Day 10

DIY

Q1. Problem Statement: Identifying Cloud Computing Service Models

in a case study

Objective: To be able to identify under which service model of Cloud

Computing does the below scenario fall.

Background: A Company XYZ is using traditional IT and wants to migrate or

upgrade existing workloads to a newer version of SQL server database.

Problem Description:

1. The Company wants its internal IT teams to work on their regular

schedules and focus on innovating their core business than taking the

responsibility for routine database management and monitoring.

2. The company also wants its customers to spin up the new SQL server

databases on-demand in an isolated cloud environment.

This will enable its customers to increase performance and speed up the

workload processing.

Solution:

IaaS provides access to fundamental resources such as physical machines,

virtual machines, virtual storage, etc.

Here the consumer does not need to manage or control the underlying cloud

infrastructure at all besides some limited control is being given to select the

networking components like host, firewalls, etc.

Estimated time: 10 minutes

Summary of this assignment: IaaS services allow an organization to

leverage and focus their time and resources on bringing innovations in

applications and solutions. Each infrastructure component is provided as a

service. For Example: hardware –as-a-service server –as-a-service, computing –

as-a-service, storage –asas-a-serviceThis adds a lot of flexibility to anyone looking

for only specific services

Q2: Identifying Cloud Computing Service Models in a case study

Objective: To be able to identify under which service model of Cloud

Computing does the below scenario fall.

Background: A Retail Company LMN wants to automate its operations so as

to improve its productivity and operational efficiency.

Problem Description:

1. LMN wants its development cycle time to be reduced so as to enable more

new products to reach the market faster. It wants to rather focus the

development time on extending and improving the applications rather than

maintaining its infrastructure.

2. It aims that the deployment of applications become possible across their

entire network while negating the need to buy or maintain hardware or software.

3. It wants the CSP to provide a computing platform and the provision and

deployment of the associated set of software applications.

Solution:

Paas provides the platform for the creation of an application or software

delivered over the web on-demand. It Provides services required to support the

complete life cycle of building and delivering web applications and services on the

internet without having to worry about the need to maintain the software or

hardware.

Estimated time: 10 minutes

Summary of this assignment:

Here the CSP provides programming languages, libraries, services, and various

other tools to the consumer; so that he can just focus on developing the

application and once done, deploy it onto the cloud.

The user need not worry about the underlying cloud infrastructure including

network, servers, operating systems, or storage

Q3: Identifying Cloud Computing Service Models in a case study

Objective: To be able to identify under which service model of Cloud

Computing does the below scenario fall.

Background:

A healthcare technical services firm delivers tech support to healthcare

customers who use its clinical software - which captures data, allows patients to

interact with the providers, and is designed to facilitate lower cost, higher quality

healthcare - to provide patient care.

But the firm did not have centralized visibility and management of the IT estate.

This meant support for customers and users was largely reactive, with problems

only being addressed after the event.

Problem Description:

1. Auditing, version control, and configuration were the key focus areas.

They needed a solution that would supplement the support infrastructure already

in place already, whilst increasing visibility.

2. They want someone to provide software solutions to their business

problems as well as to maintain the software solutions by providing regular

upgrades and enhancements; a service that not only could scale to the device

volumes required but could do so at a workable cost.

Solution:

Here the focus is on a ready-to-use software service without having

to spend time and money on building the server, installing the application, and

configuring it. So it is quite obvious that the company should go for Saas service

model.

Estimated time: 10 minutes

Summary of this assignment: Saas provides ready-to-use existing online

applications. It reduces the time spent in installation and configuration and also

reduces the issues that the customers may get in the way of software

deployment

Q4: Identifying Cloud Computing Deployment Models in a case study

Objective: To be able to identify under which deployment model of Cloud

Computing does the below scenario fall.

Background: Below is given certain scenarios. Based on the requirement, let

us try to find out which deployment model should one select for a specific

situation.

Problem Description:

1. An organization is required to maintain sensitive customer data within its own

infrastructure.

2. Multiple clients will access virtualized services all operating from the same

servers.

3. Organization has put its IT functions into the public cloud but prefers to keep

higher-risk or more bespoke functions in a private cloud or even in-house.

4. Company has SAAS applications from a vendor who has a well-implemented

security strategy.

5. Organization is working on a collaboration project and should have the ability

to add computer capacity for peak times.

6. Company wants to use a SaaS application but is concerned about security. The

SaaS vendor can create a cloud just for the company inside its firewall. And it

provides you with a virtual private network (VPN) for additional security.

7. A company offers services that are tailored for different vertical markets. It

decides to use cloud computing to interact with the clients but also aims at

keeping their data secured within a private cloud.

8. Your business is part of an industry that must conform to strict security and data

privacy issues.

9. Your company is large enough to run a next-generation cloud data center

efficiently and effectively on its own.

10.Company A and Company B want to share the same architecture and have the

same security concerns.

Solution:

1. Private Cloud

2. Public Cloud

3. Hybrid Cloud

4. Public Cloud

5. Public Cloud

6. Virtual Cloud

7. Hybrid Cloud

8. Private Cloud

9. Private Cloud

10. Community Cloud

Estimated time: 10 minutes

Summary of this assignment:

From the above case studies, we can summarize that,

1. A Public Cloud is an obvious choice when you need high efficiency in

shared resources and services and infrastructure are provided offsite over the

internet.

2. We can go for Private Cloud when security and control are of the highest

concern as your business deals with your own data and your own application. In a

private cloud services and infrastructure are maintained on a private network.

3. A Hybrid Cloud is an obvious choice when you need the public cloud to

interact with clients but at the same time, you are also concerned about the

security of their data.

4. We can opt for community cloud when infrastructure and services are to

be shared among multiple organizations with common concerns