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Cloud Computing Services on Provisioning Cost Approach

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Abstract: The cloud computing is an expression used to describe the variety of computing concepts that involve a large number of computers connected through real time communication process. In this process we are not using any software and hardware requirements. Cloud computing provides different types of services like operating system usage services and other profile services in Amazon and other cloud storage services. In this process traditionally we are used Total Cost model Ownership approach; in this model we are calculating individual costs of providing services. We will plan to extend this approach support same resource cost model approach. For this instance we are developing optimized resource provisioning cost model can be introduced. In this model we will provide stochastic algorithm for every service then we will calculate same resource provisioning services to all the clients presented in cloud computing.

Index Terms: Deep water oil exploitation, cloud computing paradigm. IaaS (Infrastructure-as-a-Service), Cost Model Approach, Resource provisioning.

I. INTRODUCTION

Cloud computing is an expression used to describe a variety of cloud computing concepts that involve a large number of computers that connected through a real time communication networks such as internet. Cloud computing is a synonym for distributed computing over a network, and means the ability to run a program or application on many connected computers at the same time. Cloud computing is mostly used to sell hosted services in the sense of application service provisioning that run client server software at a remote location. Cloud resources are usually not only shared by multiple users but are also dynamically re-allocated per demand. In these situations cloud applications can be used efficiently in real time organizations like Amazon EC2 pricing and Media Fire cloud organizations. To access these services traditionally used mathematical model for calculation of the Total Cost of Ownership of cloud computing services. It is one of the most cost oriented approach that is widely spread in both research practical oriented applications.

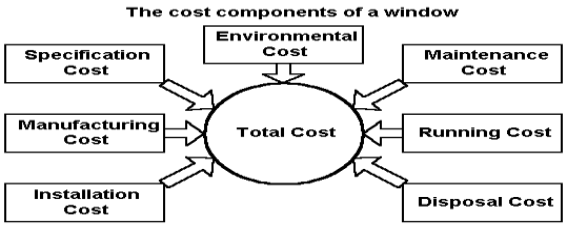

Figure 1: Total cost based approach model of data processing.

In this model we identify the efficient calculation of cost factors. These factors can be achieved in internal Infrastructure presented in Total Cost Ownership approach. The calculation results serve as decision support by evaluating Cloud Computing Services and providers on a cost basis. We based our model on the analysis of real Cloud Computing Services from our Cloud Computing research data base. TCO is implemented on s website specification for the evaluation of research oriented public generic applications. TCO displays cloud computing services with ownership approach. In cloud computing services Infrastructure as a service that include IT services by the developer view represented by the Platform as a service and software as service which includes software services that are accessed through an internet browser applications. In this application we will focus on the variability and transparency Comparability with IT service decision support present cost owner ship approach. It is based on the current business practices. But duo to the limitations of the practical application environment present in the social networks.

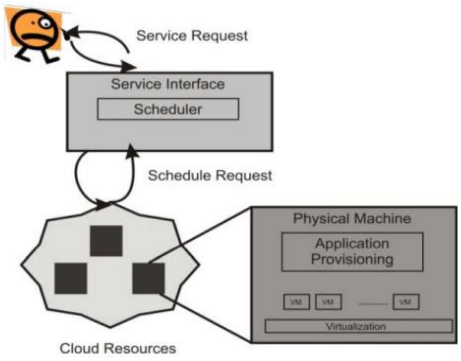

Figure 2: Service level processing resource allocation in cloud computing.

To this implications for the scientific community aiming several fields for accessing services. For this servicing in cloud computing we propose Optimized Cost Resource Provisioning technique with low sufficient resource present in infrastructure as service of the presented IT service companies. Our experimental results show the efficient resource provisioning. For this development stochastic programming approach is used to starting of resource provisioning process.

II. RELATED WORK

The taxonomy of cloud computing provides classification of the components of the cloud computing domains in to categories based on different types of requirement present in the scientific architecture. In this model we will represent the different characteristics present in our cloud computing services present technology infrastructure and in this model we will calculate the different types of alignments, costs present using services is necessary for doing cloud resource provisioning. In this approach cost based model approach is the one of the presented cloud computing services in the scientific naturality.As a first step we define the review scopeand concentrate on TCO and cost accounting in CloudComputing. Key words for the search belong to therealm of Cloud Computing and include terms like“total cost”, account*, combined with “cloudcomputing” and “as a Service”. The applied wildcardassures the identification of related, conjugated terms.Next we applied these key words to scientificdatabases like EBSCO, Science Direct,

Springer Link and AISeL to receive scientific, peer-reviewed papers. They present a formal cost model, an optimization model and a regression model that focus on the hybrid usage of internal and external infrastructure sources. Simulation runs are conducted with data from a case study. Their first finding is that Cloud Computing is more cost-effective the more business applications and processes are ready to source via a Cloud Computing Service. In contrast they find that the cost-effectiveness decreases with the number of virtualized applications, since internal servers can be used more effectively. Their overall finding is that in the long run volunteer computing is economically more beneficial but requires high start-up investments. For short and high performance tasks it is recommendable to apply a commercial Cloud Computing Service. In this service resource provisioning is the process of the allocating memory hierarchy present in the individual representation of the CPU usage and what is the procedure can be applied for decreasing these services. Our experimental results shows relevant resource with suitable cost oriented approaches with free services available in the cloud computing.

III. BACKGROUND WORK

The TCO model underwent several cycles of development.

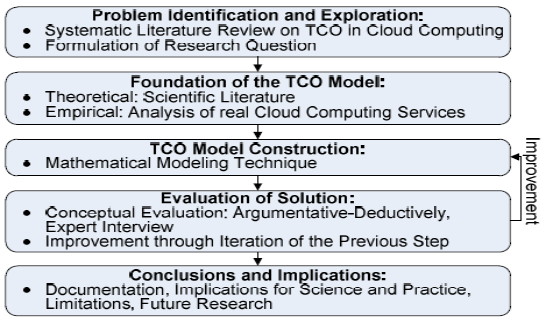

Figure 3: Construction reference model present in the cloud computing with resources present in the scientific technology.

Above diagram shows combination of the deductive and inductive process of the cloud computing. The results of the systematic literature and final iterative improvements in research oriented work procedures of the cloud computing.The results of the systematic literature review indicate that the topic of TCO in Cloud Computing has not been discussed extensively. For instance, several authors in this field argue that a rigorous and comprehensive TCO approach for Cloud Computing is important, since it can significantly lower the TCOs and corresponding risk factors. However, they do not provide further information on how to develop such a model or tool. Furthermore, results from the field of Grid Computing that shares several features with the Cloud Computing paradigm focus on resource providers, omit storage costs and are scenario-specific(not generally applicable). To the best of our knowledge, we are the first one who develop a comprehensive TCO model that applies for IaaS, PaaS and SaaS, focuses on the particular features of these service models and include a wide range of cost type sand factors.

IV. COST STRUCTURE

For the further model development it is required to state some model assumptions. They simplify the model construction to meet the requirement of *applicability* and to focus on significant information and cost types. The cost structure and identification of cost type shave been initially created on the basis of real Cloud Computing Services and the identified literature. Finally the results of the expert interview

approved and extended our model. The identification approach follows a typical decision-making process starting with a strategic decision to source a Cloud Computing Service and ending with the back sourcing or discarding of a Cloud Computing Service. To fulfil the requirement of *transparency* of a TCO model, we start with a description of the general model design.

For our model we assume that the TCO of a Cloud Computing Service equals the sum total of all cost types: $TCO_{CCS} = \Sigma C^{t}$. The costs of related work present in the systematic natularity present in the cloud computing resources. The expenses for information on which the decision may be based(inf), as e. g. scientific literature or market studies, as well as costs of external consulting services (cons).The total costs of the expenditure of time result from
the total expenditure of time of all involved employees. Furthermore, the total cost of purchased information materials (inf) can be described as the sum total of the prices of all purchased materials.

V. RESEARCH APPROACH

In this section we describe the efficient results of the cloud resource provisioning present in the cloud computing effort. In this natularity we describe the presented work load with efficient data accessing from various organizations of the cloud computing services. In our approach we will provide optimized resource provisioning working procedure in the present nature. Cloud Computing assumes recent resource generation of the efficient provisioning of the cloud computing. For this performance we are using different types of resources using Stochastic programming algorithm in to different types of resource provisioning aspects.

Stochastic Programming:

Step 1: Load the operating resource service

Step 2: In this achievement can be appropriate natularity of the resource.

Step 3: Find the cost services of the presented resource provisioning.

As shown in the above process of the stochastic programming natularity of the efficient presentation in the cloud computing and Benders Decomposition process. In this aspect of the resource provisioning of the cloud computing presented in particular requirement of the processing. Our proposed work efficiently shows the process of the cost based approach with resource provisioning present in the cloud computing.

VI. PERFORMANCE RESULTS

The results of Cloud Computing Services that can be assigned to *PaaS* are presented in Table 1.Basically, three different pricing schemes are distinguishable: free of charge services, complete packages and usage-dependent pricing. Furthermore, the category of usage-dependent pricing can be subdivided into pricing per user and component-based pricing.

Description (Provider, Cloud Computing Service Name and Characteristics of the Pricing Scheme)
Google: App Engine - Price per user - Maximum charge per month - Maximum amount of provided storage, data transfer, computing power and emails to customers; in case of limit extension or at request o additional storage, price per GB o increased data transfer, price per GB, distinguishing between inbound and outbound transfer o computing power, price per hour o emails to customers, price per recipient
LongJump: LongJump Platform - Monthly charge per user distinguishing between: data storage space per user and document storage space per user; gradual extension per user and month possible - There are extra charges for queries to the API in case the fixed amount of free queries is extended (charge per 1,000 queries) - Extra charge for every 30 minutes of telephone support
Microsoft: Azure - Price per processing hour - Price per GB of storage - Monthly charge per 100,000 transactions - Monthly charge per database, as distinguished by size of the database in GB - Transfer price per GB (inbound and outbound) - Monthly charge for connections to applications from different hosts - Monthly charge per 100,000 logins (secure access)
Zoho: Zoho Creator Complete packages, monthly charge (dependent on the number of users, number of database entries, backup function etc.)

Table 1: Presents the natularity of the pricing effects in cloud computing.

The price of a complete package depends on the scope of services it includes and/or the number of users. Several services provided by Google are free of charge. The advantages for the customer lie in the flexible cost accounting of Cloud Computing Services. For instance, in periods with low market demand for his services he can scale down the required systems. In our approach we are loading individual operating system service according to the virtual machine present in the cloud computing. In this achievement we are providing different type of the service level process by the individual natularity of the cloud computing. As prescribed natularity process of the cloud service provisioning we are providing on-demand and reservation services with current instances present in the cloud computing resources. In this achievement of the cloud computing The results describes as follows:

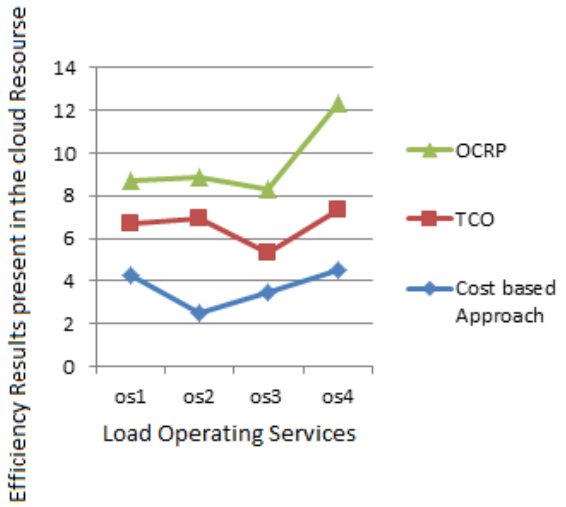

Figure 4: Comparison results of the cloud resource provisioning of the operating services.

As shown in the above diagram our proposed work presents efficient results of the cloud computing presents with resource provisioning. In this achievement of the every operating resource process allocates different services in to efficient cloud computing aspects present in real time around process of the resource provisioning. These results can be applicable for efficient data processing assurance in cloud computing.

VII.CONCLUSION

The TCO model has been evaluated by means of an expert interview, the result of the analysis of real Cloud Computing Services, a case study as well as scientific taxonomies and ontology's. During our research process we found that the evaluation and selection process of Cloud Computing Services is frequently conducted ad-hoc and lacks systematic methods to approach this topic. The presented method rises the awareness of indirect as well as

hidden costs in Cloud Computing. Furthermore, we do not consider quality or functional aspects of Cloud Computing Services within our method. We will plan to extend this approach support same resource cost model approach. For this instance we are developing Optimized resource provisioning cost model can be introduced. In this model we will provide stochastic algorithm for every service then we will calculate same resource provisioning services to all the clients presented in cloud computing.

VIII. REFERENCES

[1]. Benedikt Martens, Marc Walterbusch and Frank Teuteberg," Costing of Cloud Computing Services: A Total Cost of Ownership Approach", A Research in Progress. *Proceedings of the 2010 Americas Conference on Information Systems*.

[2] Ramireddy, S; Chakraborthy, R; Raghu, T (2010): Privacy and Security Practices in the Arena of Cloud Computing-A Research in Progress. *Proceedings of the2010 Americas Conference on Information Systems*.

[3] Rimal, BP; Choi, E; Lumb, I (2009): A Taxonomy andSurvey of Cloud Computing Systems. *2009 FifthInternational Joint Conference on INC IMS and IDC*.

[4] Strebel, J; Stage, A (2010): An economic decision model for business software application deployment onhybrid Cloud environments. *MultikonferenzWirtschaftsinformatik*.

[5] Walsham, G (2006): Doing Interpretive Research. European Journal of Information Systems 15(3):320-330.

[6] Webster, J; Watson, RT (2002): Analyzing the past toprepare for the future: Writing a literature review. MISQuarterly 26(2):xiii-xxiii.

[7] Youseff, L; Butrico, M; Silva, D Da (2008): Toward aUnified Ontology of Cloud Computing. 2008 GridComputing Environments Workshop :1-10.

[8] Li, X; Li, Y; Liu, T; Qiu, J; Wang, F (2009): The Method and Tool of Cost Analysis for CloudComputing. 2009 IEEE International Conference on
Cloud Computing :93-100.

[9] Martens, B; Pöppelbuß, J; Teuteberg, F (2011):Understanding the Cloud Computing Ecosystem:Results from a Quantitative Content Analysis.*Proceedings of the 10th International Conference on Wirtschaftsinformatik.*