

Factors influencing cloud enterprises resource planning system adoption in New Zealand small and medium enterprises

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ABSTRACT

The research included a literature review and listed the benefits and concerns of Small and Medium Enterprises (SMEs) in Cloud Enterprise Resource Planning (ERP) system adoption identified in other parts of the world. A research framework based on this was then made to guide the future research on the significant benefits and concerns of New Zealand SMEs in Cloud ERP adoption. Interviews are to be used as the qualitative tool to collect the data and a thematic analysis on the data collected is proposed to derive the results for the research. The outcome of the research is expected to aid future cloud ERP adoption decisions in SMEs.

Keywords: Cloud, Enterprise Resource Planning, ERP, Small and Medium Enterprises, SME

1. INTRODUCTION

ERP represents the basic information system software that enterprises use for their business functions (Bradford, 2010). In spite of the advantages that this software brings, a major hindrance to the adoption of traditional ERP is the associated high initial investment involved (Bradford, 2010). Cloud ERP which is a delivery model based on cloud computing offers an attractive option for Small and Medium Enterprises (SME) for whom the traditional on-premise ERP may not be a viable economic choice (Alajbegovic, Alexopoulos, & Desalermos, 2013). This research therefore aims to provide a New Zealand perspective of the benefits and concerns in cloud ERP adoption and act as a guide for future SMEs planning to adopt ERP. The research aims to emphasise on SMEs as they constitute 97 percentage of all enterprises in New Zealand and account for 40 percentage of all economic output (Ministry of Economic Development, 2011).

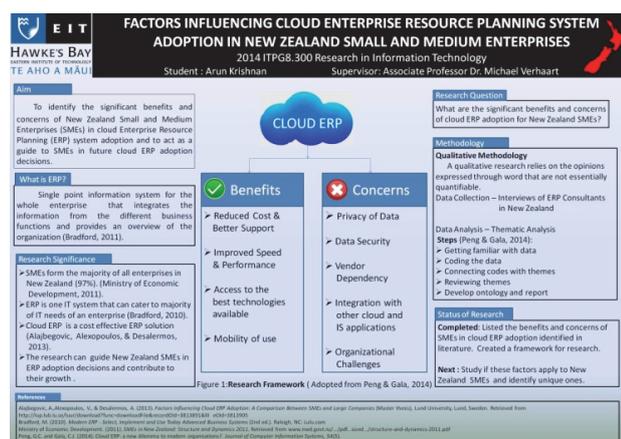
2. LITERATURE REVIEW

Enterprise Resource Planning (ERP) system is a single point information system for the whole enterprise that integrates the information from different business functions such as purchasing, human resources, production, sales and accounting and provides an overview of the organization (Bradford, 2011). Cloud ERP is a model of ERP delivery based on cloud computing that promises the same functionalities of an on-premise ERP while deriving the benefits of a cloud service (Alajbegovic et al., 2013). Cloud ERP therefore offers a flexible, scalable, adaptable, affordable and efficient solution for enterprises adopting an ERP solution (Raihana, 2012). The different deployment methods of cloud ERP are ERP-as-a-Service, Hosted ERP and Hybrid ERP (Alajbegovic et al., 2013).

According to Peng and Gala (2014) and supported by other related researches (Alajbegovic et al., 2013) the benefits obtained while adopting Cloud ERP are reduced cost and better support, improved speed and performance, access to best technologies available and mobility of use and the concern factors are privacy of data, data security, vendor dependency, integration with other cloud and information system applications and organizational challenges.

3. RESEARCH FRAMEWORK

Though there are researchers around the globe that have studied the benefits and concerns of SMEs in cloud ERP adoption, an extensive literature search could not identify any that gave a New Zealand Perspective of the issue. Table 1 lists the benefit and concern factors identified during the literature review to be used as a point of reference for the research.



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Table 1: Research Framework (adopted from Peng & Gala, 2014)

Benefits	Concerns
Reduced Cost and better support	Privacy of Data
Improved speed and performance	Data Security
Access to best technologies available	Vendor Dependency
Mobility of use	Integration with other cloud and IS applications
	Organizational challenges

4. METHODS

Quantitative research relies on information developed from quantifiable values for its results while a qualitative research relies on the opinions expressed through word that are not essentially quantifiable (Saunders, Lewis & Thornhill, 2009). This research deems qualitative research as the appropriate tool for conducting the research as the outcome is to explain the issues pertaining to adoption of cloud ERP in New Zealand SMEs. This research aims to interview IT professionals and ERP consultants in New Zealand for the purpose of collecting required data as cloud ERP may still be a new concept to SMEs and therefore the business managers and users may not be in a position to give expert opinion on the matter (Peng & Gala, 2014).

The research proposes to employ a thematic analysis to derive results from the data collected through interviews. According to Peng and Gala (2014) thematic analysis “is a process of searching, identifying and exploring codes and themes that emerged as important to the description of the phenomenon through careful reading and re-reading of data”. The different stages of thematic analysis according to Peng and Gala (2014) are “Getting familiar with data, coding the data, connecting codes with themes, reviewing themes and developing ontology and reporting findings”..

5. CONCLUSION

Cloud ERP was identified as an ideal ERP implementation model for SMEs considering the cost advantage. From the

literature cost reduction, improved performance, access to latest technology and mobility were identified as the benefits and privacy, data security, vendor dependency, integration with other IS applications and organizational challenges were identified as the concerns in cloud ERP adoption. (Alajbegovic et al, 2013; Peng & Gala, 2014; Elragal & Kommos, 2012). As the next step this research proposes the use of qualitative method involving in-depth interviews of IT professionals and ERP consultants to identify the benefit and concern factors relevant to New Zealand SMEs. The outcome of the research is expected to act as a guide to New Zealand SMEs in future ERP adoptions.

6. REFERENCES

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