

DAFTAR PUSTAKA

- Adji, K. (2024). Indonesia, Negara Berpenduduk Muslim Terbanyak Tapi Industri Halal di Peringkat 10 Dunia. <https://umsida.ac.id/produksi-industri-halal-indonesia-peringkat-10-dunia/> February 11, 2024.
- Agarwal, R., & Jain, S. (2022). Temperature and Humidity: Key Parameters for Maintaining Laboratory Quality. *Journal of Laboratory Management*, 25(2), 113-120.
- Ahmad, H., Fazullah, A., & Borham A. J. (2011). A Way Forward To Manage Halal Business. Malaysia. *International Journal of Arts and Sciences Conference*. AUSTRIA. CD ROM Version ISSN 1943-6114. <http://umpir.ump.edu.my/id/eprint/2069/>.
- Ahmad, R. D., & Keisha, D.S. (2023). Pengaruh Penerapan E-Layanan Sains (ELSA) Terhadap Peningkatan Kualitas Layanan Pengujian Laboratorium Imaging Fisika Maju BRIN. *Journal of Business Administration Economic & Entrepreneurship*. 5(1), 61-72.
<https://jurnal.stialan.ac.id/index.php/jbest/article/view/696>
- Ahyar, J., & Safrida, S. (2020). Optimalisasi pelayanan kepolisian dalam menangani tindak pidana kekerasan terhadap perempuan dan anak. *Humanis Jurnal Ilmu Administrasi Negara*, 6(2), 69-89.
<https://doi.org/10.52137/humanis.v6i1.20>.
- Al-Qaradawi, Y. (1994). *The Lawful and the Prohibited in Islam (Al-halal wal-haram fil-Islam)*. American Trust Publications.
- Aladwani, A. M., & Palvia, P. C. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information & management*, 39(6), 467-476.
- Alanezi, M. A., Mahmood, A. K., & Basri, S. (2012). A Proposed Model for Assessing e-government Service Quality: An ES-QUAL approach. In *2012 International Conference on Computer & Information Science (ICIS)* (Vol. 1, pp. 130-135). IEEE.
- Alazab, M., Venkatraman, S., Watters, P., & Alazab, M. (2011). Zero-Day Malware Detection Based on Supervised Learning Algorithms of API Call Signatures. *Proceedings of the Ninth Australasian Data Mining Conference*, 161-172.

- Alelign, A., & Belay, Y. A. (2019). Patient Satisfaction with Clinical Laboratory Services and Associated Factors Among Adult Patients Attending Outpatient Departments at Debre Markos Referral Hospital, Northwest Ethiopia. *BMC Research Notes*, 12(1). <https://doi.org/10.1186/s13104-019-4558-8>.
- Al-Shammari, M., & Kheir, N. (2022). Effectiveness of Certifications in Quality Management Systems within Laboratories. *Journal of Quality in Health Care & Economics*, 2(1), 22-29.
- Amanuha, G., Hasanah, B., Sururi, A., & Sukendar, S. (2021). Digitalisasi Pemerintahan Melalui Implementasi SIMRAL dalam Mendukung Keberlanjutan Pembangunan Daerah. *Jurnal Terapan Pemerintahan Minangkabau*, 1(2), 126-134.
- Amini, M., Rachmawati, D., & Lubis, M. (2020). Penguatan Infrastruktur Laboratorium Halal dalam Mendukung Sertifikasi Produk Halal di Indonesia. *Jurnal Halal Research*, 1(2), 89–97.
- Anggereni, K., Nurbayani, R., Lestari, D., & Trisutrino, I. (2020). Persepsi dan Harapan Mahasiswa Terhadap Kualitas Pelayanan Kesehatan di Poli Umum Klinik X Tahun 2018. *Jurnal Kesehatan Scientia*, Vol 1, No.1, Juli 2020. <https://doi.org/10.31219/osf.io/npzgf>.
- Anjelina, C. P., & Safrida, S. (2022). Implementasi Program Perizinan Online Dalam Meningkatkan Kualitas Pelayanan di DPMPSTP Kota Banda Aceh. *Musamus Journal of Public Administration*, 5(1), 140-151. <https://doi.org/10.35724/mjpa.v5i1.4507>.
- Antara. (2022). BRIN Punya Fasilitas Riset Produk Pangan Halal Baru di Gunung Kidul. <https://www.antaraneews.com/berita/2836581/brin-punya-fasilitas-riset-produk-pangan-halal-baru-di-gunung-kidul>.
- _____ (2024). Dukcapil: Jumlah Penduduk RI Tembus 282 Juta Jiwa di Semester I-2024. <https://www.antaraneews.com/berita/4244907/dukcapil-jumlah-penduduk-ri-tembus-282-juta-jiwa-di-semester-i-2024>.
- Astiwaru. E. M. (2025). Laboratorium Halal Sebagai Pilar Validasi Kehalalan Produk: Analisis Efektivitas. *Journal of community service*, 7(1), 71-88. doi:10.56670/jcs.v7i1.339.

- Badan Standardisasi Nasional (BSN). (2018). SNI ISO/IEC 17025:2017 - Persyaratan Umum Kompetensi Laboratorium Pengujian dan Kalibrasi. Jakarta: BSN. <https://www.bsn.go.id>.
- _____. (2023). Tentang Komite Akreditasi Nasional (KAN). <https://www.bsn.go.id/main/kan>.
- Badan Riset dan Inovasi Nasional (BRIN). (2022). Dikunjungi UNHAN, BRIN Kenalkan Fasilitas Laboratorium HPC. <https://www.brin.go.id/news/99129/dikunjungi-unhan-brin-kenalkan-fasilitas-laboratorium-hpc>.
- _____. (2023). ELSA, Platform Layanan Pemanfaatan Sarana dan Prasarana di BRIN untuk Mitra Industri. <https://www.brin.go.id/news/113227/elsa-platform-layanan-pemanfaatan-sarana-dan-prasarana-di-brin-untuk-mitra-industri>.
- _____. (2023). E-Layanan Sains (ELSA). Diakses dari <https://elsa.brin.go.id>.
- Bawole, J. & Langnel, Z. (2022). Administrative Reforms in the Ghanaian Public Services for Government Business Continuity During the Covid-19 Crisis. *Public Organization Review*, 23(1), 181-196. <https://doi.org/10.1007/s11115-022-00687-w>.
- Cahyono, R. D., Hadiati, E., & Wahyono, G. B. (2023). The Effect of Online Communication on Community Satisfaction Through Online Service Quality. *International Journal of Social Science and Human Research*, 6(7). <https://doi.org/10.47191/ijsshr/v6-i7-24>.
- Carter, L and Bélanger, F. (2005). The Utilization of e-Government Services: Citizen Trust, Innovation and Acceptance Factors. *Information Systems Journal* 15(1), 5-25.
- Chaichi, K., John, L., & Blackledge-Foughali, G. (2023). What Makes Consumers Loyal To a Particular Online Travel Website? Case of booking.com. *International Journal of Multicultural and Multireligious Understanding*, 10(10), 260. <https://doi.org/10.18415/ijmmu.v10i10.5205>.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Method Approaches* (5th ed.). SAGE Publications.

- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research* (3rd ed.). SAGE Publications.
- Fang, Z. (2002). E-Government in Digital Era: Concept, Practice, and Development. *International Journal of The Computer, The Internet and Management*, Vol. 10, No.2, 2002, p 1-22.
- FDA (U.S. Food and Drug Administration). (2021). Good Laboratory Practice (GLP) for Nonclinical Laboratory Studies. <https://www.fda.gov/science-research/good-laboratory-practices>.
- Friedman, L. S., & Zong, Y. (2021). The Impact of Temperature and Humidity on Laboratory Equipment Performance. *Journal of Scientific Equipment Management*, 12(1), 24-30.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in Online Shopping: An Integrated Model. *MIS quarterly*, 51-90.
- Hardiyansyah, H. (2011). *Kualitas Pelayanan Publik: Konsep Dimensi, Indikator dan Implementasinya*. Yogyakarta: Gava Media.
- Harmening, D. M. (2003). *Laboratory Management: Principles and Processes*. Prentice Hall.
- Heryati, A., Zaliman, I., Terttiaavini, T., Mulyati, M., Romli, H., & Martadinata, A. T. (2023). Evaluasi Kinerja E-Government Menggunakan Indeks Layanan Publik Elektronik Sebagai Standar Benchmarking Layanan Publik. MALCOM: *Indonesian Journal of Machine Learning and Computer Science*, 4(1), 51-56. <https://doi.org/10.57152/malcom.v4i1.1004>.
- Huda, M & Yunas, N. S. 2016. The Development of e-Government System in Indonesia. *Jurnal Bina Praja* 8 (1) (2016): 97-108.
- ILAC (International Laboratory Accreditation Cooperation). (2017). *Introduction to ISO/IEC 17025:2017*. <https://ilac.org/publications-and-resources/ilac-guidance-documents/>.
- Ilyas, A. and Bahagia, B. (2021). Pengaruh digitalisasi pelayanan publik terhadap kinerja pegawai pada masa pandemi di lembaga pendidikan dan pelatihan. Edukatif: *Jurnal Ilmu Pendidikan*, 3(6), 5231-5239. <https://doi.org/10.31004/edukatif.v3i6.1173>.

- Indrajit, R.E. 2016. Konsep dan Strategi Electronic Government. Yogyakarta: Andi.
- International Organization for Standardization (ISO). (2017). ISO/IEC 17025:2017 – General Requirements for the Competence of Testing and Calibration Laboratories.
- Iskandar, A. S., Safitri, D., Setyaningrum, S., & Lidya, B. (2023). Penentuan sensitivitas dan spesifisitas kit prime-cyto untuk deteksi kandungan babi dengan metode polymerase chain reaction. *Halal Research Journal*, 3(1), 47-65. <https://doi.org/10.12962/j22759970.v3i1.579>.
- Iswahyuningsih, I., Putri, N. T., Amrina, E., & Hasan, A. (2022). The Effect Of Service Quality On Customer Satisfaction By Moderation Of Organizational Culture And Price In View Of ISO/IEC 17025:2017. *Jurnal Rekayasa Sistem Industri*, 11(1), 109-120. <https://doi.org/10.26593/jrsi.v11i1.5073.109-120>.
- Izzah, N. N., Budiarmo, A., & Listyorini, S. (2022). Pengaruh E-Service Quality, Perceived Ease Of Use, dan Brand Trust Terhadap Loyalitas Konsumen (Studi Kasus Pada Konsumen Pizza Hut Delivery Pekalongan). *Jurnal Ilmu Administrasi Bisnis*, 11(1), 50-58. <https://doi.org/10.14710/jiab.2022.33375>.
- Jia, S. Z., Chen, W., Petrovsky, N., & Walker, R. M. (2021). The Expectancy-Disconfirmation Model And Citizen Satisfaction With Public Services: A Meta-Analysis And An Agenda For Best Practice. *Public Administration Review*, 82(1), 147-159. <https://doi.org/10.1111/puar.13368>.
- Jindal, N. M., Bajwa, N., Bansal, E., & Ghosh, A. (2023). Evaluation Of Sample Rejection Rate In Clinical Biochemistry Laboratory Before And After Implementation Of Six-Sigma Methodology. *Asian Journal of Medical Sciences*, 14(2), 79-85. <https://doi.org/10.3126/ajms.v14i2.43189>.
- Kemsetneg. (2020). Kuasai Pasar Halal Dunia, Indonesia Perlu Perkuat Riset Produk Halal. https://www.setneg.go.id/baca/index/kuasai_pasar_halal_dunia_indonesia_perlu_perkuat_riset_produk_halal
- Khairi, F., Syahriani, S., & Indriyani, L. (2024). Implementasi Metode Webqual 4.0 Dalam Menganalisis Kepuasan Pengguna Situs Jakevo. *JATI (Jurnal Mahasiswa Teknik Informatika)*, 8(3), 3323-3330. <https://doi.org/10.36040/jati.v8i3.9671>.

Kim, Y., Shim, Y.S., Lee, K.G. (2022). Determination of Alcohols in Various Fermented Food Matrices Using Gas Chromatography-Flame Ionization Detector for Halal Certification. *Food Sci Biotechnol*. Vol 31(13):1639-1646. doi: 10.1007/s10068-022-01156-2.

Komite Akreditasi Nasional (KAN). (2019). Pedoman Penerapan ISO/IEC 17025: 2017 dalam Proses Akreditasi Laboratorium. <https://kan.or.id>.

_____. (2022). Profil KAN dan Peran Akreditasi dalam Perdagangan Internasional. <https://kan.or.id/profil>.

_____. (2023). Akreditasi dan Infrastruktur Mutu Nasional. <https://kan.or.id>.

_____. (2023). Pelayanan Akreditasi. <https://kan.or.id>.

Laudon, K. C., & Laudon, J. P. (2020). *Management Information Systems: Managing the Digital Firm* (16th ed.). Pearson.

Linders, D. (2012). From E-Government To We-Government: Defining A Typology For Citizen Coproduction In The Age Of Social Media. *Government information quarterly*, 29(4), 446-454.

LPPOM MUI. (2017). Pedoman Umum Sistem Jaminan Halal (SJH) – Edisi 2017.

_____. (2021). Pedoman Umum Penulisan Label Halal dan Kriteria Produk Halal. Lembaga Pengkajian Pangan, Obat-obatan dan Kosmetika MUI. <https://www.halalmui.org/mui14/main/page/pedoman>.

Maulani, T. R., Susilo, H., Indriati, M., & Suhaemi, A. (2020). Deteksi Cemarkan DNA Babi Dengan RT-PCR pada Sosis Tanpa Logo Halal MUI dari Empat Kecamatan di Kabupaten Pandeglang Banten. *Gorontalo Agriculture Technology Journal*, 3(2), 72. <https://doi.org/10.32662/gatj.v3i2.1171>.

Masterson, D., Josefsson, K., Robert, G., Nylander, E., & Kjellström, S. (2022). Mapping Definitions of Co-Production and Co-Design in Health and Social Care: A Systematic Scoping Review Providing Lessons For The Future. *Health Expectations*, 25(3), 902-913. <https://doi.org/10.1111/hex.13470>.

Meyer, J., & Thorne, J. (2018). "The Role of Competence and Certification in Achieving Laboratory Quality." *Journal of Medical Laboratory Science*, 75(2), 160-167.

- MoldStud. (2025). The Role of UI/UX in Improving Customer Satisfaction. Diakses dari: <https://moldstud.com/articles/p-the-role-of-uiux-in-improving-customer-satisfaction>.
- Muafatun, Muhammad Syaifulloh, & Hendri Sucipto. (2022). Pengaruh Kualitas Pelayanan Publik dan Disiplin Kerja Terhadap Kepuasan Masyarakat. *Jurnal Ilmiah Manajemen dan Kewirausahaan*, 1(3), 387–399. <https://doi.org/10.55606/jimak.v1i3.520>.
- Mulyana, Y. and Jamaludin, M. (2023). Effects of Government Electronic Service Quality on Citizen Satisfaction with Integrated Service Delivery in Urban Areas. *International Journal of Public Policy and Administration Research*, 10(1), 24-33. <https://doi.org/10.18488/74.v10i1.3293>.
- Muqodasih, L. D dan Indriastuti, A. (2024). Peran Kualitas Pelayanan, Kepercayaan dan Kemudahan Penggunaan Terhadap Kepuasan Konsumen Shopee. *Jurnal Capital: Kebijakan Ekonomi, Manajemen dan Akuntansi*, 5(2), 41-52. <https://doi.org/10.33747/capital.v5i2.195>.
- Murdiyanto, E. 2020. Metode Penelitian Kualitatif (Teori dan Aplikasi disertai Contoh Proposal). Yogyakarta: Universitas Pembangunan Nasional “Veteran” Yogyakarta Press.
- Mytych, J. and Ligarski, M. J. (2018). Expert assessment of conditions for accredited quality management system functioning in testing laboratories. *Management Systems in Production Engineering*, 26(1), 42-48. <https://doi.org/10.2478/mspe-2018-0007>.
- Nabatchi, T., Sancino, A., & Sicilia, M. (2017). Varieties of Participation in Public Services: The Who, When, and What of Coproduction. *Public Administration Review*, 77(5), 766-776. <https://doi.org/10.1111/puar.12765>.
- Natika. L. (2024). Transformasi Pelayanan Publik di Era Digital: Menuju Pelayanan Masa Depan yang Lebih Baik. *e-Journal Universitas Subang*, 6(1). <https://doi.org/10.37950/wpaj.v6i1.2040>.
- National Research Council. (2005). Laboratory Experiences and Student Learning: Opportunities to Learn Science Through Experiments. The National Academies Press. <https://doi.org/10.17226/11311>.
- NovoPath. (2022). Understanding Web-Based Laboratory Information Systems. <https://www.novopath.com/resources/blog/understanding-web-based->

laboratory-information-systems/OECD (Organisation for Economic Co-operation and Development).

Nurlaela, R. S., Hastuti, A., Aminah, S., Rosmayanti, D., & Juniar, V. H. (2025). Identifikasi Kadar Alkohol dalam Air Nabeez Kurma Tunisia (*Phoenix dactylifera* L.) dengan Variasi Waktu dan Suhu Penyimpanan Menggunakan Kromatografi Gas. *Jurnal Ilmiah Pangan Halal*, 7(1), 19–26. <https://doi.org/10.30997/jiph.v7i1.16874>.

Orbayinah, S. (2021). Pengembangan Metode Real-Time Polymerase Chain Reaction Untuk Analisis DNA Babi dan Sapi Dalam Bakso Untuk Autentikasi Halal. Disertasi. Yogyakarta: Universitas Gadjah Mada.

Organisation for Economic Co-operation and Development (OECD). (2015). Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development. <https://www.oecd.org/innovation/inno/frascati-manual.htm>. OECD.

_____. (2020). OECD Series on Principles of Good Laboratory Practice and Compliance Monitoring. <https://www.oecd.org/chemicalsafety/testing/oecdprinciplesongoodlaboratorypractice.htm>.

Pamungkas, Z. C., Izzudin, M. A., & Permadi, A. (2023). Analysis of Service Quality on the Surabaya Single Window (SSW) Website Using Modification E-Govqual Method. *Sistemasi*, 12(1), 229-243. <https://doi.org/10.32520/stmsi.v12i1.2196>.

Pangkey. I. & Rantung. M. I. R. (2023). Manajemen Pelayanan Publik. Tahta Media.

Papadomichelaki, X. and Mentzas, G. (2009) E-GovQual: A Multiple-Item Scale for Assessing E-Government Service Quality. *Government Information Quarterly*, 29, 98-109. <https://doi.org/10.1016/j.giq.2011.08.011>.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A Multiple-Item Scale For Measuring Consumer Perceptions Of Service Quality. *Journal of Retailing*, 64(1), 12–40.

_____. & Malhotra, A. (2005). E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service Quality. *Journal of Service Research*, 7(1), 1-21.

- Patton, M. Q. (2015). *Qualitative Research and Evaluation Methods* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Pillai, S. K., Kosek, J. M., & Clough, J. A. (2021). "Assessment of Competence and Training in Clinical Laboratories: A Review." *Clinical Biochemistry*, 92, 1-7.
- Pitaloka, E. S. R. and Wati, K. M. (2023). Pengaruh Kualitas Pelayanan, Kemudahan Penggunaan, dan Promosi Terhadap Loyalitas Pelanggan Pada Pengguna Go Food (Studi Pada Mahasiswa Universitas Jenderal Achmad Yani Yogyakarta). *Jurnal Ilmiah Ekonomi dan Bisnis*, 2(2), 557-567. <https://doi.org/10.57141/kompeten.v2i2.73>.
- Prilitasari, N. M. (2023). ELSA, Platform Layanan Pemanfaatan Sarana dan Prasarana di BRIN untuk Mitra Industri. Berita BRIN pada laman <https://www.brin.go.id/news/113227/elsa-platform-layanan-pemanfaatan-sarana-dan-prasarana-di-brin-untuk-mitra-industri>.
- Pusparini, E. T. (2025). Customer Satisfaction Index (CSI): Pengertian, Manfaat, dan Cara Meningkatkan. <https://qontak.com/blog/customer-satisfaction-index/>.
- Rai, A., Thakur, M., & Chopra, R. (2021). Role of Digital Health in Laboratory Services During COVID-19 Pandemic. *Journal of Laboratory Physicians*, 13(1), 1-5.
- Rohyami, Y., Wijaya, A. R., & Ruwindya, Y. (2024). Determination of Ethanol in Vinegar and Beverage by Gas Chromatography: a Validated Method for Halal Verification. *IJCA (Indonesian Journal of Chemical Analysis)*, 7(1), 43-52. <https://doi.org/10.20885/ijca.vol7.iss1.art5>.
- Rusanganwa, V., Gahutu, J. B., Hurtig, A., & Evander, M. (2020). Physicians' Satisfaction with Clinical Referral Laboratories in Rwanda. *Global Health Action*, 13(1). <https://doi.org/10.1080/16549716.2020.1834965>.
- Sam, Z., Meg, C., & Olp, E. (2018). Satisfaction of The External Client With The Provision of Health Services in The Emergency Area of A First Level Hospital of Complexity. *Archives of Medicine*, 10(4). <https://doi.org/10.21767/1989-5216.1000280>.
- Simanjuntak. M. H. (2022). BRIN Dukung Penguatan Ekosistem dan Industri Produk Halal. <https://www.antaranews.com/berita/3177273/brin-dukung-penguatan-ekosistem-dan-industri-produk-halal>.

- Soares, S., Amaral, J. S., Oliveira, M. B. P. P., & Mafra, I. (2013). A SYBR Green Real-Time PCR Assay to Detect and Quantify Pork Meat in Processed Poultry Meat Products. *Meat Science*, 94(1), 115–120. <https://doi.org/10.1016/j.meatsci.2012.12.012>.
- Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage Publications.
- Sukendra, I. K., & Atmaja, I. K. S. (2020). *Instrumen Penelitian* (T. Fiktorius (ed.)). Mahameru Press.
- Suranto, Swadesi, B., & Asmorowati, D. (2020) *Manajemen Laboratorium*. Fakultas Teknologi Mineral, UPN “Veteran” Yogyakarta.
- Sutrisno, H., & Nuraini, L. (2021). Analisis Kebutuhan Sumber Daya Manusia dalam Peningkatan Kinerja Laboratorium. *Jurnal Manajemen dan Administrasi Kesehatan*, 5(2), 90–98. <https://doi.org/10.31294/jmak.v5i2.12345>.
- Teklemariam, Z., Mekonnen, A., Kedir, H., & Kabew, G. (2013). Clients and Clinician Satisfaction with Laboratory Services at Selected Government Hospitals in Eastern Ethiopia. *BMC Research Notes*, 6(1). <https://doi.org/10.1186/1756-0500-6-15>.
- The Globalist (2024). Muslims: A Global Perspective. Muslims Make Up Around A Quarter Of The World’s Population. What are the facts? <https://www.theglobalist.com/muslims-islam-religion-arabic-population/>.
- Trymata. (2024). What is User Satisfaction? Definition, Metrics and Best Practices. Diakses dari: <https://trymata.com/blog/what-is-user-satisfaction>.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2017). *Science Report: Towards 2030*. <https://unesdoc.unesco.org/ark:/48223/pf0000235406>.
- Widayat, W., Agustini, T. W., Suzery, M., Al-Baarri, A. N., & Putri, S. R. (2019). Real time-polymerase chain reaction (rt-pcr) sebagai alat deteksi dna babi dalam beberapa produk non-pangan. *Indonesia Journal of Halal*, 2(1), 26-33. <https://doi.org/10.14710/halal.v2i1.5361>.
- Winarsih & Ratminto. (2013). *Manajemen Pelayanan*, Cetakan ke-10. Yogyakarta: Pustaka Pelajar.

World Health Organization. (2009). Handbook: Good Laboratory Practice (GLP) - Quality Practices for Regulated Non-Clinical Research and Development. <https://www.who.int/tdr/publications/documents/glp-handbook.pdf>.

_____. (2011). Laboratory Quality Management System (LQMS): Handbook. <https://apps.who.int/iris/handle/10665/44665>.

WIPO (World Intellectual Property Organization). (2020). Guide on Intellectual Property for Universities and R&D Institutions. https://www.wipo.int/edocs/pubdocs/en/wipo_pub_895_2020.pdf.

Yasin, A. Y., Wirawan, H., Hanifa, M. F., Bernadeta, N., & Burman, S. (2021). Pembentukan e-Loyalty dengan Framework Kepercayaan Multidimensi pada e-Commerce di Indonesia. *PERWIRA - Jurnal Pendidikan Kewirausahaan Indonesia*, 4(1), 13-35. <https://doi.org/10.21632/perwira.4.1.13-35>

Yuningsih, Y. (2022). Efektivitas Implementasi Pelayanan Publik Digital: Studi Kasus Pelayanan Perpustakaan Digital Puslatbang PKASN LAN. *Jurnal Wacana Kinerja Kajian Praktis-Akademis Kinerja Dan Administrasi Pelayanan Publik*, 25(1), 43. <https://doi.org/10.31845/jwk.v25i1.727>.

Zendesk (2025). What is CSAT? (+ how to measure it) A Customer Satisfaction Score or CSAT Score is a Customer Engagement Metric that Measures a Buyer's Contentment with a Business's Offerings and Services. <https://www.zendesk.com/blog/customer-satisfaction-score/>.

Zhou & Hu. (2013). User Interface Adaptation Based on User Feedback and Machine Learning. Dalam *IUI '13 Companion*. ACM.

Zulkarnain M. (2014). Tapping into the Lucrative Halal Market: Malaysian SMEs Perspective. *International Journal of Business and Innovation*. 1(6), 12-22. https://ijbi-irc.com/wp-content/uploads/2025/04/Tapping-into-the-Lucrative-Halal-Market_Malaysian-SMEs-Perspective.pdf

Regulasi:

Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik (UU ITE)

Undang-Undang Nomor 14 Tahun 2008 tentang Keterbukaan Informasi Publik

Undang-Undang Nomor 25 tahun 2009 tentang Pelayanan Publik

Undang-Undang Nomor 33 Tahun 2014 tentang Jaminan Produk Halal

Undang-Undang Nomor 11 Tahun 2019 tentang Sistem Nasional Ilmu Pengetahuan dan Teknologi (Sisnas IPTEK)

Peraturan Presiden No. 95 tahun 2018 tentang Sistem Pemerintahan Berbasis Elektronik (SPBE)

Peraturan Presiden Nomor 33 Tahun 2021 tentang Badan Riset dan Inovasi Nasional

Peraturan Pemerintah Nomor 39 Tahun 2021 tentang Penyelenggaraan Bidang Jaminan Produk Halal

Peraturan Presiden Nomor 78 Tahun 2021 tentang Badan Riset dan Inovasi Nasional yang meliputi: kedudukan; struktur organisasi; tata kerja; jabatan, pengangkatan, dan pemberhentian; hak keuangan dan fasilitas; pengintegrasian; pendanaan; dan Badan Riset dan Inovasi Daerah (BRIDA)

Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Nomor 15 Tahun 2014 tentang Pedoman Standar Pelayanan

Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Nomor 14 Tahun 2017 tentang Pedoman Penyusunan Survei Kepuasan Masyarakat Unit Penyelenggara Pelayanan Publik

Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Nomor 17 Tahun 2017 tentang Pedoman Penilaian Kinerja Unit Penyelenggara Pelayanan Publik

Peraturan Badan Riset dan Inovasi Nasional Republik Indonesia Nomor 12 Tahun 2023 tentang Wajib Serah dan Wajib Simpan Data Primer dan Keluaran Hasil Riset

SMIIC (Standards and Metrology Institute for Islamic Countries) OIC/SMIIC 1:2019: General Requirements for Halal Food

SNI ISO/IEC 17025 tentang Standar Nasional Indonesia yang merupakan adopsi identik dari Standar Internasional ISO/IEC 17025:2017 yang menetapkan persyaratan umum untuk kompetensi laboratorium pengujian dan kalibrasi, yang mencakup aspek manajemen dan teknis

Fatwa MUI Nomor 10 Tahun 2018 tentang Produk Makanan dan Minuman yang Mengandung Alkohol/Etanol

Halal Assurance System (HAS) 23000: Sistem Jaminan Halal LPPOM MUI sebagai persyaratan untuk mendapatkan sertifikasi halal bagi produk

Keputusan Deputi Bidang Infrastruktur Riset dan Inovasi Nomor B-2392/II.6/HK.01.00/5/2023 tentang Penetapan Elsa Poin pada E-Layanan Sains Badan Riset dan Inovasi Nasional

Keputusan Deputi Bidang Infrastruktur Riset dan Inovasi Nomor B-5100/II.6/HK.01.00/11/2024 tentang Pelaksana dan Struktur Organisasi Sistem Manajemen Pada Kegiatan Layanan Laboratorium Badan Riset dan Inovasi Nasional

Surat Keputusan Direktorat Pelayanan Laboratorium, Fasilitas Riset, dan Kawasan Sains dan Teknologi Nomor B-7764/II.6.4/HK.01.00/12/2023 tentang Standar Pelayanan di Lingkungan Direktorat Pelayanan Laboratorium, Fasilitas Riset, dan Kawasan Sains dan Teknologi