

REFERENCES

- [1] A. Youssef, A. Almishal, and A. E. Youssef, "Cloud Service Providers: A Comparative Study," *www.ijcait.com Int. J. Comput. Appl. Inf. Technol.*, vol. 5, no. May 2014, pp. 2278–7720, 2014, [Online]. Available: <https://www.researchgate.net/publication/299551297>.
- [2] P. Durkin and P. Durkin, "Project final version Can PCI DSS compliance be achieved in a cloud environment?"
- [3] D. Yimam and E. B. Fernandez, "A survey of compliance issues in cloud computing," *J. Internet Serv. Appl.*, vol. 7, no. 1, Dec. 2016, doi: 10.1186/s13174-016-0046-8.
- [4] L. Y. Astri, "A Study Literature of Critical Success Factors of Cloud Computing in Organizations," *Procedia Comput. Sci.*, vol. 59, no. Iccsci, pp. 188–194, 2015, doi: 10.1016/j.procs.2015.07.548.
- [5] L. Sun, J. Singh, and O. K. Hussain, "Service Level Agreement (SLA) assurance for cloud services: A survey from a transactional risk perspective," *ACM Int. Conf. Proceeding Ser.*, pp. 263–266, 2012, doi: 10.1145/2428955.2429005.
- [6] R. Millán Tejedor and S. Esfandiari, "Qué es NFV (Network Functions Virtualization)," *Bit*, no. 196, p. 18, 2014.
- [7] R. Kalaiprasath, R. Elankavi, and R. Udayakumar, "CLOUD SECURITY AND COMPLIANCE-A SEMANTIC APPROACH IN END TO END SECURITY," 2017.
- [8] P. Mell and T. Grance, "The NIST Definition of Cloud Computing Recommendations of the National Institute of Standards and Technology." doi: 10.6028/NIST.SP.800-145.
- [9] A. Hashmi, A. Ranjan, and A. Anand, "Security and Compliance Management in Cloud Computing," 2018.
- [10] "Types of cloud computing," AWS. <https://aws.amazon.com/types-of-cloud-computing/> (accessed Feb. 06, 2021).
- [11] S. Marston *et al.*, "Identification of a company's suitability for the adoption of cloud computing and modelling its corresponding Return on Investment," *Decis. Support Syst.*, vol. 51, no. 1, pp. 504–521, 2011, doi:

- 10.1016/j.dss.2010.12.006.
- [12] Y. Li, Y. Ze University, and K.-C. Chang, “Association for Information Systems AIS Electronic Library (AISeL) A Study on User Acceptance of Cloud Computing: A Multi-Theoretical Perspective Kuo-chung Chang Recommended Citation A Study on User Acceptance of Cloud Computing: A Multi-Theoretical Persp,” no. 1, 2012, [Online]. Available: <http://aisel.aisnet.org/amcis2012/proceedings/AdoptionDiffusionIT/19>.
- [13] S. Khalil, V. Fernandez, and V. Fautrero, “Cloud Impact on IT Governance,” *Proc. - CBI 2016 18th IEEE Conf. Bus. Informatics*, vol. 1, pp. 255–261, 2016, doi: 10.1109/CBI.2016.36.
- [14] A. Novotny, E. W. Bernroider, and S. Koch, “IT Governance: A Literature Review and Meta-Case Study,” 2012. [Online]. Available: <http://aisel.aisnet.org/confirm2012/23>.
- [15] T. Mataracioglu, “Feature standard,” 2016. [Online]. Available: https://www.pcisecuritystandards.org/documents/PCI_SSC_Quick_Reference_Guide.pdf.
- [16] R. Debreceny and G. L. Gray, “IT Governance Drivers of Process Maturity,” 2011.
- [17] R. Ahmad and L. Janczewski, “Governance life cycle framework for managing security in Public Cloud: From user perspective,” in *Proceedings - 2011 IEEE 4th International Conference on Cloud Computing, CLOUD 2011*, Jul. 2011, pp. 372–381, doi: 10.1109/CLOUD.2011.117.
- [18] S. C. Misra and A. Mondal, “Identification of a company’s suitability for the adoption of cloud computing and modelling its corresponding Return on Investment,” *Math. Comput. Model.*, vol. 53, no. 3–4, pp. 504–521, Feb. 2011, doi: 10.1016/j.mcm.2010.03.037.
- [19] “What Does it Mean for Cloud Services to be HIPAA Compliant?” <https://www.connectria.com/blog/what-does-it-mean-for-cloud-services-to-be-hipaa-compliant-and-are-you-actually-compliant/> (accessed Feb. 06, 2021).
- [20] B. C. Drolet, J. S. Marwaha, B. Hyatt, P. E. Blazar, and S. D. Lifchez, “Electronic Communication of Protected Health Information: Privacy, Security, and HIPAA Compliance,” *J. Hand Surg. Am.*, vol. 42, no. 6, pp. 411–416, Jun. 2017, doi: 10.1016/j.jhsa.2017.03.023.

- [21] P. He, J. Zhu, S. He, J. Li, and M. R. Lyu, "An evaluation study on log parsing and its use in log mining," *Proc. - 46th Annu. IEEE/IFIP Int. Conf. Dependable Syst. Networks, DSN 2016*, pp. 654–661, 2016, doi: 10.1109/DSN.2016.66.
- [22] C. Gikas, "A general comparison of FISMA, HIPAA, ISO 27000 and PCI-DSS Standards," *Inf. Secur. J.*, vol. 19, no. 3, pp. 132–141, 2010, doi: 10.1080/19393551003657019.
- [23] M. Pohlman Marlin Pohlman, "Using the CSA Control Matrix and ISO 27017 controls to facilitate regulatory compliance in the cloud," 2010. [Online]. Available: www.cloudsecurityalliance.org.
- [24] J. N. Al-Karaki, A. Gawanmeh, and S. El-Yassami, "GoSafe: On the practical characterization of the overall security posture of an organization information system using smart auditing and ranking," *J. King Saud Univ. - Comput. Inf. Sci.*, no. xxxx, 2020, doi: 10.1016/j.jksuci.2020.09.011.
- [25] N. Grozev and R. Buyya, "Regulations and latency-aware load distribution of web applications in Multi-Clouds," *J. Supercomput.*, vol. 72, no. 8, pp. 3261–3280, 2016, doi: 10.1007/s11227-016-1735-6.
- [26] B. R. Williams, A. A. Chuvakin, and D. Milroy, *PCI compliance : understand and implement effective PCI data security standard compliance. .*
- [27] S. M. Prabhu and K. N. B. Murthy, "Phd Forum 2017 - Information Management Framework for Good Governance," in *Proceedings - 23rd Annual Conference on Advanced Computing and Communications, ADCOM 2017*, Jul. 2017, pp. 50–54, doi: 10.1109/ADCOM.2017.00015.
- [28] A. Ukidve, D. S. Smantha, and M. Tadvalkar, "Analysis of Payment Card Industry Data Security Standard [PCI DSS] Compliance by Confluence of COBIT 5 Framework," 2017. [Online]. Available: www.ijera.com.
- [29] PCI SSC, "PCI DSS Quick Reference Guide 3.2.1," *PCI Secur. Stand. Doc.*, pp. 1–40, 2018, [Online]. Available: https://www.pcisecuritystandards.org/security_standards/documents.php.
- [30] L. Sun *et al.*, "Service Level Agreement (SLA) assurance for cloud services: A survey from a transactional risk perspective," *Proc. - 2016 IEEE 14th Int. Conf. Dependable, Auton. Secur. Comput. DASC 2016, 2016 IEEE 14th Int. Conf. Pervasive Intell. Comput. PICom 2016, 2016 IEEE 2nd Int. Conf. Big Data*, no.

- 1, pp. 263–266, 2012, doi: 10.1145/2428955.2429005.
- [31] ISACA. and J. W. Lainhart, *COBIT 5: A business framework for the governance and management of enterprise IT* COBIT 5, vol. 34, no. 1. 2012.
- [32] R. Alfred and P. Anthony, “THE UTILIZATION OF COBIT FRAMEWORK WITHIN IT GOVERNANCE: A STUDY OF LITERATURE,” AICST.
- [33] M. Nicho, “Operational Issues in Measurement Using COBIT.”
- [34] M. A. Khan, M. R. Karim, and Y. Kim, “A scalable and hybrid intrusion detection system based on the convolutional-LSTM network,” *Symmetry (Basel)*, vol. 11, no. 4, 2019, doi: 10.3390/sym11040583.
- [35] S. N. Mahammad and K. Veezhinathan, “Constructing online testable circuits using reversible logic,” *IEEE Trans. Instrum. Meas.*, vol. 59, no. 1, pp. 101–109, 2010, doi: 10.1109/TIM.2009.2022103.
- [36] I. H. Shahrezaei, M. Kazerooni, and M. Fallah, “A total quality assessment solution for synthetic aperture radar nlfm waveform generation and evaluation in a complex random media,” *Int. J. Smart Sens. Intell. Syst.*, vol. 10, no. 1, pp. 174–198, 2017, doi: 10.21307/ijssis-2017-208.
- [37] P. Visconti, R. Ferri, M. Pucciarelli, and E. Venere, “Development and characterization of a solarbased energy harvesting and power management system for a WSN node applied to optimized goods transport and storage,” *Int. J. Smart Sens. Intell. Syst.*, vol. 9, no. 4, pp. 1637–1667, 2016, doi: 10.21307/ijssis-2017-933.
- [38] A. Hendre and K. P. Joshi, “A Semantic Approach to Cloud Security and Compliance,” 2015.
- [39] R. Chow *et al.*, “Controlling data in the cloud: Outsourcing computation without outsourcing control,” *Proc. ACM Conf. Comput. Commun. Secur.*, pp. 85–90, 2009, doi: 10.1145/1655008.1655020.
- [40] K. W. Ullah, A. S. Ahmed, and J. Ylitalo, “Towards building an automated security compliance tool for the cloud,” *Proc. - 12th IEEE Int. Conf. Trust. Secur. Priv. Comput. Commun. Trust. 2013*, pp. 1587–1593, 2013, doi: 10.1109/TrustCom.2013.195.
- [41] M. Al-Ruithe, E. Benkhelifa, and K. Hameed, “A Conceptual Framework for Designing Data Governance for Cloud Computing,” *Procedia Comput. Sci.*, vol. 94, no. MobiSPC, pp. 160–167, 2016, doi: 10.1016/j.procs.2016.08.025.

- [42] E. Chew, M. Swanson, K. Stine, N. Bartol, A. Brown, and W. Robinson, "Chew et al. - 2008 - Performance Measurement Guide for Information Security," no. July, 2008, doi: 10.6028/NIST.SP.800-55r1.
- [43] R. P. Padhy, M. R. Patra, and S. C. Satapathy, "Cloud Computing: Security Issues and Research Challenges," 2011. [Online]. Available: <http://www.nist.gov/>.
- [44] K. S. Jeon, S. J. Park, S. H. Chun, and J. B. Kim, "A study on the big data log analysis for security," *Int. J. Secur. its Appl.*, vol. 10, no. 1, pp. 13–20, 2016, doi: 10.14257/ijasia.2016.10.1.02.
- [45] ISACA, "IT Governance and the Cloud Principles and Practice for Governing Adoption of Cloud Computing," ISACA, 2011. <https://www.isaca.org/resources/isaca-journal/past-issues/2011/it-governance-and-the-cloudprinciples-and-practice-for-governing-adoption-of-cloud-computing> (accessed Feb. 06, 2021).



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