

DAFTAR PUSTAKA

- [1] H. Chourabi *et al.*, “Understanding smart cities: An integrative framework,” in *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2012, pp. 2289–2297, doi: 10.1109/HICSS.2012.615.
- [2] M. Höjer and J. Wangel, “Smart sustainable cities: Definition and challenges,” *Adv. Intell. Syst. Comput.*, vol. 310, pp. 333–349, Jan. 2014, doi: 10.1007/978-3-319-09228-7_20.
- [3] A. Bouguettaya *et al.*, “A service computing manifesto: The next 10 years,” *Communications of the ACM*, vol. 60, no. 4. 2017, doi: 10.1145/2983528.
- [4] H. Yeh, “The effects of successful ICT-based *smart city* services: From citizens’ perspectives,” *Gov. Inf. Q.*, vol. 34, no. 3, pp. 556–565, Sep. 2017, doi: 10.1016/J.GIQ.2017.05.001.
- [5] J. Cecílio, F. Caldeira, and C. Wanzeller, “CityMii - An integration and interoperable middleware to manage a *Smart city*,” *Procedia Comput. Sci.*, vol. 130, pp. 416–423, Jan. 2018, doi: 10.1016/J.PROCS.2018.04.062.
- [6] C. Lim, K. J. Kim, and P. P. Maglio, “Smart cities with big data: Reference models, challenges, and considerations,” *Cities*, vol. 82, pp. 86–99, Dec. 2018, doi: 10.1016/J.CITIES.2018.04.011.
- [7] B. Ahlgren, M. Hidell, and E. C. H. Ngai, “Internet of Things for Smart Cities: Interoperability and Open Data,” *IEEE Internet Comput.*, vol. 20, no. 6, pp. 52–56, Nov. 2016, doi: 10.1109/MIC.2016.124.
- [8] N. M. Josuttis, *Soa in practice: the art of distributed system Design*, vol. 54. O’Reilly Media, Inc., 2007.
- [9] Dinas Komunikasi Informatika dan Statistik Kota Magelang, *Rencana Strategis Tahun 2022 - 2026*. PEMERINTAH KOTA MAGELANG, 2021.
- [10] Pemerintah Kota Magelang, *Rencana Kerja Pemerintah Daerah Kota Magelang 2022*. MAGELANG, 2021.
- [11] Pemerintah Kota Magelang, *Rencana Pembangunan Jangka Menengah Daerah (RPJMD) Kota Magelang Tahun 2021-2026*. MAGELANG, 2021.
- [12] Kementerian Pendayagunaan Aparatur Negara Dan Reformasi Birokrasi, “Indeks SPBE Pemerintah Kota Magelang Tahun 2020,” 2021.
- [13] E. U. A. Arif Barata Sakti, Eny Sulistyowati, Yun Arifatul Fatimah, “Jajak

- Pendapat Masyarakat Tentang Layanan *Smart city* Di Kota Magelang,” *J. Jendela Inov. Drh. Badan Penelit. dan Pengemb. Kota Magelang*, vol. 3, no. 2, pp. 44–59, Aug. 2020,
- [14] M. Krämer, S. Frese, and A. Kuijper, “Implementing secure applications in *smart city* clouds using *microservices*,” *Futur. Gener. Comput. Syst.*, vol. 99, pp. 308–320, Oct. 2019, doi: 10.1016/J.FUTURE.2019.04.042.
- [15] F. F. Scattone and K. R. Braghetto, “A *Microservices* Architecture for Distributed Complex Event Processing in Smart Cities,” Aug. 2020, Accessed: Oct. 15, 2021.
- [16] S. J. Clement, D. W. McKee, and J. Xu, “Service-Oriented Reference Architecture for Smart Cities,” *Proc. - 11th IEEE Int. Symp. Serv. Syst. Eng. SOSE 2017*, pp. 81–85, Jun. 2017, doi: 10.1109/SOSE.2017.29.
- [17] S. P. R. Asaithambi, R. Venkatraman, and S. Venkatraman, “MOBDA: *Microservice*-Oriented Big Data Architecture for *Smart city* Transport Systems,” *Big Data Cogn. Comput. 2020, Vol. 4, Page 17*, vol. 4, no. 3, p. 17, Jul. 2020, doi: 10.3390/BDCC4030017.
- [18] C. Harrison *et al.*, “Foundations for Smarter Cities,” *IBM J. Res. Dev.*, vol. 54, no. 4, pp. 1–16, 2010, doi: 10.1147/JRD.2010.2048257.
- [19] Sekhar N. Kondepudi, “Smart sustainable cities: An analysis of definitions - Focus Group Technical Report,” *ITU-T International Telecommunication Union*. United Nations, Washington DC, 2014.
- [20] D. McLaren and J. Agyeman, “Sharing cities: A case for truly smart and sustainable cities,” *Shar. Cities A Case Truly Smart Sustain. Cities*, vol. 39, pp. 1–445, Jun. 2015, doi: 10.17583/rimcis.2018.3641.
- [21] F. Polese *et al.*, “*Smart city* as a Service System: A Framework to Improve Smart Service Management,” *J. Serv. Sci. Manag.*, vol. 12, no. 1, pp. 1–16, Dec. 2018, doi: 10.4236/JSSM.2019.121001.
- [22] F. Auer, V. Lenarduzzi, M. Felderer, and D. Taibi, “From monolithic systems to *Microservices*: An assessment framework,” *Inf. Softw. Technol.*, vol. 137, p. 106600, Sep. 2021, doi: 10.1016/J.INFSOF.2021.106600.
- [23] A. Krylovskiy, M. Jahn, and E. Patti, “Designing a *Smart city* Internet of Things Platform with *Microservice* Architecture,” *Proc. - 2015 Int. Conf. Futur. Internet Things Cloud, FiCloud 2015 2015 Int. Conf. Open Big Data, OBD 2015*, pp. 25–30, Oct. 2015, doi: 10.1109/FICLOUD.2015.55.

- [24] Suhardi, N. B. Kurniawan, J. Sembiring, and P. Yustianto, "Service systems engineering framework based on combining service engineering and systems engineering methodologies," *Int. Conf. Res. Innov. Inf. Syst. ICRIS*, Aug. 2017, doi: 10.1109/ICRIIS.2017.8002469.
- [25] P. Piboonrunroj, S. Williams, and T. Simatupang, "The emergence of value chain thinking," *Int. J. Value Chain Manag.*, vol. 8, p. 40, Jan. 2017, doi: 10.1504/IJVCM.2017.10003558.
- [26] "Business Model Generation: A handbook for visionaries, game changers and challengers," *African J. Bus. Manag.*, vol. 5, no. n^o 7, pp. 1–5, 2011.
- [27] M. Chapman and M. Edwards, "Service Component Architecture Assembly Model Specification Version 1.2," *OASIS*, 2011.
- [28] T. P. Liang, Y. W. Wang, and P. J. Wu, "A system for service blueprint design," *Proc. - 2013 5th Int. Conf. Serv. Sci. Innov. ICSSI 2013*, pp. 252–253, 2013, doi: 10.1109/ICSSI.2013.52.
- [29] M. Von Rosing, H. Von Scheel, and A. W. Scheer, "The Complete Business Process Handbook: Body of Knowledge from Process Modeling to BPM," *Compleat. Bus. Process Handb. Body Knowl. from Process Model. to BPM*, vol. 1, pp. 1–707, Dec. 2014, doi: 10.1016/C2013-0-13596-9.
- [30] T. Erl, "Service-Oriented Architecture Analysis and Design for Services and Microservices," *Prentice Hall Press*, pp. 1–16, 2016.
- [31] G. J. Myers, C. Sandler, and T. Badgett, "The art of software testing," p. 240, 2012.
- [32] L. G. Anthopoulos, "The rise of the *smart city*," *Public Adm. Inf. Technol.*, vol. 22, pp. 5–45, 2017, doi: 10.1007/978-3-319-57015-0_2.
- [33] T. Hunter, *Advanced Microservices: A Hands-on Approach to Microservice Infrastructure and Tooling*. California Apress, 2017.
- [34] M. A. Cook, "Building enterprise information architectures: reengineering information systems," *Hewlett-Packard Prof. books.*, pp. xxiii, 193, 1996.
- [35] E. Gonzalez-Holland, D. Whitmer, L. Moralez, and M. Mouloua, "Examination of the Use of Nielsen's 10 Usability Heuristics & Outlooks for the Future," *Proc. Hum. Factors Ergon. Soc. Annu. Meet.*, vol. 61, no. 1, pp. 1472–1475, Sep. 2017, doi: 10.1177/1541931213601853.
- [36] A. Arsanjani, S. Ghosh, A. Allam, T. Abdollah, S. Ganapathy, and K. Holley, "SOMA: A method for developing service-oriented solutions," *IBM Syst. J.*,



UNIVERSITAS
GADJAH MADA

**PERANCANGAN SISTEM LAYANAN SMART CITY BERBASIS ARSITEKTUR MICROSERVICE (KASUS:
KOTA MAGELANG)**

M TRI ADHI UTOMO, Dr. Ir. Rudy Hartanto, M.T., IPM, Prof. Ir. Selo, S.T., M.T., M. Sc., Ph.D., IPU.

Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

vol. 47, no. 3, pp. 377–396, 2008, doi: 10.1147/sj.473.0377.