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**IMPACT OF ERP AND CLOUD COMPUTING IN  
BUSINESS ENTERPRISES**

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# Impact of ERP and Cloud Computing In Business Enterprises

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**Abstract – An Enterprise Resource Planning (ERP) system allows a company to accomplish tasks that cannot be done well, if at all, without such a system. Traditionally: ERP systems have been software applications that are run on a company's own computer systems. Focuses of ERP has been on managing business transactions**

**Keywords: ERP, Cloud computing, Business**

## INTRODUCTION

Cloud computing is a very new and emerging concept in the field of computing. There are many concepts involve in cloud computing but the major are Software, Hardware and Network. The basic idea behind cloud computing is that anything that could be done in computing – whether on an individual PC or in a corporate data center – from storing data to communicating via email to collaborating on documents or crunching numbers on large data sets – can be shifted to the cloud. Cloud computing encompasses a wide variety of offerings, including: SaaS (Software as a Service), PaaS (Platform as a Service), and IaaS (Infrastructure as a Service).

## ERP -

ERP is an evolutionary phenomenon, and requires a change in the mindset of one and all – citizen, executives or the government. With the support of the Internet, the government processes defined by specializations can be made efficient, effective, and citizen friendly. There are many challenging issues lying ahead. Security is the main concern for the citizen, and redefining rules and procedures, information transparency, legal issues, infrastructure, skill and awareness, access to right information, inter-departmental collaboration, tendency to resist the change in work culture, are the main concerns for the government to address. Other than all these factors, the government needs to make significant investments in areas such as Business process re-engineering, capacity building, training, assessment and awareness [9].

## REVIEW OF LITERATURE

The core of ERP initiatives includes information exchange, processing and service delivery. Moreover, the scheduled processes in public organizations are usually data-intensive, consume a variety of resources and encompass data that can be shared. Thus, these initiatives require: a) system interoperability, b) integration of government operations and c) cloud computing infrastructures. As it has been aforementioned, the major challenge in ERP adoption is the lack of systems' interoperability within an inadequate IT infrastructure in public sector. Furthermore, integration is a critical success factor for achieving a mature level of ERP applications [2].

Cloud computing has been a major focus of some businesses and government agencies in developing economies. Regarding the potential and impact of cloud computing in the developing world, findings and conclusions drawn from surveys, studies and experiences of companies are inconsistent [3].

The success of the forthcoming endeavors of human civilization depends on the proper utilization of the resources which are becoming scarce day by day. It is observed that while some places have plenty of resources, other places suffer from the lack of it. This discrimination can be wiped out by a proper management and strategy adopted by the business entities of different countries in the form of a properly implemented and managed ERP solutions. The existing ERP framework cannot address all categories of users. There is need of effective framework of ERP based on cloud computing concept, which would be intelligent as well as accessible by all [4].

Information Support Systems (ISS) are computer technology/network support systems that interactively support the information processing mechanisms for

individuals and groups in life, public, and private organizations, and other entities. With the increasing use of technology in modern times, there is a growing requirement of Information Support Systems for the organizations. Cloud Computing paradigm can be used to meet the increasing demands of the Information Support Systems and how Cloud Computing paradigm can prove to be future solution for such systems. In terms of implementation, there are three major types of cloud deployments; internal clouds, private clouds, and public clouds [6].

With the rapid evolution of Information Communication Technology (ICT) governments, organizations and businesses are looking for solutions to improve their services and integrate their IT infrastructures. Cloud computing is a latest technological paradigm in IT world, related to the delivery of computing as a service. Evidences from literature show that the use of cloud computing has significant advantages such as: a) cost reduction, b) great storage capacity, c) scalability, d) needless software installation and maintenance, e) accessibility of on-demand services or applications from anywhere, f) elasticity and pay-as-you-go model and g) energy saving[7]. India is emerging as a country where a number of experiments of ERP are taking place. India gives a unique challenge to ERP professionals because of several reasons ranging from poverty, awareness, literacy, basic infrastructure, bandwidth issues, multilingual and cultural issues. ERP provides with some tremendous opportunities to move forward in the 21st century with better quality, cost-effective, business and government services and a better relationship between customer, company, citizens and their government. [8]

### Radio frequency identification technology [1]

It is known commonly as RFID which is an increasingly efficient tool for tracking items through a supply chain.

#### RFID device

- Can be attached to products
- A small package (or tag) made up of a microprocessor and an antenna

#### RFID reader

- Can determine location of an item with an RFID tag
- Emits radio waves and receives signals back from the tag
- Sometimes called an interrogator

### ADVANTAGES OF RFID TECHNOLOGY:

- Does not need a line-of-sight connection
- Can withstand most environmental stresses

### CONCLUSION:

In this paper we found that technologies, such as radio frequency identification (RFID), are increasing the amount of data that is contained in ERP systems. Business intelligence technologies are turning data in ERP systems into valuable information. Cloud computing and mobile technologies are changing where ERP data is stored and how it is delivered.

### REFERENCES:

- [1] [www.csun.edu/~pjl26399/](http://www.csun.edu/~pjl26399/)
- [2] Charalampos Tsaravas, Marinos Themistocleous, "Cloud Computing & ERP : Myth Or Reality?", <http://www.iseing.org/tgovwebsite/tGovWorkshop2011/CRCPDF/tGOV-7/Paper%207.pdf> [Accessed: August 13, 2010].
- [3] Nir Kshetri, "Cloud Computing In Developing Economies: Drivers, Effects And Policy Measures", [http://www.ptc.org/ptc10/program/images/papers/papers/Paper\\_Nir%20Kshetri\\_B8.pdf](http://www.ptc.org/ptc10/program/images/papers/papers/Paper_Nir%20Kshetri_B8.pdf) [Accessed: August 13, 2010].
- [4] K.Mukherjee, "Cloud Computing: Future Framework for ERP", <http://www.ijcaonline.org/volume7/number7/pxc3871613.pdf> [Accessed: December 3, 2010].
- [5] Dr Ashish Rastogi, "A Model based Approach to Implement Cloud Computing in ERP", <http://www.ijcaonline.org/volume9/number7/pxc3871888.pdf>. [Accessed: February 8, 2011].
- [6] Muzafar Ahmad Bhat, Bashir Ahmad, Razeef Mohd Shah, Inayat Rasool Bhat. "Cloud Computing: A Solution to Information Support Systems (ISS)", <http://www.ijcaonline.org/volume11/number5/pxc3872118.pdf> [Accessed: March 18, 2011].
- [7] Charalampos Tsaravas, Marinos Themistocleous, "Cloud Computing And Egovernment: A Literature Review", <http://www.iseing.org/emcis/EMCISWebsite/EMCIS2011%20Proceedings/SCM16.pdf> [Accessed: August 11, 2011].
- [8] Vineet Agrawal, Manish Mittal, Lavanya Rastogi, "Integrated Citizen Relationship Management Framework – The Indian Perspective" [http://www.e11online.com/pdf/e11\\_whitepaper2.pdf](http://www.e11online.com/pdf/e11_whitepaper2.pdf) [Accessed: March 11, 2011].

- [9] Mrinalini Shah," ERP in India: Dream or reality?",  
<http://ijedict.dec.uwi.edu/include/getdoc.php?id=2391&article=332&mode=pdf> [Accessed:  
March 11, 2010]