

# PARTICIPATION OF CLOUD BROKER IN CLOUD COMPUTING TO ACHIEVE MAXIMUM PROFIT

<sup>1</sup>Vikesh Shinde, <sup>2</sup>Aniruddha Patil, <sup>3</sup>Shubhada Kodre, <sup>4</sup>Dr. G.M. Bhandari

<sup>1,2,3</sup> Students and <sup>4</sup>Asst. Prof. of Department of Computer Engineering,  
Savitribai Phule Pune University, Pune

**Abstract:** Along with the development of cloud computing, increasingly more companies start to adopt cloud carrier, which promotes the emergence of many cloud service carriers. For cloud service providers, a way to configure their cloud service systems to reap the most earnings will become more and more the point of interest that they take note of. on this paper, we take purchaser pleasure into attention to deal with this trouble. client pride affects the income of cloud provider companies in two ways. On one hand, the cloud configuration impacts the satisfactory of service that's a vital aspect affecting customer delight. then again, the patron pride impacts the request arrival charge of a cloud provider issuer. But, few existing works take client pleasure into attention in fixing profit maximization hassle, or the existing works considering client pleasure do now not give a right formalized definition for it. hence, we first off discuss with the definition of patron pride in economics and expand a system for measuring purchaser delight in cloud computing. and then, an analysis is given in element on how the customer pleasure impacts the income. lastly, taking into account customer delight, carrier-level agreement, renting charge, power consumption and so on, an earnings maximization problem is formulated and solved to get the most effective configuration such that the profit is maximized.

**Index Terms:** Cloud Computing, cloud service provider, Resource Allocation, Security, attribute-based encryption scheme.

## I. INTRODUCTION

In CLOUD computing the client behaviour depends on if the cloud provider is attractive enough to them. To configure a cloud carrier platform properly, the cloud service issuer must recognise how customer satisfaction impacts the provider demands. hence, thinking about consumer delight in income optimization problem is essential. however, few present works take client satisfaction into consideration in fixing profit maximization hassle, or the existing works thinking about purchaser delight do now not provide a right formalized definition for it. To deal with the problem, this paper adopts the thought in commercial enterprise administration, and first off defines the patron pleasure stage of cloud computing. primarily based at the definition of purchaser pride, we build a profit maximization model wherein the impact of purchaser satisfaction on exceptional of provider (QoS) and rate of carrier (PoS) is taken into consideration. From an economic viewpoint, factors affecting customer pleasure are QoS and PoS. The PoS is decided by using cloud carrier companies. The QoS is determined through the service ability of a cloud service provider which largely relies upon on its platform configuration. below the given pricing method, the simplest way to enhance the client satisfaction degree is to sell the QoS, which can be executed through configuring cloud platform with better carrier capability. Doing consequently will have an impact on a cloud service provider from 2 asides. On one hand, the upper purchaser pride level ends up inside the next marketplace proportion, consequently the cloud carrier supplier will advantage additional sales. On the other hand, additional resources area unit rented to enhance the carrier capability, that ends up in the upward push of costs. therefore, the remaining word answer of up income is to seek out AN great cloud platform configuration theme.

## II. LITERATURE REVIEW

Zahra Ali,Raihan ur Rasool,Peter Bloodsworth. "Social Networking for Sharing Cloud Resources". In our approach we have linked a social network with the computational cloud to create a social cloud (SC) so that users can share their part of the cloud with their social community. A prototype system has been deployed on a social network by using the bartering resource

trading mechanism. It is anticipated that this may help users to share their dedicated resources without the need for money changing hands and different communities.

D. Shivalingaiah, Sheshadri K N. "Applications of Cloud computing for resource sharing in academic libraries". In this paper authors have made an attempt to discuss the types, applications, advantages and disadvantages of implementing cloud computing mainly for resource sharing in an academic library environment. The purpose of this article is to look specifically at how cloud computing can be employed by libraries and what are the potential areas need to be considered before moving into a cloud computing solution implementation.

Ashwin R. Bharambe Cormac Herley Venkata N. Padmanabhan. "Analyzing and Improving a BitTorrent Network's Performance Mechanisms". Our results confirm that BitTorrent performs near-optimally in terms of uplink bandwidth utilization, and download time except under certain extreme conditions. We also show that low bandwidth peers can download more than they upload to the network when high bandwidth peers are present. We find that the rate-based tit-for-tat policy is not effective in preventing unfairness. We show how simple changes to the tracker and a stricter, block-based tit-for-tat policy, greatly improves fairness.

A Profit Maximization Scheme with Guaranteed Quality of Service in Cloud Computing. 2008. In a cloud computing environment, there are always three tiers, i.e., infrastructure providers, services providers, and customers. An infrastructure provider maintains the basic hardware and software facilities. A service provider rents resources from the infrastructure providers and provides services to customers. A customer submits its request to a service provider and pays for it based on the amount and the quality of the provided service. In this paper, we aim at researching the multiserver configuration of a service provider such that its profit is maximized. Like all business, the profit of a service provider in cloud computing is related to two parts, which are the cost and the revenue. For a service provider, the cost is the renting cost paid to the infrastructure providers plus the electricity cost caused by energy consumption, and the revenue is the service charge to customers. In general, a service provider rents a certain number of servers from the infrastructure providers and builds different multiserver systems for different application domains. Each multiserver system is to execute a special type of service requests and applications. Hence, the renting cost is proportional to the number of servers in a multiserver system.

Profit Maximization for Geographical Dispersed Green Data Centers, 2016". Complying with such a growing demand in an environmentally friendly manner calls for innovations across different disciplines. Therefore, recently, studies on data centers have focused on reducing the energy consumption and accordingly the cost of electricity. These studies can be largely categorized into two main approaches: power management techniques and green data centers. The first approach, which investigates CPU and memory power consumption, aims at reducing the carbon footprints and the cost of electricity. In particular, a Dynamic Voltage/Frequency Scale (DVFS) scheme is deployed in to reduce CPU power, and Felter et al. in proposed re-budgeting the available power between processor and memory to maintain a server budget within constrained power budgets.

### III. PROPOSED SYSTEM:

In this paper, we focus on how to configure a cloud broker and how to price its VMs such that its profit can be maximized on the premise of saving costs for users. Profit of a cloud broker is affected by many factors such as the user demands, the purchase price and the sales price of VMs, the scale of the cloud broker, etc. Moreover, these factors are affected mutually, which makes the analysis on profit more complicated. In this paper, we firstly give a synthetically analysis on all the affecting

factors, and define an optimal multiserver configuration and VM pricing problem which is modeled as a profit maximization problem.

Secondly, combining the partial derivative and bisection search method, we propose a heuristic method to solve the optimization problem. The near-optimal solutions can be used to guide the configuration and VM pricing of the cloud broker. Moreover, a series of comparisons are given which show that a cloud broker can save a considerable cost for users.

#### IV. SYSTEM ARCHITECTURE OVERVIEW

In proposed System, we firstly refer to the definition of customer satisfaction in economics and develop a formula for measuring customer satisfaction in cloud computing. And then, an analysis is given in detail on how the customer satisfaction affects the profit. Lastly, taking into consideration customer satisfaction, service-level agreement, renting price and so forth, a profit maximization problem is formulated and solved to get the optimal configuration such that the profit is maximized. To address the problem, this paper adopts the thought in Business Administration, and firstly defines the customer satisfaction level of cloud computing. We build a profit maximization model in which the effect of customer satisfaction on quality of service (QoS) and price of service (PoS) is considered. We proposed an optimal multiserver configuration strategy. Through the optimal strategy, the optimal configuration of multiserver system, i.e., the server size and the server speed can be determined such that the profit of a multiserver system is maximized.

Based on the definition of customer satisfaction, we build a profit maximization model in which the effect of customer satisfaction on quality of service (QoS) and price of service (PoS) is considered. From an economic standpoint, two factors affecting customer satisfaction are QoS and PoS. The PoS is determined by cloud service providers. The QoS is determined by the service capacity of a cloud service provider which largely depends on its platform configuration. Under the given pricing strategy, the only way to improve the customer satisfaction level is to promote the QoS, which can be achieved by configuring cloud platform with higher service capacity.

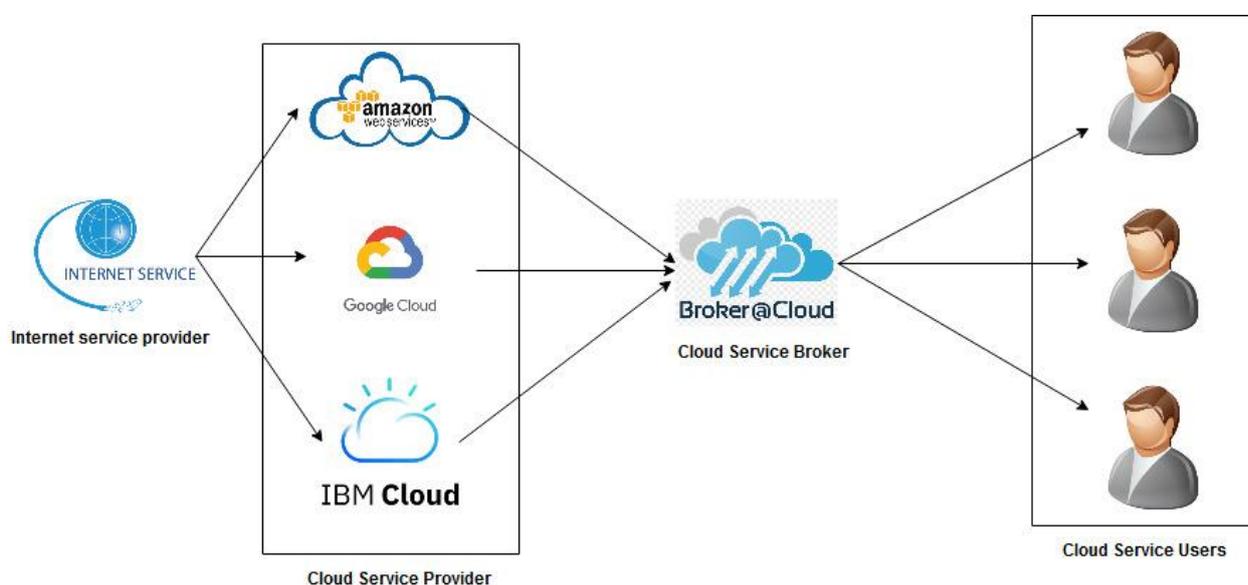


Fig.1 (System Architecture)

## V. SYSTEM ANALYSIS

Customer satisfaction affects the profit of cloud service providers in two ways. On one hand, the cloud configuration affects the quality of service which is an important factor affecting customer satisfaction. On the other hand, the customer satisfaction affects the request arrival rate of a cloud service provider. so we resolve a profit maximization problem, in which Based on the affection of customer satisfaction on workload, we analyze the interaction between the market demand and the customer satisfaction, and give the calculation of the actual task arrival rate under different configurations.

## VI. CONCLUSION

This project propose to a client satisfaction in resolution optimal configuration drawback with profit maximization. Because, the present work doesn't provide secure cloud storage with data backup. So, to overcome the problem of backup to user a good management system is provided by the framework of project. The important aspect of customer satisfaction over security is an important issue to be resolved. The proposed Framework generally looks over it and cloud backup where the data may be lost or corrupt. We initially provide a definition of client satisfaction leveraged from social science and develop a formula for activity client satisfaction in cloud. Additionally, we tend to study associate optimum configuration drawback of profit maximization.

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