



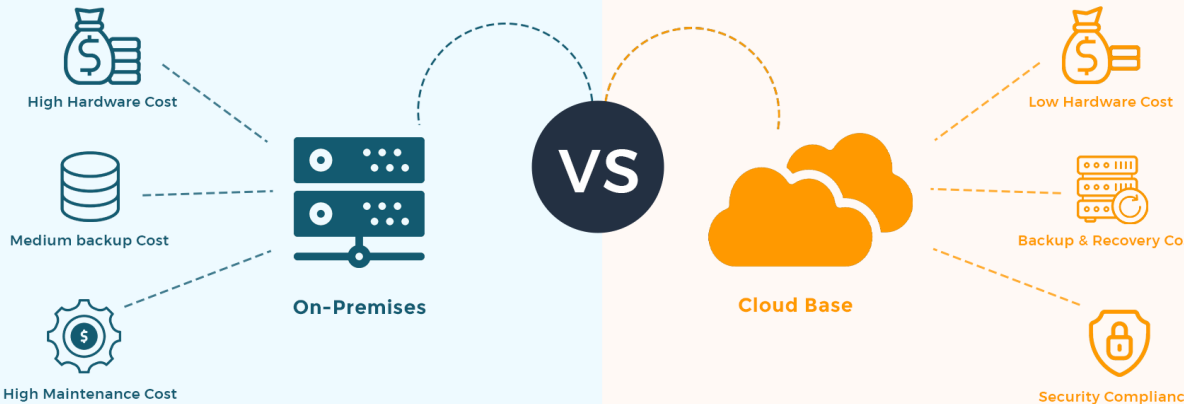
# **The Revolution of Cloud Computing**

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# What is Cloud Computing?

## On-Premises VS Cloud Base



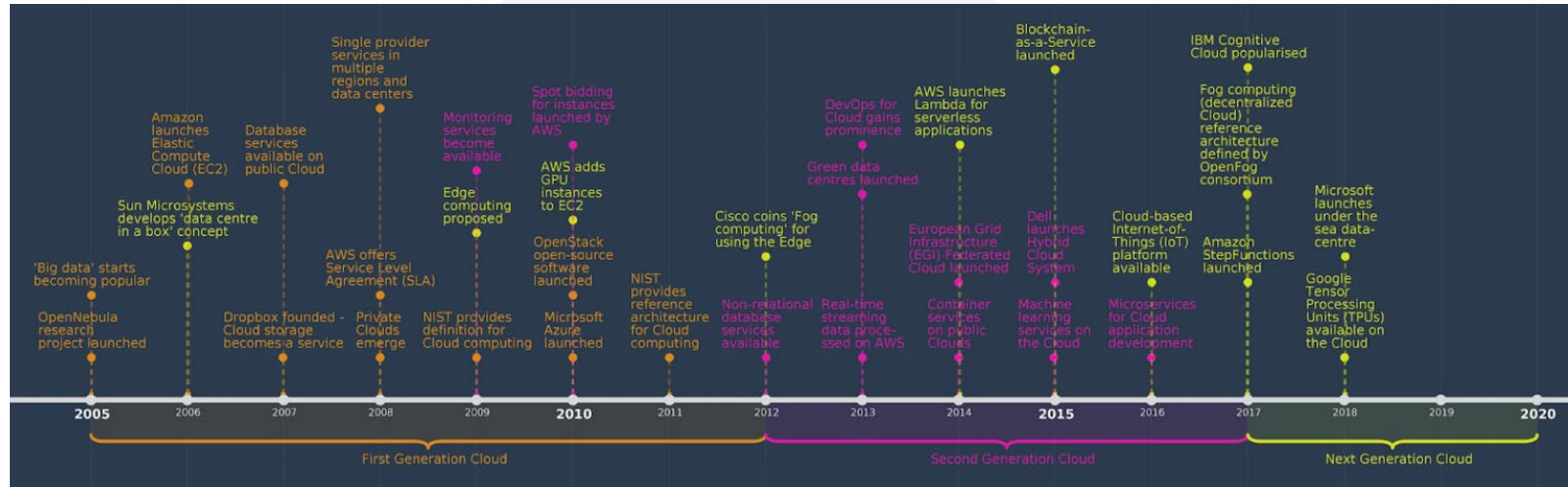
- Delivery of IT resources over the internet.

- Key features: scalability, cost-efficiency, and accessibility.

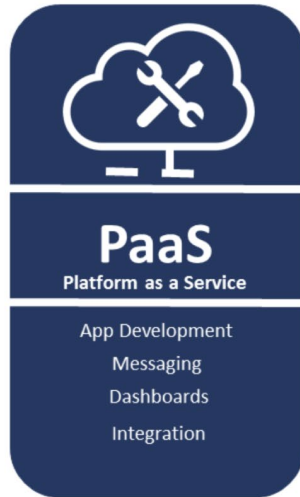
# History of Cloud Computing

## The Journey of Cloud Computing

- 1960s: Conceptualized by J.C.R. Licklider.
- 2006: Amazon launches AWS.
- Present: Multi-cloud and hybrid solutions.



# Types of Cloud Services



## Three Main Types

- *SaaS*: Software as a Service (e.g., Google Workspace).
- *PaaS*: Platform as a Service (e.g., Microsoft Azure).
- *IaaS*: Infrastructure as a Service (e.g., AWS EC2).

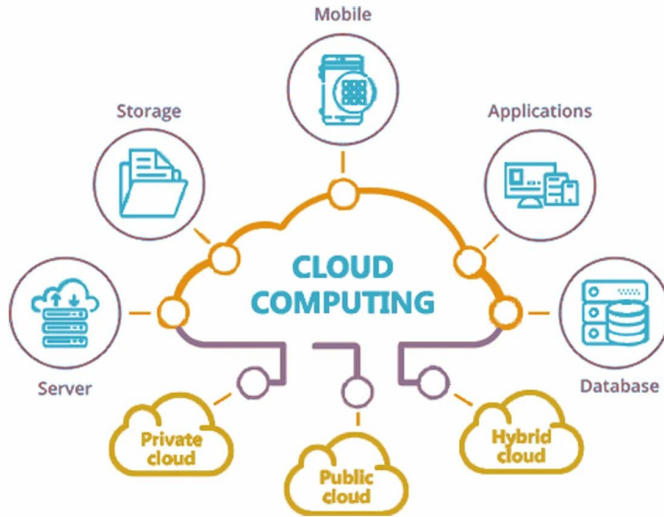
# Key Features

SECURITY	COST OPTIMIZATION	RELIABILITY	PERFORMANCE EFFICIENCY	OPERATIONAL EXCELLENCE
Identity and key management	RI and spot	Service limits	Right AWS services	CI/CD
Encryption	Volume tuning	Multi-AZ/region	Storage architecture	Runbooks
Security monitoring and logging	Service selection	Scalability	Resource utilization	Playbooks
Dedicated instances	Consolidated billing	Health checks and monitoring	Caching	Game days
Compliance	Resource utilization	Networking	Latency requirements	Infrastructure as code
Governance	Decommissioning	Self healing/ disaster recovery	Planning and benchmarking	RCAs

## Why Cloud Computing?

- Scalability: Resources adjust to demand.
- Cost-Efficiency: Pay-as-you-go model.
- Security: Advanced data protection.

# Impact on Business



**Business Transformation**

- Remote work: Cloud-based tools like Zoom.
- Data analysis: Big Data in the cloud.
- E-commerce: Seamless operations and scalability.

# Real-World Applications



## Where We See It

- Entertainment: Streaming services.
- Storage: Cloud drives.
- Enterprise: Customer relationship management tools.



# Cloud and Innovation



## Driving Innovation

- IoT integration.
- AI and ML models hosted in the cloud.
- Edge computing for real-time data processing.



# Challenges

## Challenges Ahead

- Security: Data breaches and threats.
- Compliance: Regulations like GDPR.
- Downtime: Service interruptions.





**Thanks for the Attention!**