



# INTRODUCTION TO CLOUD COMPUTING

# ROADMAP

- **Introduction to Cloud Computing**
- **Why Cloud Computing?**
- **Benefits of Cloud Computing**

# The NIST Definition of Cloud Computing

Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model is composed of five essential characteristics, three service models, and four deployment models.

# Essential Characteristics

**On-demand self-service:** Consumer can provision computing resources

**Broad network access:** Capabilities are available over the network

**Resource pooling:** the provider's computing resources are pooled to serve multiple consumers using a multi-tenant model

**Rapid elasticity:** Capabilities can be elastically provisioned and released

**Measured service:** Cloud systems automatically control and optimize resource usage

# WHY CLOUD COMPUTING ?

Many businesses large and small use cloud computing today either directly (e.g. Google or Amazon) or indirectly (e.g. Twitter) instead of traditional on-site alternatives.

- Reduction of costs
- Universal access
- Up to date software
- Choice of applications.
- Potential to be greener and more economical
- Flexibility

# BENEFITS OF CLOUD COMPUTING

- **Faster Deployments** : because there's no wait for local computing resources
- **Usage-based pricing** : letting you pay only for what you use
- **Less financial risk**: with lower up-front investment in hardware and software
- **Reduced need for on-premises resources**: such as servers and IT staff
- **Easier upgrades**: with no on-premises software to update



**Thank you**

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