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A LITERATURE REVIEW ON CLOUD COMPUTING ADOPTION IN CURRENT ENTERPRISES

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1 ABSTRACT

cloud computing is the practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer. Cloud computing has received increasing interest from enterprises since its inception. With its innovative information technology (IT) services delivery model, cloud computing could add technical and strategic business value to enterprises. However, cloud computing poses highly concerning internal (e.g., Top management and experience) and external issues (e.g., regulations and standards). This paper presents a systematic literature review to explore the current key issues related to cloud computing adoption. This is achieved articles published about cloud computing adoption. Using the grounded theory approach, articles are classified into eight main categories: internal, external, evaluation, proof of concept, adoption decision, implementation and integration, IT governance, and confirmation. Then, the eight categories are divided into two abstract categories: cloud computing adoption factors and processes, where the former affects the latter. The results of this review indicate that enterprises face serious issues before they decide to adopt cloud computing. Based on the findings, the paper provides a future information systems (IS) research agenda to explore the previously under-investigated areas regarding cloud computing adoption factors and processes. This paper calls for further theoretical, methodological, and empirical contributions to the research area of cloud computing adoption by enterprises.

2 KEYWORDS

Cloud Computing Adoption Enterprises

3 Introduction

Over the past decade, there has been a heightened interest in the adoption of cloud computing by enterprises. It promises the potential to reshape the way enterprises acquire and manage their needs for computing resources efficiently and cost-effectively [1]. In line with the notion of shared services, cloud computing is considered an innovative model for IT service sourcing that generates value for the adopting enterprises [2]. Cloud computing enables enterprises to focus on their core business activities, and, thus, productivity is increased [3]. The adoption of cloud computing is growing rapidly due to the scalability, flexibility, agility, and simplicity it offers to enterprises [36]. It has been reported that 32 percent of large enterprises are testing the concept of cloud computing; 37 percent are already running applications on the cloud; and 17 percent are using cloud infrastructure [7]. Contrarily, 19 percent of SMEs are testing the concept; 29 percent are running applications on the cloud; and 41 percent are using cloud infrastructure.

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