

# Potential of Cloud Computing

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## Abstracts

First there was the advent of the Internet that changed the manner in which we do business forever. Now, with the advent of cloud computing, the world is ready to undergo another major shift in terms of technology.

Cloud computing is an internet-based process that makes it possible to share information, software and even resources from computers to other devices all through the internet. The concept of cloud computing brings forth a new delivery model for IT services that are conducting businesses over the Internet. The process generally involves provision of scalable and virtualized resources over the internet. Not only does the process provide ease-of-access, but the speed and overall reliability of the entire concept of cloud computing is changing the IT industry rapidly.

Taiyou Research presents an analysis of the Potential of Cloud Computing.

This in-depth research offering from Taiyou Research offers the following strategic insights:

An overview of the cloud computing concepts detailing what is cloud computing, history of cloud computing, importance of the network in cloud, evolution of devices, cloud architecture, programming interfaces, rising demand for cloud computing, and the advantages and disadvantages of cloud computing.

Market profile discusses the various scenarios about the actual figure of cloud computing usage in the world.

Benefits of cloud computing such as ease of ubiquity, customization of services, sharing of softwares, infrastructure on demand, and many others are analyzed.

Cost benefits to organizations upon using cloud systems. Benefits such as cost reduction, improved time to market, and return on investment are analyzed.

Analysis of cloud computing delivery and deployment models such as infrastructure as a service, platform as a service, and software as a service are explained. Deployment models analyzed include hybrid cloud, public and private cloud, special purpose clouds, etc.

Application programming interfaces (APIs) are analyzed. This section analyzes the four levels of APIs, namely the wire, language specific toolkits, service-specific toolkits, and service neutral toolkits. The five categories of APIs are also analyzed, namely ordinary programming, deployment, cloud services, image and infrastructure management and internal interfaces.

We analyze the taxonomy of cloud computing under the broad segments of service consumer, that is the end user, service provider, service developer, standards across cloud service types, standards within cloud service types, and standards within an enterprise as well as between the cloud and the enterprise.

The complete deployment process of the cloud system is explained in phases - starting from the planning to the implementation phase. Services offered by cloud vendors and case studies of successful cloud deployment enhance the analysis provided in this section.

The technical features of cloud systems such as virtualization, multi-tenancy, data management, APIs, and metering is analyzed.

An analysis of various types of cloud clients such as hardware clients, software clients, etc. is provided.

The regulatory landscape and the challenges posed by regulations around the world are discussed. We also analyze several case studies of the use of cloud computing by governments and government agencies around the world.

The commercialization of cloud computing and the emergence of cloud exchanges worldwide is analyzed.

Concepts that are similar to cloud computing or that make use of cloud

computing are analyzed, particularly the concept of grids and clouds. We analyze resource grids and eBusiness grids, as well as grids and service oriented architectures.

Cloud computing case studies are analyzed to better understand the workings of the cloud system. Hadoop, Google File System, the NASDAQ project, are all analyzed comprehensively.

Over 140 market players are analyzed in this report including Akamai, 3Tera, Adaptivity, Amazon Web Services, Barracuda Networks, Asankya Inc, CA, Booz Allen Hamilton, Callidus Software, Cloud9Analytics, Cisco, Elastra, etc.

Taiyou Research presents the complete strategic analysis of the potential of cloud computing in this research offering. It is an ideal guide to cloud computing for investors and researchers alike.

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