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Cloud Computing

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Abstract : Cloud computing has grown significantly as Amazon launched its first type of service in 2006. Hong Kong is highly suited to Hong Kong due to its unimaginable amount of data used on a daily basis in several fields, and there are signs that you have subscribed to pall service area. real companies will soon be at the photography course, despite the slow launch in the early stages. As a test team, pall computing now surpasses any schedule of motifs in computer intelligence due to its far-reaching proposition in many computer fields, especially big data that outside of pall computing is a big evidence. The current construction of a major R&D canter in Hong Kong by Lenovo (January 2015) confirms this fact. Cloud computing, a computer-life dream as a mile, has the potential to transform a large portion of IT assiduity, making the software more attractive as a service and shaping the way IT is designed and purchased. Developers with new ideas for developing new online services do not have to face the huge costs required to do their job or the ongoing costs to operate. **Keywords -** Cloud Computing, Cloud, IaaS, SaaS, PaaS.

I. INTRODUCTION

Cloud computing, like real murk, is a collection of networks. The user can use cloud computing programs permanently whenever he wishes [1] [2]. Instead of setting up their body structure, the end user naturally selects an Internet service provider on a cloud computer. [2] To reduce work, work can be changed. [3] The service load is managed by cloud-based networks, so that the load on local computers during processing of the application is passed. [4] As a result, the need for computer hardware and software at the end of the user decreases. [5] A web browser is all we need to use cloud computing. [3] Cloud computing offers the following benefits:

- 1.1. Integration of Resources and Stability
- 1.2. Self-help and much-needed services
- 1.3. Prices
- 1.4. Service Quality

There are three cloud computing services namely Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS). [6] People use Facebook, YouTube, Dropbox, and Gmail as cloud computing models in their daily lives. As a result, its use is growing rapidly in large companies due to its durability, durability, craftsmanship, and simplicity. [7]

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Figure 1: Network of Cloud

1.1 EVOLUTION OF CLOUD COMPUTING:

John McCarthy said in a speech at MIT around 1960 that computing could be marketed as water and electricity. And in 1999, Salesforce Company began distributing services to visitors through an accessible website. In 2002, Amazon Web Services was established to provide storage and accounting services. By about 2009 major corporations such as Google, Microsoft, HP, Oracle had begun offering cloud computing services. [8] Currently each person uses cloud computing resources in their daily lives. With imagery of Google Photos, Google Drive, and iCloud etc. In the future of cloud computing will need the introduction of IT Industries [5]

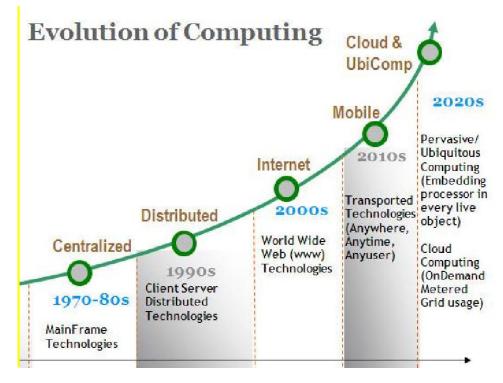


Figure 2: Evolution of Cloud Computing

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II. METHODOLOGY

2.1 COMPONENTS OF CLOUD COMPUTING:

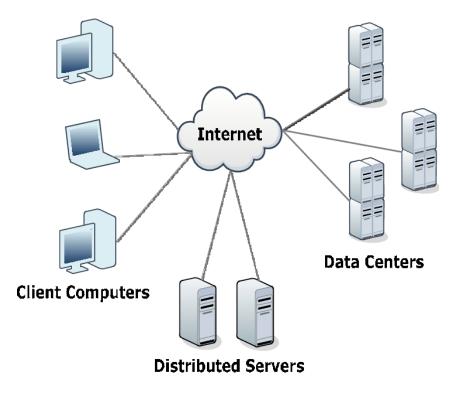
Factors of Cloud computing has three parts for presentation like-

2.1.1 Client Computers: The end user can interact with the cloud using client computers. [3] [1]

2.1.2 Distributed Servers: Servers are distributed between different locations but appear to be interoperable. [3] [1]

2.1.3 Platform: Cloud platform, such as Platform as a service, platform delivery, and / or solution stack as a service, facilitates the delivery of affordable and sophisticated software and basic computer and software system management.

2.1.4 Application: A cloud application uses Cloud to develop software, generally eliminating the need to install and use the program on a client computer, thereby reducing the burden of software maintenance, continuous act.





2.2 SERVICES OF CLOUD COMPUTING:

2.2.1 Software as a Service (SaaS): A method of operating as an Internet service is known as software as a service. "" In its place of connecting software system on his computer, the user can simply transfer it working. "Access to the system is really easy. A few examples are Microsoft Office 365 and Google Apps. [4] [5]

2.2.2 Forum as a Service (PaaS): Customer has the right to make its own applications that may work in a particular area. "[4] [4] As a result, the product as a service provider provides a predefined configuration."

2.2.3 Infrastructure as a Service (IaaS): "Most computer services are provided by IaaS and storage, network, operating system, computer hardware, and storage where required." "As Internet. Example, a user can provide virtual machines by logging into the IaaS area. "[4] [2]

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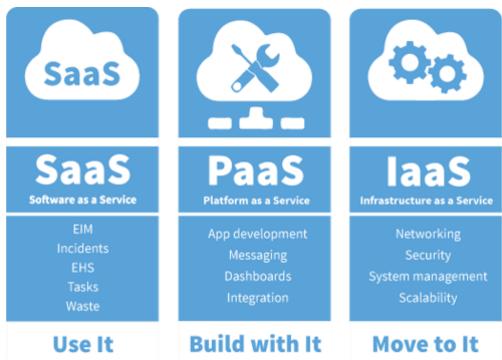


Figure 4: Cloud Computing Services

2.3 TYPES OF CLOUD COMPUTING:

2.3.1 Public Cloud: Public Clouds are owned by external companies that provide online cloud services to the public; these services are available as payment models as you go systematized. They offer solutions to reduce the cost of IT infrastructure and have a great opportunity to handle the high responsibilities of local infrastructure "Clouds are an option for small businesses, able to start their own businesses without investing a lot in the past by fully relying on public infrastructure."

2.3.2 Private Cloud: Computer services provided over the Internet or in a private network fall under a private cloud and these services are only provided to end-users named instead of ordinary people. Previous and next news: Security and privacy are being sent through private networks through an internal security system and hosting [5] [2]

2.3.3 Hybrid Cloud: A compact cloud is a combination of public and private clouds. With a mixed cloud, each cloud can be managed independently, but data and applications can be shared across all clouds. [5] [2]

2.3.4 Dedicated clouds: A cloud in the middle of another cloud. For example, a finance department may have its own dedicated cloud within the confidential cloud of an organization. [5] [3]

2.3.5 Managed private clouds: Customers create and use a private cloud that is used, configured, and managed by a third-party vendor. [5] [2]

2.3.6 Multiclouds: multi-clouds are a cloud path made with more than 1 cloud service, from more than 1 cloud vendor — public or private. "All mixed clouds are multi-clouds, but not all clouds are mixed." Most clouds become compact clouds when many clouds are connected by some form of integration or orchestration. [5] [3]

2.4 BENEFITS OF CLOUD COMPUTING:

2.4.1 Cost Saving: In cloud computing the customer should only pay for the services they use. Since the customer does not need to purchase a building, maintenance costs are low. "Once you are in the cloud, easy access to your company's data will save you time and money on project implementation. [6] [4]

2.4.2 Flexibility: Your business has a limited amount of focus only to differentiate between all of its obligations. "" If your current IT solutions force you to be more dedicated to computer and data storage, you will not be able to focus on achieving business and customer areas "pleasure." and infrastructure management, you will have more time to contribute "to activities that directly affect your main goal. [6] [3]

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2.4.3 Mobility: Cloud computing allows mobile access to company data via smartphones and devices, which, considering the more than 2.6 billion smartphones used worldwide today, is a great way to ensure that no one is left out. Employees with busy schedules, or who live far from the business office, can use this feature to keep up-to-date with customers and colleagues.

2.4.4 Insight: As we move into the digital age, it becomes increasingly clear that the old adage "knowledge is power" is taken literally and accurately: "Numbers is money [6] [2]." Your customers' performance and business process are critical, tangible information waiting to be identified and processed. "

2.4.5 Loss Prevention: If your organization is not investing in a cloud-computing solution, then all your important data is seamlessly tied to the computers of the office where it resides. " Home issues problems, your hardware software How can cloud-computing software be installed? can you save you have lost your data forever. "

2.4.6 Quality Control: There are a few things that damage business success such as low quality and consistent reporting. "In a cloud-based system, all documents or data are stored in one place and in one format." With everyone accessing the same information, you can maintain data consistency, avoid human error, and have a clear record of any updates or updates. Conversely, managing information in archives may cause employees to accidentally store different versions of documents, leading to confusion with deleted data. [6] [4]

2.4.7 Disaster Recovery: One of the factors contributing to the success of a business is control. Unfortunately, no matter how controlling your organization may be when it comes to its processes, there will always be things out of your control, and in today's markets, even a small unproductive leisure time can have a devastating effect. [6] [3] Downtime on your services results in product loss, revenue, and product reputation.

2.4.8 Security: "Many organizations are concerned about security when it comes to adopting cloud-computing solutions."" However, if files, programs, and other information are not securely stored locally, how can you know if they are safe? "" If you have access to your data remotely, then what prevents an cybercriminal from doing the same thing? " [6] [3]

2.4.9 Competitive Edge: Although cloud computing is growing in popularity, there are still those who like to keep everything in place. That is their decision, but doing so puts them in a bad position when they are competing with those who have the benefits of the cloud in their hands. [6] [2]

2.4.10 Automatic Software Updates: For those who want to do more, there is nothing as annoying as waiting for a system update to happen. "Cloud-based applications are automatically updated and updated, instead of forcing the IT department to do a complete organizational review." This saves valuable IT staff time and money spent without consulting IT. The world calculates that 50% of cloud receivers say they need fewer internal IT resources as a cloud benefit. [6] [4]

2.4.11 Sustainability: Given the current state of the environment, it is not enough for organizations to place a recycling bin in the recreational area and claim to be doing their "part of helping the manufacture. Real sustainability requires waste management solutions at all levels of business.

Clouds are highly adaptable to nature and lead to carbon emissions. "" Cloud infrastructure supports environmental performance, renders visual services over virtual products and computer hardware, and reduces paper loss, improves energy efficiency, and (supposedly allows employees to access any internet connection) to reduce air productions. "" The Peak Research statement predicts that numbers run power consumption will decrease by 31% from 2010 to 2020 based on the adoption of cloud computing and other visual data options. "

III. CONCLUSION

In this review paper we briefly describe the presentation, evolution, types and features of cloud computing as well as the various forms of cloud computing and its other profits. Cloud computing application space will be added. Currently almost all small and large products use cloud computing to control storage, traffic, and hardware requirements It is clear that cloud computing has a huge impact on society and business.

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[7] The connection to these resources is usually via the Internet, but it is possible to use another communication line. Cloud computing includes not only software but also hardware -servers, data warehouses and more [3] [8] Buyya, Salvi," Mastering Cloud Computing ", TMH Pub.

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