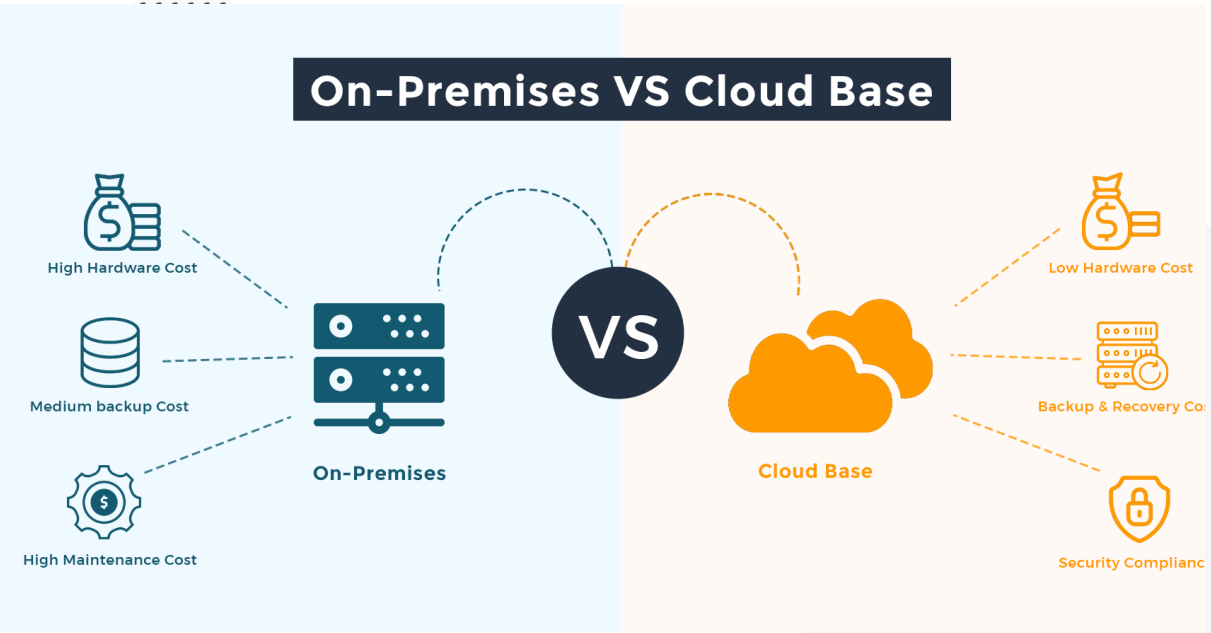
The Revolution of Cloud Computing

Nikita Safronov

12/4/2024

What is Cloud Computing?



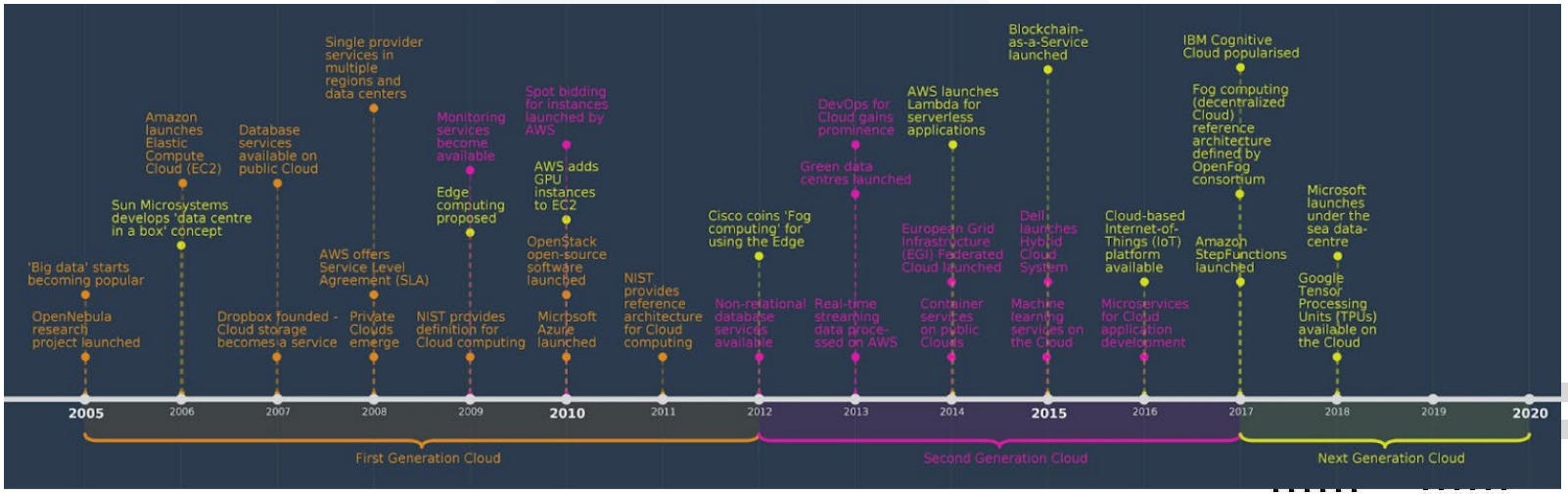
- Delivery of IT resources over the internet.

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

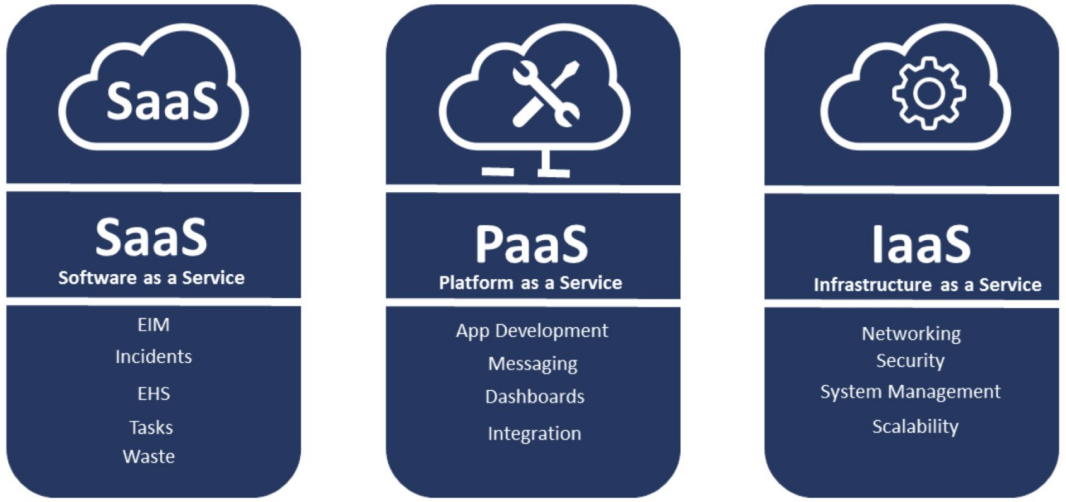
History of Cloud Computing

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



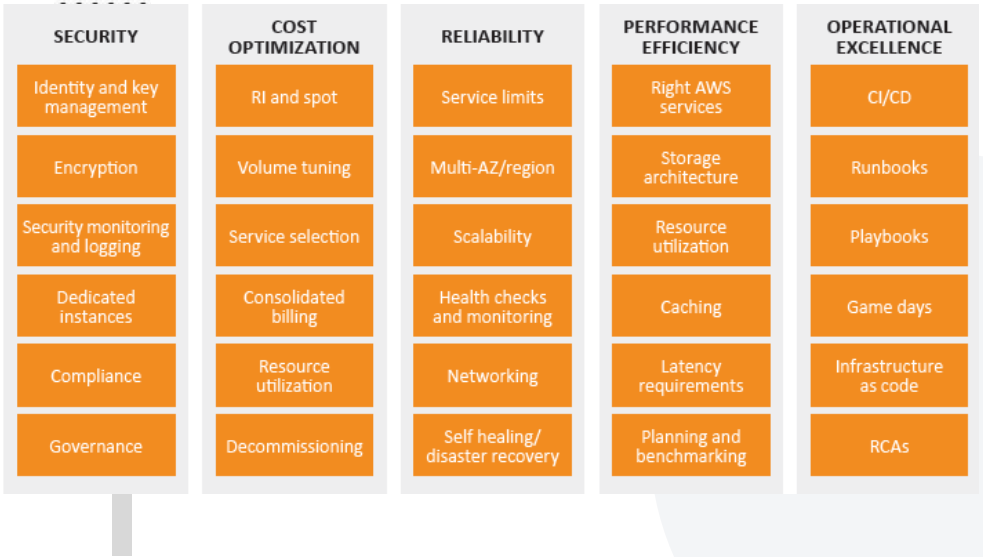
Three Main Types

- *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



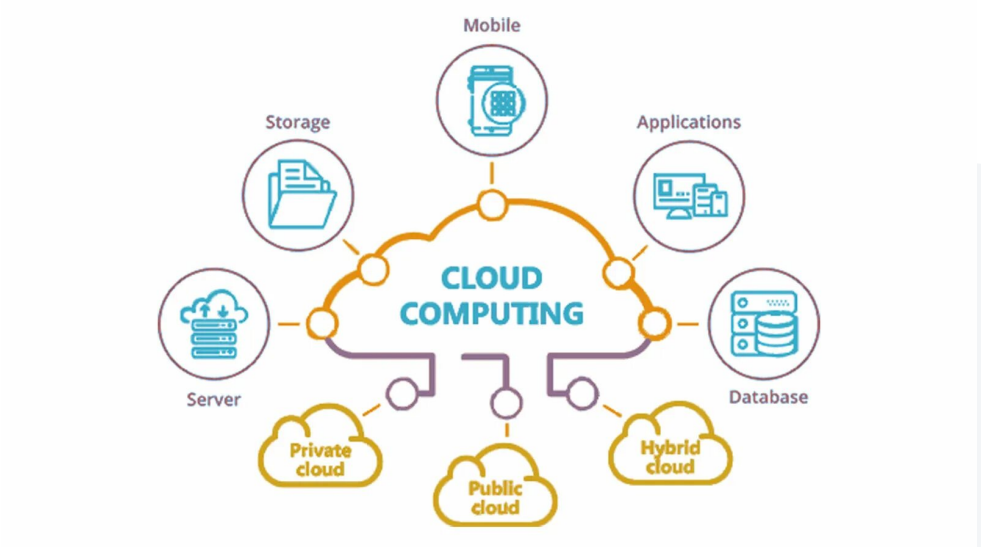
Why Cloud Computing?

- 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!