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Literature Survey on Cloud Computing and its Benefits

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A B S T R A C T

Cloud Computing provides computer infrastructure and services "on-need" basis. The computing infrastructure could include server, hard disk, CPU cycles, database, development platform or complete software applications, and so on. Users (organizations and individuals) do not need to pay any large-scale capital expenditures to access these resources from the cloud vendors.

As more cloud service providers enter the market, it becomes more challenging for customers to choose ones who are likely to pose little risk in terms of security. The necessity of defining Service Level Agreements that meet customer security concerns has recently received substantial attention. Even though they provide services with comparable functionality, it has been shown that these Sec SLAs vary between providers. When choose a cloud provider, analysing security service levels and the associated risk is crucial. Data breaches are a top issue that is holding back the use of cloud computing, according to research.

1. Introduction to Cloud computing

1.1 Introduction

Cloud computing and storage solutions provide users and enterprises with various capabilities to store and process their data in either privately owned, or third-party data centres that may be located far from the user–ranging in distance from across a city to across the world.

Despite the advantages and rapid growth of cloud computing, existing cloud environments are still not seen to be sufficiently trustworthy by consumers. This framework enables consumers to specify which security parameters are most significant for them, enabling a subjective view to be formed of different cloud providers. Security remains an important concern for many users, particularly prevention of data breaches at the cloud provider and the ability of a provider to interrogate data stored at their systems. The proposed work is to prevent data breaching threat

1.2 Motivation

i. Basically, Cloud Computing is used in Data storing.

ii. It's a vast-emerging and very Fascinating topic.

iii. It teaches us how to create Virtual Machines from one single machine.

iv. Also Teaches about computer operating systems, networks, and data storage.

v. An IT Student should have the basic knowledge about the Cloud and its benefits.

1.3 Aim and Objective of the work

i. The aim of this project is to define Cloud Computing and making aware of cloud computing.

ii. Knowing about the cloud and its uses.

iii. Understand Cloud Computing and making it use in daily life.

iv. Main aim is to making users work easy and efficient using cloud technology.

Project objectives:

i. To make aware to the user of cloud computing.

ii.   Cloud computing is so important because it offers flexibility, data recovery, little to no maintenance, easy access and a higher level of security.

iii.   Cloud computing not only changes how so many businesses store and access data, but it is also changing how many of these businesses operate.

iv.   Cloud security is employed in cloud environments to protect a company's data from distributed denial of service (DDoS) attacks, malware, hackers, and unauthorized user access or use.

v.   On the other side When you're looking for cloud-based security, you'll find three main types of cloud environments to choose from. The top options on the market include public clouds, private clouds, and hybrid clouds.

vi.   This must be highly focused and feasible and should address the more immediate project outcomes

vii.   Guide must personnel check these aim and objectives and make students write these statements properly

2. Scope of Cloud Computing

Cloud computing and storage solutions provide users and enterprises with various capabilities to store and process their data in either privately owned, or third-party data centres that may be located far from the user–ranging in distance from across a city to across the world.

2.1 Specifications

Types of Cloud Computing

i.   Public Cloud

ii.   Private Cloud

iii.   Hybrid Cloud

iv.   Community Cloud

2.2 Features

i.   Mainly For Storage

ii.   Building Applications.

iii.   Uses Low code- No code formulae

iv.   Easier to integrate.

v.   Highly scalable.

vi.   Easy to create Virtual Machines.

vii.   Top notch Security for applications.
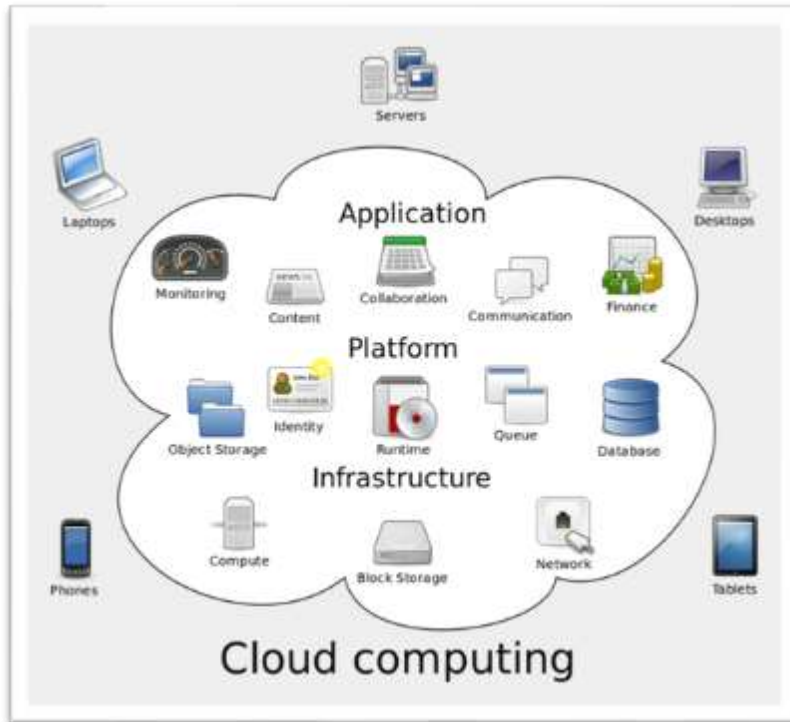
viii. Various platform to choose.

2.3 Illustration

Figure 1 Cloud Computing Layout

Figure 2 **:** Examples of Service Models of Cloud Computing

2.4 Methodology

This architecture mainly aims to make aware of Cloud computing and storage solutions provide users and enterprises with various capabilities to store and process their data in either privately owned, or third-party data centres that may be located far from the user–ranging in distance from across a city to across the world. Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model promotes availability and is composed of five essential characteristics, three service models, and four deployment models

2.5 Enhancement

i.   Largely scalable

ii.   Most Flexible

iii.   This architecture is efficient and effective .

iv.   It is very easy to understand if once trained.

v.　It is difficult to operate for a non-technical person.

vi.　Public Cloud is less secure because resources are shared publicly.

vii.　Performance depends upon the high-speed internet network link to the cloud provider.

3. Conclusion

The Cloud Computing view has truly changed over the last ten years, not only the fact that more suppliers and service offer congested the space, yet also Cloud Infrastructure which traditionally was restrained to one provider's data centers is now changing. This study discloses the evolving Cloud Infrastructure and considers the infrastructure usage from several providers and the decentralization of computing farther from data centers advantages. Those tendencies resulted in the requirement for different modern computing design which will be proposed by new cloud framework; These are expected to affect fields like connecting users and devices, Data-Intensive Computing, service environment, and Self-Learning systems. Lastly, it lays out a guideline of obstacles which will require to be given attention for let go of the new Cloud Systems generations' potential.

References

[1]　H. Josh, "80+ SaaS Statistics and Trends (2022)," Exploding Topics, 16 March 2022. [Online]. Available: https://explodingtopics.com/blog/saas-statistics. [Accessed 19 April 2022].

[2]　S. Andrey and S. Ahmed, "Engineering and Business Aspects of SaaS Model Adoption: Insights from a Mapping Study," in International Workshop on Software-intensive Business: Start-ups, Ecosystems and Platforms, Espoo, Finland, 2018.

[3]　M. Joel, L. Miira, M. Hannu and K. Heikki, "Agile logic for SaaS implementation: Capitalizing on marketing automation software in a start-up," Journal of Business Research, vol. 145, no. https://doi.org/10.1016/j.jbusres.2022.03.026, pp. 583-594, 2022.

[4]　S. Aleksandar and K. Božidar, "Microsoft Office 365 - cloud in business environment," in *MIPRO, 2012 Proceedings of the 35th International Convention, 2012*

[5]　Adobe, "What is Creative Cloud?," Adobe, 2022. [Online]. Available: https://www.adobe.com/nz/creativecloud.html. [Accessed 18 April 2022].

[6]　Adobe, "What is Creative Cloud?," Adobe, 2022. [Online]. Available: https://www.adobe.com/nz/creativecloud.html. [Accessed 18 April 2022].

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