STUDY AND RECOMMENDATION ON THE ROLE OF INFORMATION TECHNOLOGY IN THE EFFECTIVE IMPLEMENTATION OF E-GOVERNANCE PROGRAMS

Naveen Sharma*; Dr. Raghav Mehra**

*Research Scholar (Ph.D. CS),
Bhagwant University, Ajmer, Rajasthan, INDIA
Email id: tnaveen@yahoo.com

**Associate Professor & Assistant Director,
Bhagwant University, Ajmer, Rajasthan, INDIA
Email id: raghav.mehrain@gmail.com

ABSTRACT

Innovation and the growth of consumer-centric communication and digitized service delivery involve continued investment in the latest technology. And public sector agencies, like any other large enterprise, are expected to deliver programs with minimal human intervention to corporations, other partner public entities and to the citizens. And unlike an organized and tightly controlled private enterprise, due to many factors, government organizations frequently fail to deliver as expected. A detailed systematic review of existing research work has helped to identify key factors that define the role of IT in effectively implementing G2G, G2B and G2C services. This research illustrates the need and strategies for public sector standardization of the information technology environment. The main guidelines are presented based on the context of enterprise architecture and how standardization will gain control over the potential return on investment in technology. The study also opens the doors to further proposals for research and s tandardization in the Indian public sector, as the recent adoption of enterprise architecture framework for government initiatives matures further. General Terms: Enterprise Architecture Implementation Capability, Standardization of the Use of Information Technology in Indian Public Sector

KEYWORDS: *Enterprise Architecture, EA Implementation Capability, Connected Governments, e-Governance, Information Technology, Business Value, Digitalization, Innovation, Indian Public Sector, IndEA.*

5. REFERENCES

R. P, "Issues and challenges in e-governance planning," Electronic Government an International Journal, pp. 4-9, 2004.

J. B. K Hjort-Madsen, "When Enterprise Architecture Meets Government: An institutional case study analysis," Journal of Enterprise Architecture, vol. 2, no. 1, pp. 11-25, 2006.

S. B. R Foorthuis, "Best Practices for Business and Systems Analysis in Projects Conforming to Enterprise Architecture," Enterprise Modelling and Information Systems Architectures, vol. 3, no. 1, pp. 36-47, 2008.

M. R. P. R K Das, "SOA for e-governance in India: potentials and pitfalls," ICEGOV '09, pp. 36-41, 2009.

Z. Feng, "E-Government in Digital Era:Concept, Practice, and Development," Thailand, 2003.

P. Saha, "Enterprise Architecure as Plaform for Connected Government," National University of Singapore, Singapore, 2010.

R. B. Heeks, "Why do most government IT projects fail?," ICA Newsletter, vol. 70, no. 1, pp. 26-31, 2000.

A. W. K Langenberg, "Enterprise Architecture: What Aspects is Current Research Targeting?," EPFL Technical Report IC/2004/77, Finland, 2004.

V. P. K. &. P. M. Seppänen, "Key issues in enterprise architecture adoption in the public sector," The Electronic Journal of e- Government, vol. 16, no. 1.

S. Basu, "E-government and Developing Countries: an Overview," International Review of Law Computers and Technology, vol. 18, no. 1, 2004.

M. Ayyad, " How Does e-Government Work?," ICEGOC '17, pp. 485-493, 2017.

S. W. Ambler, "Agile Software Development at Scale," in In Balancing Agility and Formalism in Software Engineering, CEE-SET, 2007, pp. 1-10.

H. K, "Enterprise Architecture in Public Sector Digitalization," Alto University, Finland, 2015.

E. Niemi, "Enterprise Architecture Benefit Realization," Tempere University of Technology, Tempere, 2016.

T. J. E. Y Levy, "A systems approach to conduct an effective literature review in support of information systems research," Informing Science Journal, vol. 9, no. 1, pp. 181-212, 2006.

J. A. Maxwell, "Understanding and validity in qualitative research," Harvard Educational Review, vol. 62, no. 3, pp. 279-301, 1992.

J. Muehlfeit, "The connected government framework for local and regional government," Microsoft Corporation, Germany, 2006.

P. Saha, "Understanding the impact of enterprise architecture on connected government," UNPAN, India, 2011.

S. &. G. J. Sharma, "Building Blocks of an E-government-A Framework," Journal of Electronic Commerce in Organizations, vol. 1, no. 4, 2003.

V. Ndou, "E-government for developing countries: opportunities and challenges," The Electronic Journal on Information Systems in Developing Countries, vol. 18, no. 1, 2004.

H. &. L. K. Isomäki, "Challenges of Government Enterprise Architecture Work – Stakeholders' Views," M. A. Wimmer, H. J. Scholl & E. Ferro (Eds.), Turin, Italy, EGOV,2008.

K. S. Suchaiya S, "Analyzing national e-Government interoperability frameworks: A case of Thailand," ICDIM, vol. 2014, pp. 51-6, 2014.

L. Guijarro, "Interoperability frameworks and enterprise architectures in egovernment initiatives in Europe and the United States," 2007.

I. M. Al-Nasrawi S, "An enterprise architecture mapping approach for realizing e-government," ICCIT, vol. 2013, pp. 17-21, 2013.

S. H. Bakar NAA, "Investigating Enterprise Architecture implementation in public sector organisation: A case study of Ministry of Health Malaysia," 3rd Int Conf Comput Inf Sci, vol. 3, pp. 1-6, 2016.

R. A. Kaushik A, "The new data-driven enterprise architecture for e-healthcare: Lessons from the indian public sector.," Gov Inf Q., vol. 32, no. 1, pp. 63-74, 2015.

H. S. K. N. Bakar NAA, "Enterprise architecture implementation model: Measurement from experts and practitioner perspectives.," 4th IEEE Int Colloq Inf Sci Technol, 2016. [Online]. Available: http://ieeexplore.ieee.org/document/7804849/.

K. Y. I. Lee J Du, "A study on strategy planning and outcome of EA in Korea," 15th Int Conf Adv Commun Technol, vol. 873, no. 9, 2013.

Z. L. Zheng T, "Examining e-government enterprise architecture research in China: A systematic approach and research agenda," Govt Info Q, 2013. [Online]. Available: http://dx.doi.org/10.1016/j.giq.2012.08.005.

S. M. S. I. Kotusev S, "Consolidating Enterprise Architecture Management Research," 48th Hawaii International Conference on System Sciences, 2015. [Online]. Available: http://ieeexplore.ieee.org/document/7070308/.

R. L. P. E. El-mekawy M, "Computers in Human Behavior An evaluation framework for comparing business-IT alignment models : A tool for supporting collaborative learning in organizations," 2015.

D. R., "Process Oriented Approaches in Enterprise Architecture for Business-IT Alignment.," Procedia Comput Sci, 2016. [Online]. Available: http://dx.doi.org/10.1016/j.procs.2016.09.239.

S. S. R. P, "Cloud Computing Technology for Effective e-Governance," IJCSIT, vol. 3, no. 1, pp. 1-4, 2012.

P. B. S. G. S. P. R. T Tamm, "How Does Enterprise Architecture Add Value to Organisations?," Communications of the Association for Information Systems, vol. 28, no. 1, pp. 141-168, 2011.

M. Lange, "Evaluating the Realization of Benefits from Enterprise Architecture Management: Construction and Validation of a Theoretical Model," PhD diss., Humboldt-Universität, Berlin, 2012.

A. I. A. Bilal charif, "Business and Government Organizations' Adoption of Cloud Computing," in Lecture Notes in Computer Science, Egypt, Springer International Publishing Swtizerland, 2014, pp. 492-501.

M. H. J. H. K Liimatainen, "Overview of Enterprise Architecture work in 15 countries," Ministry of Finance, State IT Management Unit, Research reports, Finland, 2007.