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Cloud Enterprise Application Provider Selection Model for the Small and Medium Enterprise: A Pilot Study

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Abstract : Enterprise Applications (EAs) aid the organizations achieve operational excellence and competitive advantage. Over time, most Small and Medium Enterprises (SMEs), which are known to be the major drivers of most thriving global economies, use the costly on-premise versions of these applications thereby making business difficult to competitively thrive in the same market environment with their large enterprise counterparts. The advent of cloud computing presents the SMEs an affordable offer and great opportunities as such EAs can be cloud-hosted and rented on a pay-per-use basis which does not require huge initial capital. However, as there are numerous Cloud Service Providers (CSPs) offering EAs as Software-as-a-Service (SaaS), there is a challenge of choosing a suitable provider with Quality of Service (QoS) that meet the organizations’ customized requirements. The proposed model takes care of that and goes a step further to select the most affordable among a selected few of the CSPs. In the earlier stage, before developing the instrument and conducting the pilot test, the researchers conducted a structured interview with three experts to validate the proposed model. In conclusion, the validity and reliability of the instrument were tested through experts, typical respondents, and analyzed with SPSS 22. Results confirmed the validity of the proposed model and the validity and reliability of the instrument.

Keywords : cloud service provider, enterprise application, quality of service, selection criteria, small and medium enterprise
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