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Architecture for Digital Transformation Toward IS Leadership: With Case Studies in Global Companies and Ecosystem Society

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 Many global corporations have gone through enormous changes in response to dynamic economic events with the progress of new disruptive technologies, big data, globalization, shifts in customer needs, and new business models. Significant changes in cutting-edge IT technology in Artificial Intelligence, Data Analytics, Internet of Things, Cloud Computing, Mobile IT and Digitalization in particular, have emerged as new trends of IT innovation drastically (Masuda, et al. 2021). Digital Transformation is the key for corporations to align their Digital IT Strategies for leveraging the above technology trends, while existing leadership talent and skillsets need to be enhanced to new global leadership capabilities needed to drive the digital transformation for addressing the diversity and complexities in global societies (Ernest Gundling 2011).
Our research with case studies explores the experiences of digital transformation initiatives with leadership roles, addressing the following questions: 1) How can Agile software development process be integrated with Digital Enterprise Architecture – AIDAF Framework as Process-Oriented Transformation Methods? 2) What Long-Term Vision of Transformation should be attained with Architecture Adaptiveness in the AIDAF Framework? We focus on digital IT strategy and architecture with innovation to support such leadership initiatives there. This research aims to exemplify answers for the above questions by case studies in global enterprises, primary city vison in Asia and healthcare ecosystem society in Americas with necessary leadership behaviors in global companies for advancing digital transformation initiatives there (Masuda, et al. 2021, 2022). The authors look into these case studies in global enterprises with the digital transformation initiatives, while clarifying the effectiveness and necessary tasks of the desirable Leadership behaviors there, as well (Funke, et al. 2019).

References

Ernest Gundling. 2011. "What is global leadership? 10 Key Behaviors," pp. 127-149.
Funke, C. Syed, R. 2019, "The leadership influences in BPM lifecycle," Proceedings of the 25th Americas Conference on Information Systems (AMCIS 2019), AIS.
Masuda, Y. Zimmermann, A. Bass, M. Nakamura, O, Shirasaka, S. Yamamoto, S. 2021, "Adaptive Enterprise Architecture Process for Global Companies in a Digital IT Era." International Journal of Enterprise Information Systems. IGI Global. 17(2), pp. 21-43.
Masuda, Y., Zimmermann, A., Shepard, D. S., Schmidt, R., & Shirasaka, S. (2021). An Adaptive Enterprise Architecture Design for a Digital Healthcare Platform: Toward Digitized Society–Industry 4.0, Society 5.0. In 2021 IEEE 25th International EDOC Conference, pp. 138-146. IEEE.
Masuda, Y., Jain, " Vision Paper for Sharing Economy and Digital Platforms Toward Society 5.0," In International KES Conference on Human Centered Intelligent Systems (2022).
Miyake, T., "Strategic Risk Management Model for Agile Software Development: Case of Global Pharmaceutical Enterprise," In International KES In Medicine & Healthcare Conference (2022).

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