A Systematic Review of Cloud Storage Services- A Case Study on Amazon Web Services

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ABSTRACT

Background/Purpose: *Cloud computing is the buzz word today as it has made its presence felt in many fields, such as business, education, industries, e-commerce to list a few. The concept of cloud storage is the IT service provided on the internet which allows the flexibility of paying for only the actual usage that is in short it is pay as you go. The companies now have the option to rent computing power, storage, and databases from the service provider. This avoids huge financial investment for procuring, operating, and maintaining licensed software, physical data centers and servers. To overcome the challenges in general the storage medium, it is important upgrade to cloud concept. Nowadays, new business language has seen tremendous success by putting their services and data on the internet without relying on any physical devices. There are many service providers who cater this segment. This paper provides an analysis of the company Amazon Web Services which is the major service providers in recent times.*

Objective: *In this case study we focus on the cloud storage services of Amazon Web Service.*

Design/Methodology/Approach: *The related information and details for this case study on Amazon Web Services was obtained from various scholarly articles published in various peer reviewed journals, conferences and company websites. White papers have provided additional information.*

Findings/Result: *The study of this paper focus on the relevance and importance of cloud storage in the present era. The need, requirements and necessity of various services provided by AWS, financial plan, different products of AWS, Leading clients and types of cloud services are discussed.*

Originality/Value: *The study provides a brief overview of Amazon Web Services, nature and manner of various data collection, data management, information about cloud storage and various cloud services of AWS.*

Paper Type: *Case Study on the importance of storage and computation requirements for services on web, various service providers, with special reference to Amazon Web Services.*

Keywords: Cloud computing, SWOC Analysis, Cloud storage, Big data, Cloud services, Web service, Case study, Amazon, Amazon Web Services.

1. INTRODUCTION :

The power of the human brain has been intriguing to both scientists and researchers. They are trying hard to unravel the mystery of the human brain's ability to store, organize, analyze, relate and remember large amounts of data. Despite this with burgeoning data flowing from different streams which we term as BIG DATA, it is becoming difficult to manage, analyze and interpret, by overlooking or missing of crucial and critical information. As a result, computers with high-end processing capabilities and memory, in addition to large storage devices were invented for efficient processing, storing and retrieval of information. The development of storage devices began in the 1960s with tape drives. Floppy discs were introduced in 1967, compact discs in 1992, USB drives in 1994, and cloud computing and storage

in 2006. In the information age, cloud computing and storage was a revolutionary discovery [1]. Storing in cloud is an easiest way to safely store and transfer data over the internet. It functions by enabling the sending and receiving of files from a distant data server using the internet on a client's device. Thus the invention of high end processors with parallel computing facility and software programs developed using algorithms based on neural computing has made a very big impact on research, industries, and education, business and service sectors.

Data is used for computation, analysis, interpretation and decision making in all sectors. Having the fastest computation capability and storage of data in every sector is now an important component for every industry in the present digital era. Increasing the computational capability and going for new releases or versions by individual company will have a big financial burden on them. In addition to this the cost of maintenance of high-end computing systems would also be high. Using Cloud technology the clients can always have access to their data and also process them if one of the server is offline or data gets lost because, the data is updated on the go and kept on multiple servers at the same time. Because of networked backups, hardware failures will never result in data loss. The concept Cloud storage is invented in the year 1960s by Dr. Joseph Carl Robnett Licklider. Almost 20 years later, CompuServe started giving its clients a small amount of disc space to store their data. In the middle of the 1990s, AT&T introduced the whole first entirely web-based storage system for business and personal communications [2].

The cloud computing model was developed to allow users to do activities without needing or requirement to buy or update software or hardware [3]. Cloud computing is a sort of Web-based technology. Here we can pay for the services like database, storage etc, and cannot use more than what we have paid [4]. Companies that use the cloud only pay for the resources they use, allowing them to reduce investment costs on infrastructure and thus leading to encourage entrepreneurs and startups with minimal finance.

In the cloud computing world, traditional service providers provide two options for businesses. The two businesses options are to act as infrastructure providers and service providers. Infrastructure firms look after cloud systems and rent out resources based on consumption. To serve end clients, service providers lease infrastructure resources from service providers. An on delivery of services using cloud computing involves data and programs that can be stored and succeeded in getting too quickly [5]. Numerous analytical tools have been created as a result of the increase in user data. The necessity for effective cloud computing services has increased in order to enable such technologies [6]. More people have access to cloud computing, which helps many start-ups finance their operations [7].

2. RELATED WORKS :

Literature reviews of available scholarly publications are listed in the following table Table-1.

Table 1: Review of articles related to cloud computing.

S. No	Field of Research	Focus	Outcome	Reference
1	Market oriented cloud computing	Overview of Amazon Elastic Cloud Compute and Amazon Simple Storage Service	A customer can design a new Amazon Machine Image (AMI) in Amazon EC2 that contains the application and data	Raj Kumar Buyya et al. **(**2008**).** [8]
2	Virtualization on third party cloud providers.	To find information leakage on third party cloud computing.	It can be map internal cloud architecture and start creating additional VM's one at a time	Ristenpart T. et al. (2009). [9]
3	Technical security issues of cloud computing	Difficulties with technological security resulting from the use of Cloud services	Security and trust issues are solved in some extent.	Jensen M et al. (2009). [10]
4	Review of AWS and MWA	Survey of cloud computing platforms and architecture	Based on the study AWS and MWA provide	Bhargavi K. et al.

			efficient services in cloud platform.	(2010). [11]
5	Cloud migration	Shows the potential advantages and dangers of moving an IT system in the oil and gas business.	To avoid applying local improvements at the expense of organizational performance, company decision-makers take into account the overall organizational consequences of the changes brought about by cloud computing.	A. Khajeh-hosseini et al. (2010). [12]
6	Secure code based cloud service	Focus on data protection when data is stored in a third party's cloud system.	A secure distributed storage system is created by combining a decentralised deletion code with a threshold proxy re-encryption technique.	Lin, H. Y., & Tzeng, W. G. (2011). [13]
7	Cloud computing	Security and Privacy of data	Building trust between cloud service providers and customers requires a focus on data storage as well as data protection in cloud computing settings.	Sun, Y et al. (2014). [14]
8	Security issues and solutions	Different security concerns for data privacy and dependability, important elements impacting cloud computing	Solutions for various security problems are discussed.	Ahmed, I. (2019). [15]

3. RESEARCH AGENDA :

(1) What is the importance of cloud storage concepts and service providers?
(2) What is the role and importance of cloud service providers in order to manage the requirements of customers?
(3) What are the different algorithms used in cloud storage?

4. OBJECTIVES OF THE STUDY:

(1) To study and understand cloud storage concept.
(2) To analyze the importance of cloud storage concept and service providers.
(3) To analyze the role and importance of cloud service providers in order to manage the requirements of customers.
(4) To provide a descriptive study of the Amazon Web service.
(5) To perform SWOC analysis on Amazon Web Services.

5. METHODOLOGY :

The analysis is based on information and data gathered from a variety of sources. The resources are standard reference text books connected to cloud computing concepts, various articles, websites and literature reviews related to cloud storage and cloud services.

5.1 Database searches:

Some of the online and World Wide Web sources which are repositories of various peer reviewed journals, conference publications that were widely referred to for obtaining information are:

- Research Gate
- IEEE Explore
- Google Scholar

6. CLOUD STORAGE :

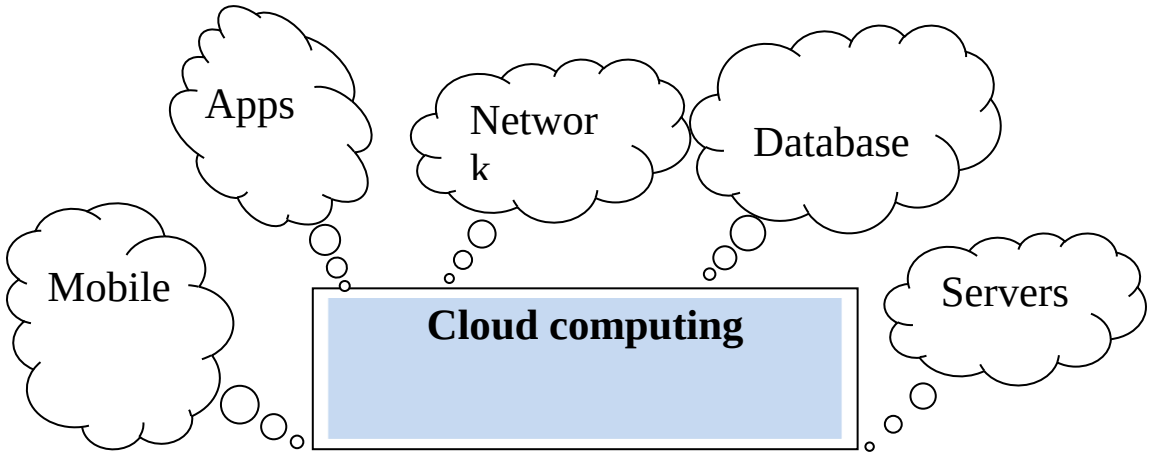

Fig. 1: Cloud storage concept [16]

In the cloud storage paradigm, data is kept on distant servers and accessed via the internet or a specialized private network connection. The provider of cloud storage services is in charge of managing, operating, and maintaining the storage infrastructure. The primary purpose of cloud computing is resource, software, and information sharing over the internet with the goal of lowering capital and operating costs, improving performance in terms of response and data processing times, maintaining system constancy, and allowing for future technology adaptation [17].

The cloud storage can be accessed by using API or by conventional storage protocols. To promote and encourage cloud usage, services such as to collect, manage, secure, and analyze data at scale are given free or with very minimal cost. There is no need to invest funds in buy hardware, storage, or other infrastructure while using cloud storage. When the development team of any company is ready to execute, infrastructure issues may arise. Cloud storage allows accessing the required amount of storage. This will make the development team more concentrate on their work.

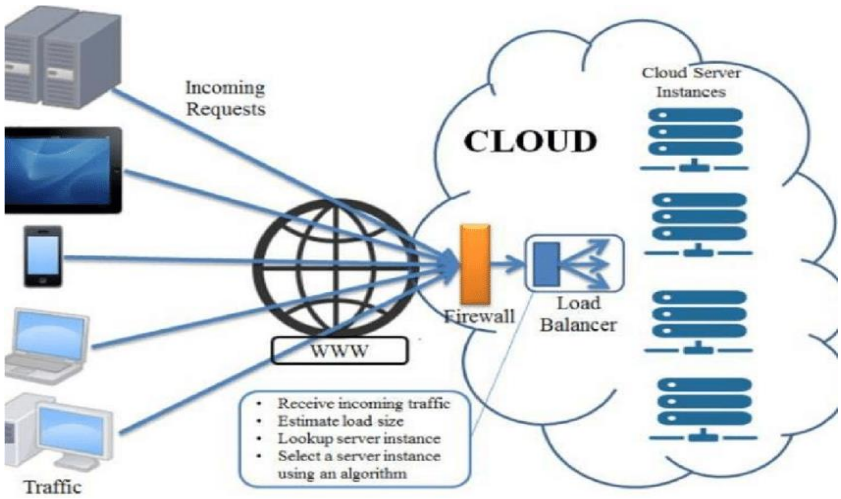

Fig. 2: Block diagram of cloud architecture [17]

7. DIGITALIZATION OF DATA :

Today, digital technologies are used to track and diagnose problems in health, the environment, and agriculture, as well as to carry out routine chores like navigating traffic or paying a bill, etc. By observing our interests, purchases, and interactions the government and other business organizations can utilize data for their financial growth. The amount of data accumulated every day is very high.
Some daily statistics are listed below:

- More than 500 million tweets in a day
- Around 300 billion emails in a day
- 4 petabyte data on Facebook
- More than billion messages on whatsApp
- More than 5 billion searches
- Global data production is predicted to reach 463 Exabyte's per day by 2025 [18].

The below graph (Figure 3) shows the growth of digital data created every year:

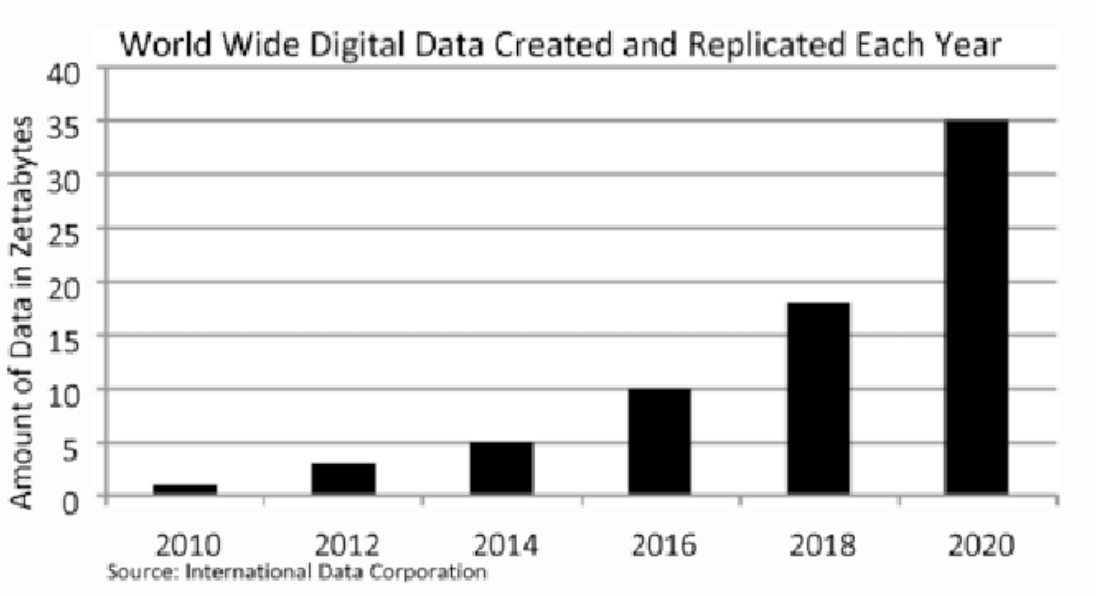

Fig. 3: Growth of digital data [19]

The arrival of digitalization and Service Oriented Architecture (SOA) completely altered the way that information and communication technology (ICT) resources are managed. Traditional and cloud computing both exist today. The three main service models for cloud computing are platform as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS) [19].

8. ALGORITHMS USED IN CLOUD COMPUTING :

(1) Load balancing algorithm: The algorithm is based on the idea of balancing the load among various resources (network links, central processing units, disc drives, and so on) to achieve optimum throughput, optimal resource utilization, and greatest response time while avoiding overload to have considerable performance enhancement [20].
(2) RSA algorithm: Ron Rivest, Adi Shamir, and Len Adleman, who traced it in 1977. A public key algorithm known as RSA protects data by encrypting and decrypting it so that only authorised users can access it. After being encrypted, the data is kept as ciphertext in the cloud. When a user requests the data, the cloud provider authorises the request and sends the requested data to the user [21].
(3) Digital signature algorithm: DSA is regarded as one of the most popular digital signature algorithms today, along with RSA. DSA does not use a private key to encrypt or a public key to decrypt message digests. Instead, it employs special mathematical operations to produce a digital signature made up of two 160-bit values derived from the message and private key digests [21].
(4) Advanced encryption algorithm: US National Institute of standards and technology has proposed this algorithm. In contrast to other encryption algorithms, AES operates on data in bytes. The block

size of the encryption is 128 bits, which means that 16 bytes of input data are processed every time a block of 128 bits is processed [22].

(5) Blowfish algorithm: It functions almost identically to DES, however the key size in DES is small and can be readily decrypted, whereas the key size in the Blowfish method is huge and can range from 32 to 448 bits [22].

9. TOP CLOUD SERVICE PROVIDERS COMPANIES :

(1) Microsoft Azure: Microsoft Azure is used to develop, test, deploy, and manage applications. The Microsoft-managed data centers worldwide network is where this process is carried out. It is both a public and a private cloud platform. Virtual machines are widely available and each one supports a wide range of operating systems. IT specialists and developers may easily manage and deploy their applications and services with the aid of Azure [23].

(2) Google Cloud Platform: Google search and YouTube are mostly run on the Google cloud infrastructure. Google Cloud provides a range of services, including data storage, machine learning, and analysis of data. The information kept in the Google Cloud is safe and accessible. It includes the services like platform as a service and infrastructure as a service [23].

(3) IBM Cloud Services: Platform as a Service and Infrastructure as a Service are two services provided by the IBM cloud. This cloud company can install and access its resources, such as storage, networking, and computing power, through the internet. .The home appliance industry as well as the retail and medical supply industries are benefited by IBM Cloud computing services. It makes use of it because it provides the best services at the lowest cost [23].

(4) Adobe Creative Cloud: Adobe Creative Cloud offers the top digital experiences, apps, services, design, and photography. The instructions and templates offered by the Adobe cloud services are easy for a new user to sign up for and begin utilizing the cloud. It is made up of numerous tools and services that give users access to a variety of programmers used in graphic design, web development, photography, and video editing [23].

10. INDUSTRY OVERVIEW :

Amazon was the first online bookstore started during 1995, in Bellevue, Washington. Customers with internet access in those days got an opportunity to purchase choosing from a wide range of books under different categories. Analysis of growth and demands of the software industry for licensed software and storage led to the founding of the Amazon Web Services, Inc. (AWS) with the concept of metered pay-as-you-go cloud computing platforms and APIs to cater to consumers, businesses, and governments as per their requirements came as a boon[24]. Amazon Web Services is a cloud-based infrastructure platform that powers hundreds of thousands of enterprises around the globe in more than 190 countries. Customers from many industries benefit from the low-cost, elastic, open and adaptable, secure infrastructure, which is available in data centers across the United States, Europe, Singapore, and Japan [25]. Amazon Web Services (AWS) is a cloud service provider being in the field with more than ten years of experience. During this period, its market share has grown, and cloud service providers now provide a varied and wide range of services to meet the needs of commercial customers. AWS is continuously improving its services in all areas and it is no exception in providing the needs and requirements of the ever increasing demands of the customers and entrepreneurs. It has a reputation for innovation, which has helped it establish and maintain its position as a top provider in this industry in recent years. It has a huge app store, and the large partner ecosystem it has built to support its cloud offerings gives customer's additional options when selecting solutions. The developments in the organization, the details of growth, events and additions made in terms of service made by AWS are indicated in Table 2.

Table 2: Growth Saga Of Amazon Web Services [26].

YEAR	GROWTH
2003	Benjamin Black and Chris Pinkham discussed the potential for offering virtual services as a service.
2004	Queue, AWS's first service, was made available.
2006	AWS was officially launched.
2007	AWS has about 180,000 registered developers.

2010	The retail online services from Amazon.com were migrated to AWS.
2012	The first innovate conference was held by AWS.
2013	For computer engineers, AWS has begun offering certification programmes.
2015	AWS reported $2.1 billion in sales in the third quarter of 2015, which was considered profitable.
2016	AWS was for the first time more profitable than Amazon's North American retail operation in first quarter, which saw revenue of $2.57 billion and net income of $604 million, an increase of 64 percent over first quaeter of 2015.
2018	On AWS, Amazon has introduced an auto scaling service.
2019	AWS grew by 37% year on year and contributed for 12% of Amazon's revenue.
2021	AWS claimed 32% annual growth and accounted for 32% of the $41.8 billion cloud market in first quarter of 2021.

11. FINANCIAL GROWTH :

AWS provides the best cloud storage services which is affordable and is of reasonable subscription rate. These attributes really helped AWS brands to establish and have a strong foothold in this fast developing sector. AWS witnessed tremendous growth along with its domination in the cloud industry. Due to the pandemic and work from home concepts, there is a huge demand for cloud computing. Industries and business communities are relying on internet storage to store their data in the cloud for its ease of access. The reasons for this surge are the improved technological growth and decrease in costs. Cost reductions and technology adaptation has increased the revenue by more than ten times within a span of seven years. From the data provided in TABLE 3 it is clearly observable that there is growth in the demand for cloud services. Table 3 and figure 4 indicate that how the annual revenue growth of Amazon Web Services during the last five years.

Table 3: Annual revenue of Amazon web services [27].

YEAR	NET SALES (IN BILLION DOLLARS)
2017	17.46
2018	25.7
2019	35
2020	45
2021	62

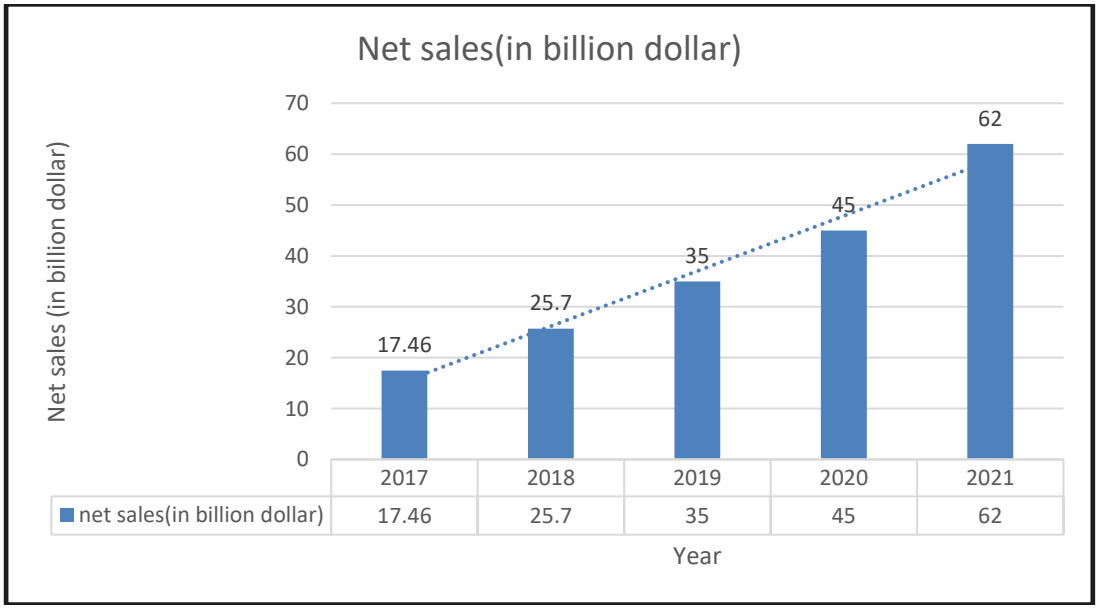

Fig. 4: Graph to show the annual net sales [28]

12. ORGANIZATION STRUCTURE :

The organization structure of any company is very important for a sustained growth and expansion. The adaption of a structure by an organization depends on the founder's vision, and it is a very important aspect. The internal communication are very important as the requirements and the development in each department would have an overall impact on the growth of organization hence Internal communications in companies has always received a lot of attention in the literature which looks into the development of on organizations, but empirical researches that aim to assess various aspects of organizational communications are few. The organization structure is shown in fig 5.

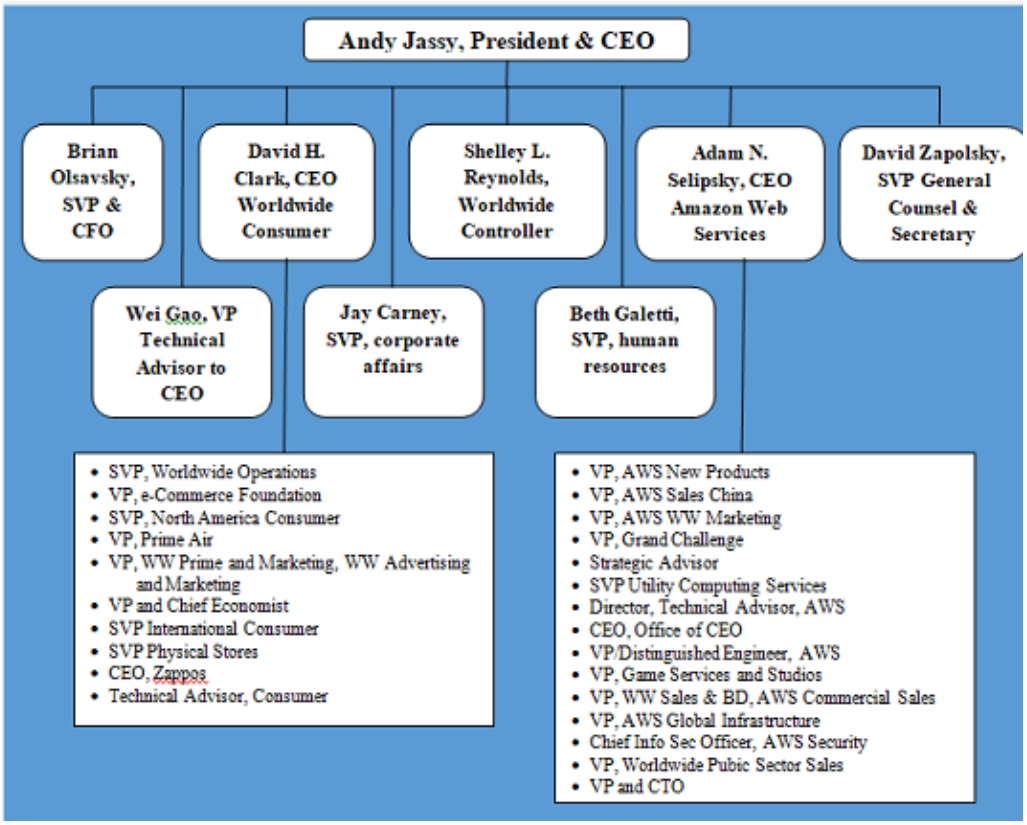

Fig. 5: The organization structure of AWS [29]

The details of the prominent persons in the organization structure are provided.

- **President and CEO:** Andrew R. Jassy is the president and CEO of Amazon since July 5, 2021. He is an American business professional. Since 2003, Jassy has been the CEO of Amazon Web Services [30].

Fig. 6: Andrew R. Jassy [30]

- **Founder:** Amazon's founder and executive chairman is Jeffrey Preston Bezos.. He is an American businessman, media owner, investor, Engineer, and previously served in the post of president and CEO.

Fig. 7: Jeffrey Preston Bezos [30]

- **Chief Executive Officer (CEO):** Adam Selipsky spent over a decade establishing Amazon Web Services (AWS).

Fig. 8: Adam Selipsky [31]

- **Chief Financial Officer:** In April 2002, Brian T. Olsavsky joined Amazon.com. He handles Amazon.com's total financial activities, which include controllership, tax, treasury, analysis, investor relations, internal audit, and financial operations as CFO.

Fig. 9: Brian T. Olsavsky [32]

Chief Information Security Officer (CISO): Stephen Schmidt is the CISO, he is responsible for establishing and maintaining the enterprise vision [33].

For any organization to be successful the Vision and Mission are important. The vision and mission has been framed with the motto of looking in for continuous development and keeping the customer in mind, development, and growth of the company Amazon Web Services. The vision and mission of AWS is stated as below:

Vision: Our vision is to be earth's most customer-centric company; to build a place where people can come to find and discover anything they might want to buy online [34].
Mission: Amazon is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking [34].

13. AWS STORAGE SERVICES :

AWS provides various storage services which are made available to the customer and are classified based on the importance and requirements from time to time and are listed below.

(1) Amazon Simple Storage Service: It ensures the security of storing and retrieving massive amounts of data from any location [35].
(2) **Amazon Elastic File System (EFS):** There is no setup costs or minimum fees. The payment is for the actual storage space utilized, and no charges for updating of data that is saved under the category of Infrequent Access storage classes, and also for the throughput provided [35].
(3) **Amazon FSx:** Launching, running, and growing feature-rich, high-performance file systems in the cloud are all made possible by Amazon FSx. It is suitable for a variety of activities due to its dependability, security, scalability, and large collection of features [35].
(4) **Amazon Elastic Block Store (EBS):** Block storage systems are employed to house persistent data [36].
(5) **AWS DataSync:** The online data transfer service AWS DataSync makes it simpler, quicker, and more automatic to move data between AWS storage services and on-premises storage systems. [35].
(6) **AWS Snow Family:** It is a group of physical devices that aid in the migration of massive volumes of data into and out of the cloud without the need for networks [35].
(7) **AWS Storage Gateway:** It is an on-premises hybrid cloud storage solution that allows your apps to use AWS cloud services such as S3, Glacier, and EBS [35].
(8) **AWS Elastic Disaster Recovery (DRS):** AWS Elastic Disaster Recovery (AWS DRS) reduces downtime and data loss by providing economical storage, minimal computing, and point-in-time recovery for on-premises and web applications [35].
(9) **AWS Backup:** Backup is a completely managed solution for consolidating and automating for protecting the data, both in the cloud and on-premises [35].

14. CLIENTS OF AMAZON WEB SERVICES :

The client base is very important for any service provider. Retention and expansion of client base are very challenging. It is dependent on various factors for succeed in this competitive and ever-changing scenario in the world to be on the top. The world's top supplier of cloud computing services is the company AWS. Offering a wide range of computing, storage, and machine learning/artificial intelligence (ML/AI) services. AWS has been an industry leader in terms of innovation and market penetration. Many developers, startups, and even large businesses can now simply design, test, and deploy apps as a result of its rise. Due to its global presence, flexible pricing, security, development tools, and connection with existing systems, storage, and backups, AWS is always preferred by clients [37**].** Fig. 10 shows database the logos with the name of customers of AWS [38].

Details of some of the leading business house who are clients of AWS are discussed along with the main areas of utilization of services.

(1) Netflix: More than 200 million customers in 190 countries use Netflix, the most well-liked internet television provider, to view 125 million hours of TV series and movies each day. Nearly all of Netflix's processing and storage needs are met by Amazon Web Services. This includes databases, analytics, recommendation systems, video conversion, and many other tasks that demand the employment of more than 100,000 AWS server instances in total [39].
(2) Twitter: Twitter's global cloud infrastructure will be provided by Amazon Web Services (AWS). The partnership with AWS will boost Twitter performance by allowing us to deliver Tweets from data centres closer to our clients while also utilising the Arm-based architecture of AWS Graviton2 instances [40].
(3) NASA: NASA is making its massive abundance of photographs, movies, and audio recordings easily discoverable in one centralised location, with AWS and ManTech International [40].

(4) Unilever: Unilever relies on Amazon Web Services for complete backup and disaster recovery, as well as the rapid deployment of standardized infrastructure [41].
(5) GE Oil & Gas: GE is also curious in AWS' capacity to manage huge data volumes. Mission-critical automated pipeline inspection data must be handled by the oil and gas division in vast quantities. Data analysis and processing are performed using AWS technology, which reduces processing time and raises the quality of the results [41].

Fig. 10: Customers of AWS [38]

(6) Kellogg's: The Kellogg Company, is a well-known brand associated with breakfast foods. It has a rich history. The business choose AWS because of its speed and overall capacity. AWS additionally provided affordable prices, excellent availability, and adaptability in IT planning [41].
(7) Shell: Like many other multinational organizations, Shell has taken precautions to protect itself from the growing threat of cyber attacks [41].
(8) Apple: Amazon Web Services and Apple have a multiyear arrangement. Although Apple hasn't confirmed these reports, it's understandable that the company would want a complete cloud solution given the increased demand for internet services like ICloud and Apple Music [39].

15. TYPES OF CLOUD SERVICES :

Cloud services include a number of internet-based services given to businesses and consumers. Rather than installing software and platforms on each of the company's employees' devices, the company or organization may simply use the cloud to access the desired available services from anywhere [42]. The available services are mainly categorized to three categories Saas, Paas, Iaas [43-44].

(1) Software as a Service (SaaS): The customer can only utilize the provider's applications in this case. Through the user interface, the software communicates with the user [45]. File storage, recovery, web-based email, and project management tools are examples of Software as a Service. Using one of these programmers, users can access, share, save, and safeguard data on the cloud.
(2) Platform as a Service (PaaS): In the Platform as a service (PaaS) of cloud-based environment the developers have the facility to build and distribute applications. PaaS provides the required database and operating system software development. As creating and maintaining infrastructure is not a concern for the developer firm the focus would be on the product development [45].
(3) Infrastructure as a Service (IaaS): IaaS (infrastructure as a service) provides servers, memory, and networking resources required to manage SaaS solutions. Managing storage, servers, networking equipment, and providing services of load balancing and firewalls is the responsibility of the cloud provider [45].

16. SWOC ANALYSIS :

SWOC means Strength, Weakness, Opportunities, and Challenges. It is commonly used to assess the internal capacities of organizations. SWOC analysis is used in scientific papers to comprehend internal organizational analysis, ABCD analysis as a Conceptual framework, and PESTLE analysis as outside

institutionalism [46-47]. Several companies' SWOC analyses from various industry sectors have been published as academic research [48-52]. The SWOC analysis of AWS is discussed below.

Strengths:

(1) **Easy to understand:** You will have access to the Amazon Web Service Management Console, a user convenient terminal, when the client sign up for Amazon Web Services. You have access to a number of programmers and services through this server interface [53].
(2) **Boundless capacity:** AWS provides unlimited bandwidth.
(3) **Reliable security:** Your data is protected and secured by AWS's more reliable security solution. With 12 data centres worldwide, this is the highest level of security for your personal information [50].
(4) **Flexible and affordable:** One of AWS's main benefits is its adaptability. There is no cap on how much of its infrastructure-on-demand you can use. A wide range of platforms and infrastructure are available of economic price [53].

Weakness:

(1) **EC2 limits:** The resources on Amazon EC2 and the Amazon VPC console are constrained. The sum may, however, be increased upon request.
(2) **Cloud computing problems:** Issues that come with changing to cloud storage include security for backups, the potential for loss of data, isolation, safety and limited control.

Opportunities:

(1) The most crucial aspect that should be taken advantage of as a chance for cloud computing adoption is the simplicity of integration. A range of learning materials are integrated and made available to users in a variety of structures and forms like mixed media-based study material and other digital media. This is due to the fact that cloud services often handle all file types and structures, as well as having an efficient storage structure to work with [54].

Challenges:

(1) **Data protection:** Concerning the risks of cloud technology, some questions remain unanswered. The most serious and damaging cloud computing data security dangers are virus assaults and hacking. This calls for very high security measures and thwarts any intrusions from hackers. Beginners should think about the risks before using technology and take appropriate precautions in their business. You must ensure that you have cloud management and security strategy in place before transferring sensitive company data to a third party.

17. CONCLUSION :

There are many cloud service providers like Microsoft Azure, Google Cloud platform, IBM cloud services, etc., and they are competitors in terms of price and various services. In spite of the various competitors it is observed from the analysis that Amazon Web Services has been widely accepted by a large number of business house, Entrepreneur and institutions. The customer base is increasing every financial year and this is attribute to the key strength of AWS adaptability to customer requirements and expectations.

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