# Outsourcing Business to cloud computing with communication services

Nory Chou, Minsoo Lee Computer Science and Engineering Department, Ewha Womans University nory\_chou@yahoo.com,mlee@ewha.ac.kr

#### Abstract

This paper describes business on cloud computing service and the development of solution in the business Architecture in outsourced services environment for communication. Cloud computing is so popular and make people life easier. Business process outsourcing has become attractive to both large and small businesses with the advent of service oriented and specifically web service technology.

# Keywords-Outsourcing Business; Cloud computing

# 1. Introduction

Every businessman has the idea of creating and running their business over the internet is not new. Especially, for large manufacturers are among the first in exploiting the electronic network ability to conduct business to business interaction. As The Internet is a global system of interconnected computer networks that it is a network of networks that consists of millions of academic, business, and government networks of local to global scope that are linked by a broad array of electronic and optical networking technologies and it is so fast, very easy to use and not expensive. There are few businesses that don't use web presence. Up until recently, Cloud computing has become attractive for large business. It is at an early stage, with a motley crew of providers large and small delivering a slew of cloud-based services, from full-blown applications to storage services to spam filtering. Utility-style infrastructure providers are part of the mix, but so is software as service providers such as Salesforce.com. For the most part, IT must plug into cloud-based services individually, but cloud computing aggregators and integrators are already emerging. We have some idea to solve the existing problems in the business processes and integration layer part by using ETL/data flows technique.

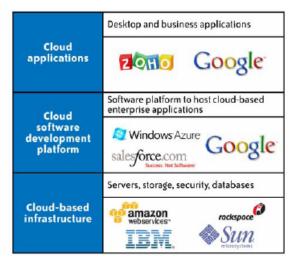
# 2. Related Research

Cloud computing is the evolution of a variety of technologies that have come together to alter an organization's approach to building out an IT infrastructure. Like the Web a little over a decade ago, there is nothing fundamentally new in any of the technologies that make up cloud computing. Many of the technologies that made up the Web existed for decades when Netscape came along and

This work was supported by Mid-career Researcher Program through NRF grant funded by the MEST(No. 2008-0061488)

made them accessible; similarly, most of the technologies that make up cloud computing have been around for ages. It just took Amazon to make them all accessible to the masses.

The computing field is able to envision transitioning into the cloud computing era because of the breath-taking advances in computing and information technologies during the past three decades. The advances include the build-up of the Internet backbone, the widespread adoption of broadband access to the Internet, the powerful network of servers and storage in data centers, the advances in high performance and scalable software infrastructure for the data censers and the Web.



(Figure 1) Recent Notable Cloud Launches

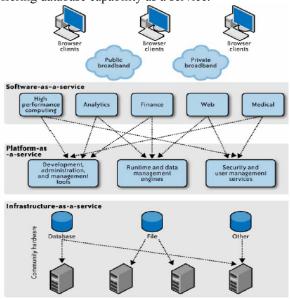
The Software-As-a-Service enables the organization to outsource the hosting and management of applications to a third party as a means of reducing the cost of application software licensing, servers, and other infrastructure and personnel required to host the application internally and SaaS

centralized control often allows the vendor or supplier to establish an ongoing revenue stream with multiple businesses and users without preloading software in each device in an organization. Applications delivery using the SaaS model typically uses the one-to-many delivery approach.

The Platform-As-a-Service, the vendor offers a development environment to application developers, who develop applications and offer those services through the provider's platform. PaaS systems are useful because they enable lone developers and start-up companies to deploy web-based applications without the cost and complexity of buying servers and setting them up.

The Infrastructure-As-a-Service Model, the vendor provides the entire infrastructure for a customer to run his applications. The IaaS model is similar to utility computing, in which the basic idea is to offer computing services in the same way as utilities.

**Database–As-a-Service,** Specialized type of storage is offering database capability as a service.



(Figure 2) Cloud service structure

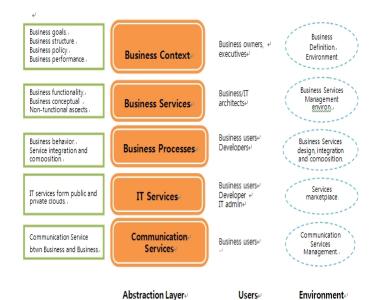
# 3. Business Architecture in an outsourced services environment for communication

We modify on business architecture in an outsourced services environment to exchange message (requirement, answer, etc.) between business and business for efficient communication by add new communication service layer in the business architecture in an outsourced services environment.

Communication service layer should be qualified following conditions such as Exchange of messages among partners, partners use different protocols, Interoperability objective which independence from transport protocols and Interoperability solutions which Translate messages between heterogeneous protocols.

■ Exchange of messages among partners: there are Transport binding, communication modes such as asynchronous/synchronous, Partners must understand message and message exchanges must be done in a secure way.

■ Partners use different protocols: there are Internet messaging middleware and remote application services (java RMI).



(Figure 3) Business Architecture in an outsourced services environment

# 4. Conclusion

Cloud computing makes people life more easy with the technology. When we use the service in cloud, small business and individual consumers will be with the main users of Laas, Paas, Saas, Daas. Enterprises may demand customization of services as the APIs, provided by service providers may not offer the flexibility and the features they require. It describes the development of solution in the business architecture in an outsourced services environment for communication.

### References

- [1] Relational Cloud: The Case for a Database Service Carlo Curino, Evan Jones, Yang Zhang, Eugene Wu, and Samuel Madden in VLDB 2007
- [2] HadoopDB: An Architectural Hybrid of MapReduce and DBMS Technologies for Analytical Workloads
- [3] Outsourcing Business to Cloud Computing Services: Opportunities and Challenges Hamid R Motahari-Nezhad, Bryan Stephenson, Bryan Stephenson. HP Laboratories HPL-2009-23
- [4] Hewlett-Packard: The benefits of combining businessprocess outsourcing and service-oriented architecture, http://h20195.www2.hp.com/PDF/4AA04316ENW.pdf
- [5] Brogi, A., Corfini, S., and Popescu, R. 2008. Semantics based compositionoriented discovery of Web services. ACM Trans. Internet Technol. 8(4): 1-39, Sep. 2008.
- [6] S. Murugesan. Understanding Web 2.0 IEEE IT Professional 9(4)
- [7] M. Ibrahim, G. Long, Service-Oriented Architecture and Enterpriserchitecture, http://www.ibm.com/developerworks/webservices/library/wssoaenterprise1/S\_TACT=105 AGX04&S\_CMP=ART