INTERNET AS A PLATFORM

By : SHIVANI TIWARI

Introduction – Internet as a Platform

- In the early days, the Internet was mainly used for communication and information sharing.

- Today, it has grown into a powerful platform that delivers applications, services, and infrastructure.

- Through the Internet, users can access software, storage, databases, and computing power without needing powerful local machines.

- This idea is the foundation of Cloud Computing, which is usually offered in three main models:

- IaaS (Infrastructure as a Service) – renting servers and storage.

- PaaS (Platform as a Service) – tools for developers to build and deploy apps.

- SaaS (Software as a Service) – using ready-made applications over the web.

- Example: When we use Google Drive for storing files or Netflix for streaming, the Internet is acting as a platform.

Key Features

- On-demand access: Resources like storage or software can be accessed instantly when needed.

- Scalability: Resources can be increased or decreased based on demand.

- Pay-per-use model: Users only pay for the services they use, making it cost-effective.

- Accessibility: Any device with internet can use the services – mobile, laptop, or tablet.

- Resource sharing: Multiple users can use the same infrastructure, reducing cost and improving efficiency.

Real Examples

- Google Drive, Dropbox: Provide online storage and file sharing.

- Amazon Web Services (AWS), Microsoft Azure, Google Cloud: Provide infrastructure, databases, and tools for cloud computing.

- Salesforce: Provides Customer Relationship Management (CRM) as a service over the internet.

- YouTube, Netflix: Deliver videos and entertainment content globally using the internet platform.
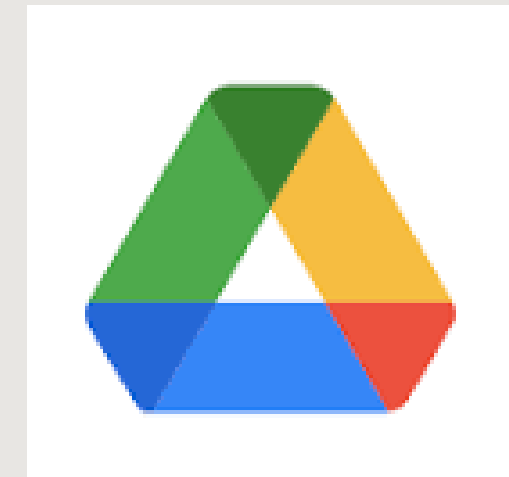
Benefits

- Cost-effective: Reduces the need for heavy investment in hardware and software.
- Flexibility: Users can work from anywhere as long as they have internet access.
- Collaboration: Enables real-time teamwork, like editing documents together.
- Automatic updates: Software and services are updated automatically, reducing manual work.
- Reliability: Data is stored on secure servers with backup systems, ensuring safety.
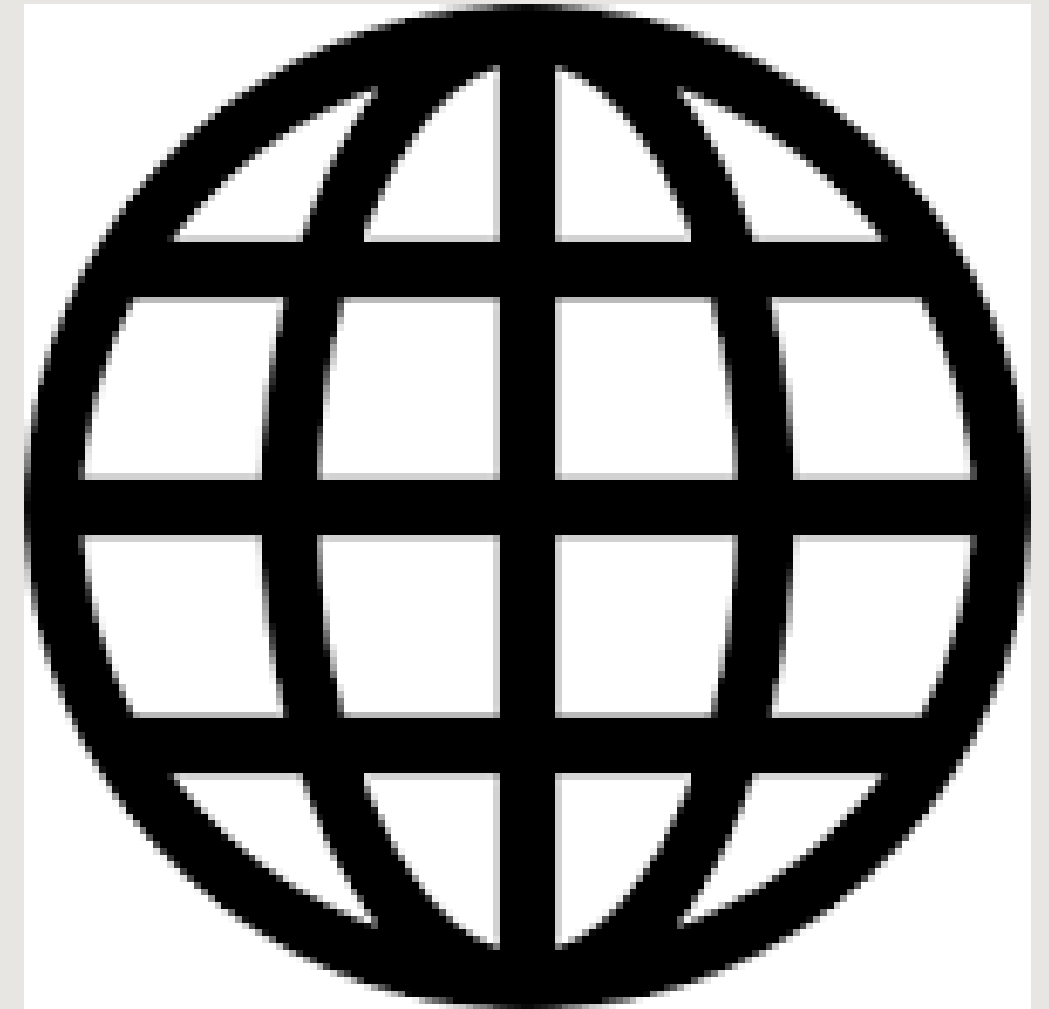
Challenges & Future Scope

- **<u>Challenges:</u>**

  - Data security and privacy are major concerns in cloud services.
  - Internet dependency – services stop if connection fails.
  - Vendor lock-in – difficult to switch from one provider to another.

- **<u>Future Scope:</u>**

  - Integration with AI, IoT, and Big Data will make services smarter.
  - Serverless computing will allow running applications without managing servers.
  - Edge computing will bring data processing closer to users, reducing delay.

THANK YOU

For Listening