*, 5(3), 261–277.
- Khosrowshahi, F., & Arayici, Y. (2012). Roadmap for implementation of BIM in the UK construction industry. In *Engineering, Construction and Architectural Management* (Vol. 19, Number 6, pp. 610–635). <https://doi.org/10.1108/09699981211277531>
- Kline, P. (2015). *A handbook of test construction (psychology revivals): introduction to psychometric design*. Routledge.
- Kohavi, R. (1995). A Study of Cross-Validation and Bootstrap for Accuracy Estimation and Model Selection. *Appears in the Internasional Joint Conference on Artificial Intelligence*.
- Latief, W. D. P. R. U., & Arifuddin, R. (2025). Conceptual Framework Integration of Building Information Modelling (BIM) and Internet of Things (IoT) Technology in the Application of Construction Safety Management Systems in Construction Projects. *Proceedings of the 9th International Conference on Civil Engineering: ICOCE 2025, 22–24 March, Singapore*, 714, 280.
- Latupeirissa, J. E., Arrang, H., & Wong, I. L. K. (2024). The Challenges of Implementing Building Information Modeling in Indonesia Construction Projects. *Engineering and Technology Journal*, 09(04). <https://doi.org/10.47191/etj/v9i04.28>
- Lee, N. (2024). *Encyclopedia of Computer Graphics and Games*. Springer Int Publishing.
- Maulani, F., & Maharani, D. J. (2025). Studi kebijakan Pemerintah Indonesia dalam mendorong adopsi Building Information Modeling (BIM). In *Jurnal Media Konstruksi* (Vol. 10, Number 2).
- Nepal, M. P., Jupp, J. R., & Aibinu, A. A. (2014). *Evaluations of BIM: Frameworks and Perspectives*.
- Pokojski, J., Gil, M., & Newnes, L. (2020). *Transdisciplinary Engineering for Complex Socio-technical Systems—Real-life Applications: Proceedings of the 27th ISTE International Conference on Transdisciplinary Engineering, July 1–July 10, 2020* (Vol. 12). IOS Press.
- PU. (2024). *SOP Implementasi Building information Modeling (BIM)*.

- PUPR. (2022). *Pedoman Pemantauan & Evaluasi Penerapan Building Information Modelling (BIM) Kementerian PUPR*.
- Puspita, N. R., & Patriotika, F. (2021). BIM Implementation in Public Construction Projects in Indonesia. *IOP Conference Series: Materials Science and Engineering*, 1156(1), 012008. <https://doi.org/10.1088/1757-899x/1156/1/012008>
- Ringle, C. M., Sarstedt, M., Sinkovics, N., & Sinkovics, R. R. (2023). A perspective on using partial least squares structural equation modelling in data articles. *Data in Brief*, 48, 109074.
- Rubin, D. B. (2004). Direct and indirect causal effects via potential outcomes. *Scandinavian Journal of Statistics*, 31(2), 161–170.
- Sacks, R., Eastman, C., Lee, G., & Teicholz, P. (2018). *BIM Handbook: A Guide to Building Information Modeling for Owners, Designers, Engineers, Contractors, and Facility Managers*. Wiley. https://books.google.co.id/books?id=a_JiDwAAQBAJ
- Sacks, R., Koskela, L., Dave, B. A., & Owen, R. (2010). Interaction of lean and building information modeling in construction. *Journal of Construction Engineering and Management*, 136(9), 968–980.
- Saksena, H. T. (2024). *Assessing BIM Implementation Success through Defined KPIs in Indonesia's Road and Bridge Infrastructure Projects*.
- Sebastian, R., & Van Berlo, L. (2010). Tool for benchmarking BIM performance of design, engineering and construction firms in the Netherlands. *Architectural Engineering and Design Management*, 6(SPECIAL ISSUE), 254–263.
- Smits, W., van Buiten, M., & Hartmann, T. (2017). Yield-to-BIM: impacts of BIM maturity on project performance. *Building Research and Information*, 45(3), 336–346.
- Succar, B. (2009). Building information modelling framework: A research and delivery foundation for industry stakeholders. *Automation in Construction*, 18(3), 357–375.
- Succar, B., & Change Agents, A. (2009). *Building Information Modelling Maturity Matrix*.
- Sun, C., Chen, H., Long, R., & Liao, R. (2022). Research on BIM Application Two-Dimensional Maturity Model. *Buildings*, 12(11).
- Susanti, R., Fauziyah, S., & Aziz, S. A. (2023). Factor and Barrier Implementing Building Information Modelling (BIM) in Green Construction in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 1203(1).
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53.
- Van Roy, A. F., & Firdaus, A. (2020). Building Information Modelling in Indonesia: Knowledge, Implementation and Barriers. *Journal of Construction in Developing Countries*, 25(2), 199–217. <https://doi.org/10.21315/jcdc2020.25.2.8>
- Volk, R., Stengel, J., & Schultmann, F. (2014). Building Information Modeling (BIM) for existing buildings - Literature review and future needs. In *Automation in Construction* (Vol. 38, pp. 109–127). <https://doi.org/10.1016/j.autcon.2013.10.023>
- Weisberg, H. I. (2014). *Willful ignorance: The mismeasure of uncertainty*. John Wiley & Sons.
- Wijaya, C. (2024). *IMPLEMENTASI TEKNOLOGI BIM DALAM MANAJEMEN PROYEK KONSTRUKSI*.
- Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement*, 73(6), 913–934.
- Wu, C., Xu, B., Mao, C., & Li, X. (2017). Overview of BIM maturity measurement tools. In *Journal of Information Technology in Construction (ITcon)* (Vol. 22).
- Yilmaz, G., Akcamete, A., & Demirsors, O. (2019). A reference model for BIM capability assessments. *Automation in Construction*, 101, 245–263.

Yilmaz, G., Akcamete, A., & Demirors, O. (2023). BIM-CAREM: Assessing the BIM capabilities of design, construction and facilities management processes in the construction industry. *Computers in Industry*, 147.