AMAZON WEB SERVICES

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Abstract: - Amazon Web Services provides a wide range of worldwide cloud-based solutions, including compute, storage, databases, analytics, networking, mobile, developer tools, management tools, IoT, security, and enterprise applications, all of which are on-demand and pay-as-you-go. Over 200 AWS services are accessible, ranging from data warehousing to deployment tools, directories to content delivery.

Without incurring any upfront capital costs, new services can be offered immediately. This enables corporations, start-ups, small and medium-sized organizations, and public-sector customers to gain access to the building blocks they require to respond rapidly to changing business needs. This whitepaper gives you an overview of the AWS Cloud's benefits as well as an introduction to the platform's services.

1. INTRODUCTION

Amazon Web Services (AWS) began delivering IT infrastructure services to businesses as web services in 2006, a term that has now become synonymous with cloud computing. One of the most significant advantages of cloud computing is the ability to replace upfront capital infrastructure costs with low variable costs that grow with your company. Businesses no longer need to prepare for and purchase servers and other IT infrastructure weeks or months in advance thanks to the cloud. Instead, they can quickly spin up hundreds or thousands of servers and give speedier results.

AWS now powers hundreds of thousands of organisations in 190 countries across the world with a highly reliable, scalable, and low-cost cloud infrastructure platform.

2. PURPOSE OF CLOUD COMPUTING

- Price: It lowers the high upfront expenses of purchasing gear and software.
- Accessibility: Resources may be accessible in minutes, usually with just a few mouse clicks.
- Scalability: We may scale up or down our resource requirements based on the needs of the business.
- Productivity: We expend less operational effort when we use cloud computing. We don't have to apply patches, and we don't have to maintain hardware or software.
- Reliability: For business continuity, data backup and recovery are less expensive and quick.

- Data security: Many cloud companies provide a comprehensive set of rules, technologies, and controls to help us protect our data.

3. AIMS AND OBJECTIVES OF THE STUDY

The point of investigation is to identify the specific technical and service needs of the users, from cloud computing and understand the specific parameters that affect customer perception of quality.

- To analyze the service offerings of AWS
- To review the existing perception of users regarding the service
- To identify the customer needs from contemporary cloud computing services
- To identify the parameters that affect quality perception regarding cloud computing
- To identify areas of further research to boost quality perception

4. RESEARCH QUESTIONS

Based on the set aims and objectives the following research questions drafted provide a guide for the study.
- What are the services AWS is offering?
- How do the users perceive the existing services from the company?
- What are the parameters that influence the decision-making or perception formation processes for the users?

5. AWS SERVICES

Amazon has many services for cloud applications. Let us list down a few key services of the AWS ecosystem and a brief description of how developers use them in their business.

Amazon has a list of services:

- Compute service
- Storage
- Database
- Networking and delivery of content
- Security tools
- Developer tools
- Management tools

6. CLOUD COMPUTING MODELS

Infrastructure as a Service (IaaS)

Infrastructure as a Service (IaaS) is the foundation of cloud computing, and it often includes networking capabilities, computers (virtual or dedicated hardware), and data storage capacity. IaaS gives you the most flexibility and administrative control over your IT resources, and it's quite comparable to the existing IT resources that many IT departments and developers are already familiar with.
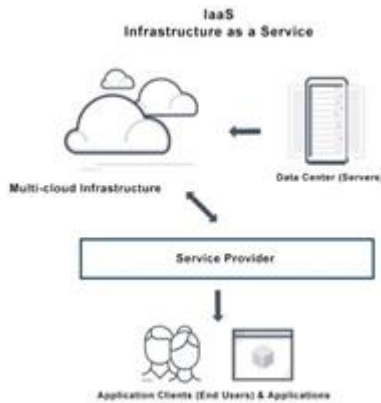
Platform as a Service (PaaS)

Platform as a Service (PaaS) eliminates the requirement for your company to handle the underlying infrastructure (typically hardware and operating systems), allowing you to focus on application deployment and administration.

This allows you to be more productive because you won't have to worry with resource procurement, capacity planning, software maintenance, patching, or any other undifferentiated heavy lifting that comes with running your application.

Software as a Service (SaaS)

Software as a Service (SaaS) gives you a fully functional product that is managed and maintained by the service provider. The majority of the time, when people talk about Software as a Service, they're talking about end-user apps. You don't have to worry about how the service is maintained or how the underlying infrastructure is managed when you

utilise a SaaS solution; all you have to do is think about how you'll use that particular piece of software. Web- based email is a frequent example of a SaaS application, which allows you to send and receive email without having to manage feature changes to the email product or maintain the servers and operating systems on which the email programme runs

7. CONCLUSION

AWS provides quick-to-assemble building blocks that can accommodate almost any demand. AWS offers a comprehensive range of highly available services that are designed to work together to create complex, scalable applications.

You can use highly reliable storage, low- cost computing, high-performance databases, management tools, and more. All of information is provided without charge up advance, and you simply pay for what you use. These services enable businesses to move more quickly, reduce IT costs, and grow. AWS is used to power a wide range of workloads, including web and mobile applications, game development, data processing and warehousing, storage, archive, and many others, by both huge corporations and the hottest start-ups.

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