Scopus

Documents

Zainuddin, A.A.[a] , Chung, C.K.[b] , Rosani, A.N.M.[c] , Rahman, S.H.A.[d] , Kamarudin, S.I.[e] , Puzi, A.A.[a] , Subramaniam, K.[b]

Towards an Enterprise Architecture for Healthcare System and Information Technology: State of the Art and Future Trends
(2024) *SpringerBriefs in Applied Sciences and Technology*, Part F3223, pp. 49-58.

[a] Department of Computer Science, Kulliyyah of Information and Communication Technology, International Islamic University Malaysia Gombak Campus, Gombak, Malaysia
[b] Information Technology Management, Manipal GlobalNXT University, Manipal International Malaysia, Nilai, Malaysia
[c] Faculty of Computer Science and Information Technology, Universiti Putra Malaysia, Seri Kembangan, Malaysia
[d] Faculty of Computing and Informatics, Multimedia University, Cyberjaya, Malaysia
[e] College of Computing, Informatics and Media, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia

Abstract
Enterprise architecture (EA) integrates and develops organisational components for strategic planning. It helps define IT component linkages and engage paramedical workers in healthcare. It also creates the greatest healthcare enterprise architectural framework. Commonly, the senior management must grasp enterprise architecture to choose a business-IT-aligned organisation. The study examines healthcare organisations' EA adoption issues before, during, and after. To fix these difficulties and streamline the process. The report recommends healthcare EA implementation. To improve implementation, these principles streamline processes, stimulate collaboration, and improve patient outcomes. EA boosts healthcare performance, but IT-human interaction must be reviewed. The healthcare businesses must overcome challenges to deploy smoothly and achieve great results. © The Author(s), under exclusive license to Springer Nature Switzerland AG 2024.

Author Keywords
Enterprise architecture; Healthcare; TEAF; TOGAF

Index Keywords
Electronic health record; Enterprise Architecture, Future trends, Healthcare, Healthcare systems, Organisational, State of the art, Systems and information, TEAF, TOGAF, Workers'; Strategic planning

References

- Wichmann, M.W., Johannes Wichmann, M.W.
  An exploration of enterprise architecture research in hospitals
  (2019) *Business Information Systems Workshops*, pp. 89-10.
  Springer, Cham

- Tamm, T.
  How does enterprise architecture add value to organisations
  (2011) *Commun. Assoc. Inf. Syst*, 28, pp. 141-168.

- Zhang, X.
  P.Y.: Patients' adoption of the e-appointment scheduling service: a case study in primary healthcare. Stud
  (2014) *Health Technol. Inf*, 204, pp. 176-181.

- Kitchenham, B.
  Guidelines for performing systematic literature reviews in software engineering
  (2007) *Technical Report EBSE*, pp. 2007-3001.

- Rozario, M., Zainuddin, A.A., Manokaran, P.
  Analysis of a survey on the role of enterprise architecture in the field of healthcare technology by knowledge-based research
  (2023) *Int. J. Comput. Digital Syst*, 13 (1), pp. 547-557.

- Thimbleby, H.
  Technology and the future of healthcare
  (2013) *J. Public Health Res*, 2 (3), p. e28.

- Armour, F.
  (2007) *Enterprise Architecture: Challenges and Implementations*, p. 217.

- Zachman, J.A.
  (2018) *The Concise Definition of the Zachman Framework*,

- (2007),

- Dedić, N.
  FEAMI: A methodology to include and to integrate enterprise architecture processes into existing organizational processes
  (2020) *IEEE Eng. Manag. Rev*, 48 (4), pp. 46-54.

- Faizal Pasaribu, J.S.
  Designing enterprise architecture in hospitals group
  (2019) *International Conference on Information and Communications Technology (ICOIACT)*,

- Kitchenham, B.A., Brereton, O.P., Budgen, D.
  (2017) *Protocol for Extending an Existing Tertiary Study of Systematic Literature Reviews in Software Engineering*,

- Negin Banaeianjahromi, K.S.
  (2016) *Understanding Obstacles in Enterprise Architecture Development*,
  European Conference on Information Systems (ECIS), Istanbul, Turkey

- Cresswell Kathrin, S.A.
  M.: Health information technology in hospitals: Current issues and future trends
  (2015) *Future Hosp. J*, 2 (1), pp. 50-56.

- Plessius, H.
  Towards an enterprise architecture benefits measurement instrument. Interna-tional Conference on Advanced Information Systems Engineering
  (2015) *Lecture Notes in Business Information Processing*, 215, pp. 363-374.

- Abunadi, I.
  Enterprise architecture best practices in large corporations
  (2019) *Information*, 10 (10), p. 293.

Correspondence Address
Zainuddin A.A.; Department of Computer Science, Malaysia; email: anwarzain@iium.edu.my

Document Type: Book Chapter
Publication Stage: Final
Source: Scopus