



SNS COLLEGE OF TECHNOLOGY

Coimbatore-36.

An Autonomous Institution



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AICTE, New Delhi & Affiliated to Anna University, Chennai

COURSE NAME : 19CSE310 - Grid and Cloud Computing (Professional Elective II)

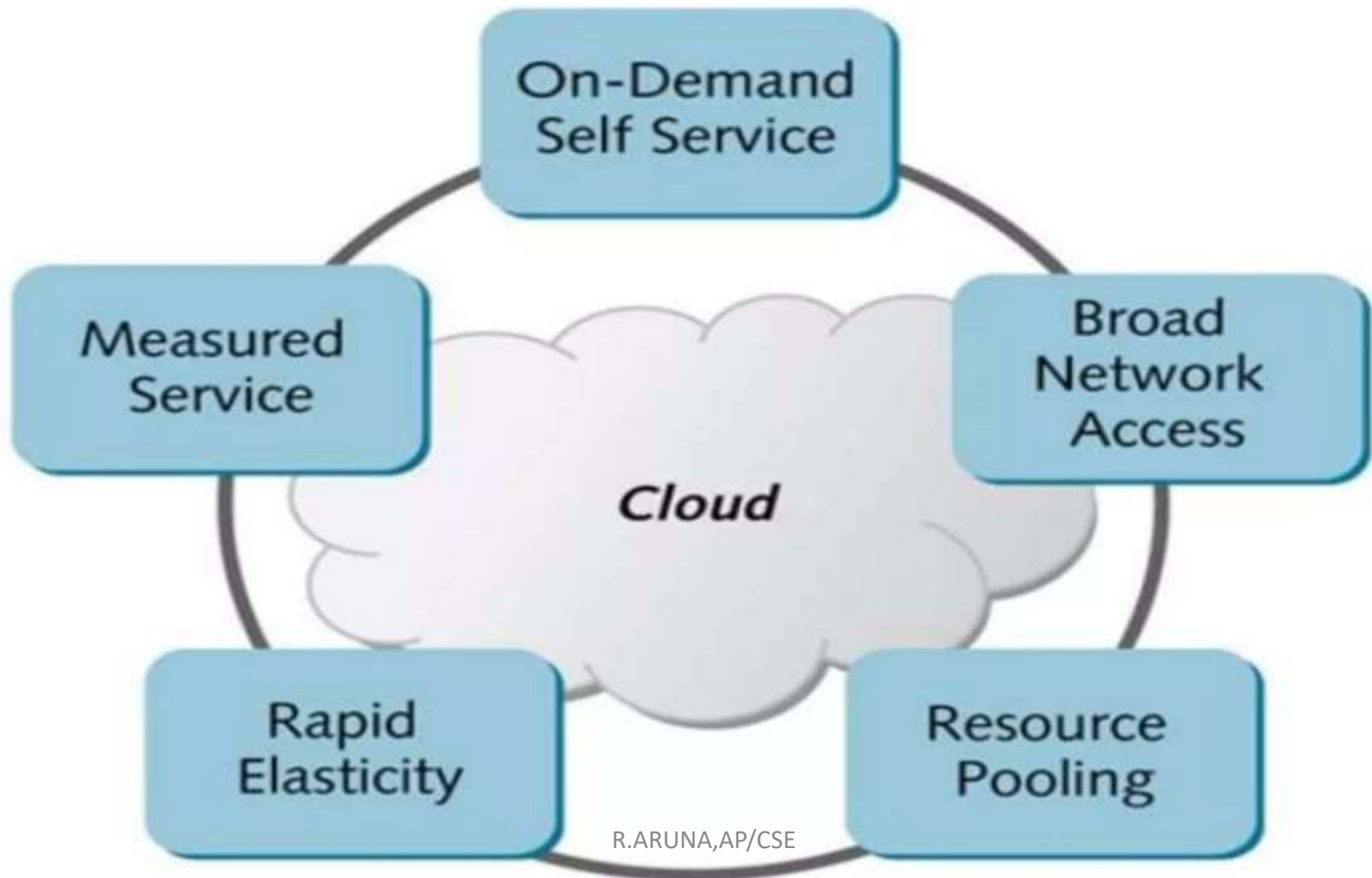
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CLOUD CHARACTERISTICS

ESSENTIAL CHARACTERISTICS OF CLOUD



CHARACTERISTICS

➤ **ON DEMAND SELF- SERVICE:**

Users are able to provision cloud computing resources without human interaction mostly done through a web based self service portal(management console)

➤ **BROAD NETWORK ACCESS:**

Cloud computing resources are accessible over the network,supporting heterogeneous client platforms such as mobile devices and workstations.

➤ **RESOURCE POOLING:**

Service multiple customers from the same physical resources,by securely seperating the resources on logical level.

Resource pooling. The provider's computing resources are pooled to serve multiple consumers using a multi-tenant model, with different physical and virtual resources dynamically assigned and reassigned according to consumer demand.

There is a sense of location independence in that the customer generally has no control or knowledge over the exact location of the provided resources but may be able to specify location at a higher level of abstraction (e.g., country, state, or datacenter).

Examples of resources include storage, processing, memory, and network bandwidth

Rapid elasticity.

Capabilities can be elastically provisioned and released, in some cases automatically, to scale rapidly outward and inward commensurate with demand.

To the consumer, the capabilities available for provisioning often appear to be unlimited and can be appropriated in any quantity at any time.

Measured service. Cloud systems automatically control and optimize resource use by leveraging a metering capability at some level of abstraction appropriate to the type of service (e.g., storage, processing, bandwidth, and active user accounts).

Typically this is done on a pay-per-use or charge-per-use basis. Resource usage can be monitored, controlled, and reported, providing transparency for both the provider and consumer of the utilized service