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THE ADOPTION OF CLOUD COMPUTING: CHALLENGES AND OPPORTUNITIES FOR FIRMS IN CHINA

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Abstract

Cloud technologies are orchestrating a paradigm shift in network integration and data management, resulting in increased investments in these technologies globally. It is predicted that China will become the Asia-Pacific *Cloud powerhouse* generating an estimated revenue of \$1.59 billion by 2020. These investments come with challenges including security and privacy, legal and jurisdictional, data ownership and reliability of service providers, to name a few. Yet, little is known about these challenges in a Chinese context. To address this gap in knowledge, we conducted a qualitative study. The data collected through 19 semi-structured interviews from experts belonging to various industries were analysed using content analysis techniques. The results show that: (1) information security, data ownership, reliability and effective administration are some of key issues being faced by Chinese firms, (2) Security issues are the main obstacles for firms in Finance industry to adopt cloud computing mainly due to lack of regulations, and inherent technological vulnerabilities posing risks such as password sniffing, data modification, and spoofing, (3) Telecommunication and Education sectors have a more favourable view towards cloud computing adoption, and (4) manufacturing sector provides opportunities, but still lags behind in cloud adoption. Theoretically, the results contribute the adoption of innovation theories, particularly building knowledge on technological adoption stream. Managerially, the findings will help IT/IS managers to understand challenges and develop relevant strategies for successful adoption of cloud-based technologies. The results are also significant for policy makers to work towards creating necessary regulations and policies for uptake of cloud technologies in China.

Keywords: Cloud Computing, Data Security, Regulatory Environment, China, Qualitative Methods.
