

A SOA-based framework for e-procurement in multi-organisations

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Abstract: The lack of standard platform for application-to-application interaction between the procurement systems of subsidiary organizations of a multi-organisation limits transparency of procurement procedures, and uniformity in the procurement patterns and practices, even when there are cross-cutting concerns. In this paper, an SOA-based e-procurement framework is proposed for effective e-procurement in a multi-organisational context. The e-procurement framework leverages SOA's inherent capability for addressing problems of heterogeneity, interoperability and dynamic requirements. An empirical case study showed that the framework is effective for achieving the corporate goal of promoting transparency, and enhancing uniformity of corporate procurement management in a multi-organisational context.

Keywords: business-to-business; e-procurement; SOA; service-oriented architecture; web services; multi-organisation; e-finance; goal question metric; SOA evaluation; interoperability; procurement management.

Reference to this paper should be made as follows: Adesina, A.A., Daramola, J.O. and Ayo, C.K. (2010) 'A SOA-based framework for e-procurement in multi-organisations', *Int. J. Electronic Finance*, Vol. 4, No. 2, pp.156–170.