# Cloud Computing & Data Centers

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# Technology Overview

## Cloud Computing

- Computing services delivered over the internet or "cloud"
- On demand
- Rapid elasticity

## Data Center

- Facility of networked computers
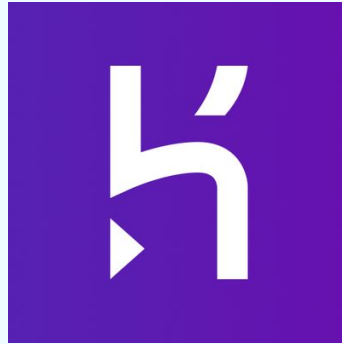- Storage
- Infrastructure

# Applications

## IaaS



- Computing resources
- Virtual machines
- Networking infrastructure

## PaaS



- Application development
- Databases
- Middleware

## SaaS



- Software applications
- Email
- Office suites
- CRM

# Applications cont.

## Data Storage & Backup



- Scalable
- Cost effective
- Reduced storage infrastructure

## Big Data Analytics



- Cloud facilitates processing and analysis
- Cloud provides computing power and storage

## Internet of Things



- Wearables
- Smart Home
- Autonomous Vehicles

# Market Opportunities

## 01
### Digital Transformation

- Modernizing IT infrastructure
- Adopting cloud technologies

## 02
### Enterprise Cloud

- Increased efficiency
- Better security
- Cost savings

## 03
### Edge Computing

- Reduced latency
- Internet of Things
- Autonomous systems

## 04
### AI & Machine Learning

- Personalized Customer Experience
- Resource Management
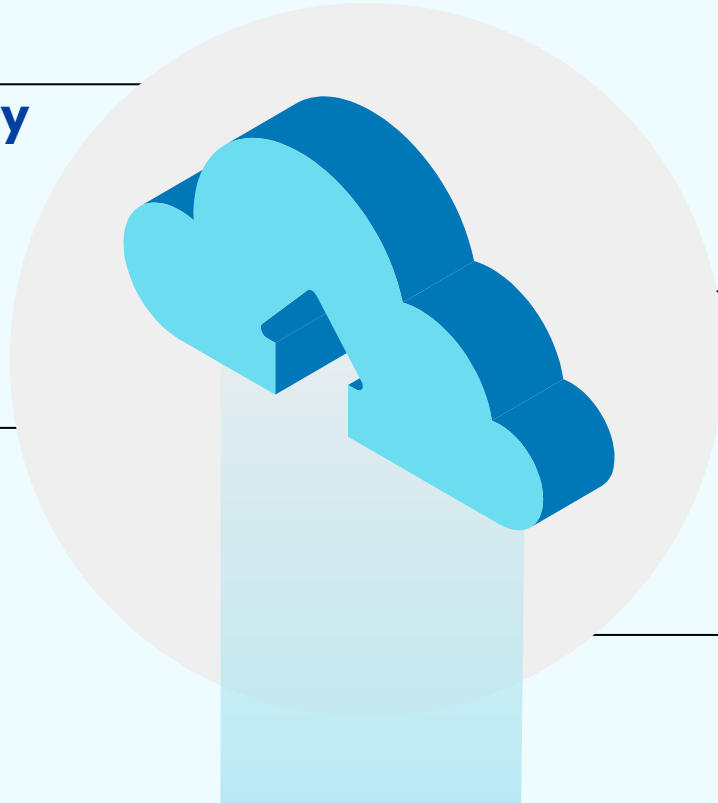- Provide Security Solution

# Strengths & Benefits

## Reliability & Recovery

- Data backups
- Recovery solutions
- Redundancies

## Cost Efficiency
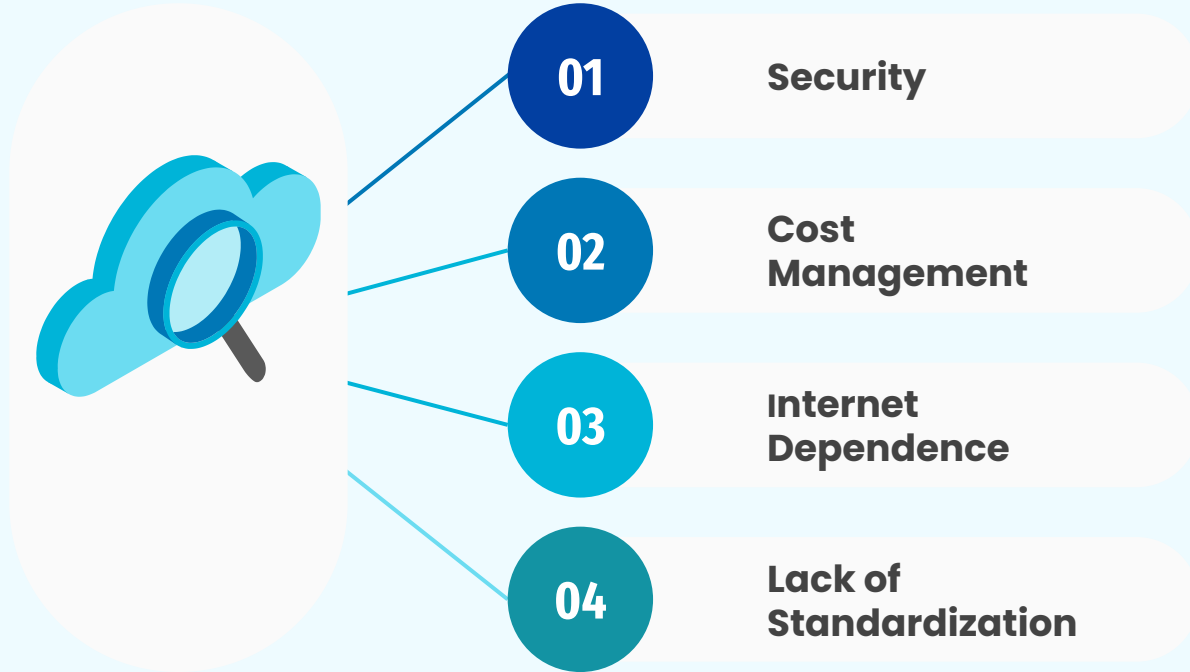
- Pay as you go
- Reduced hardware
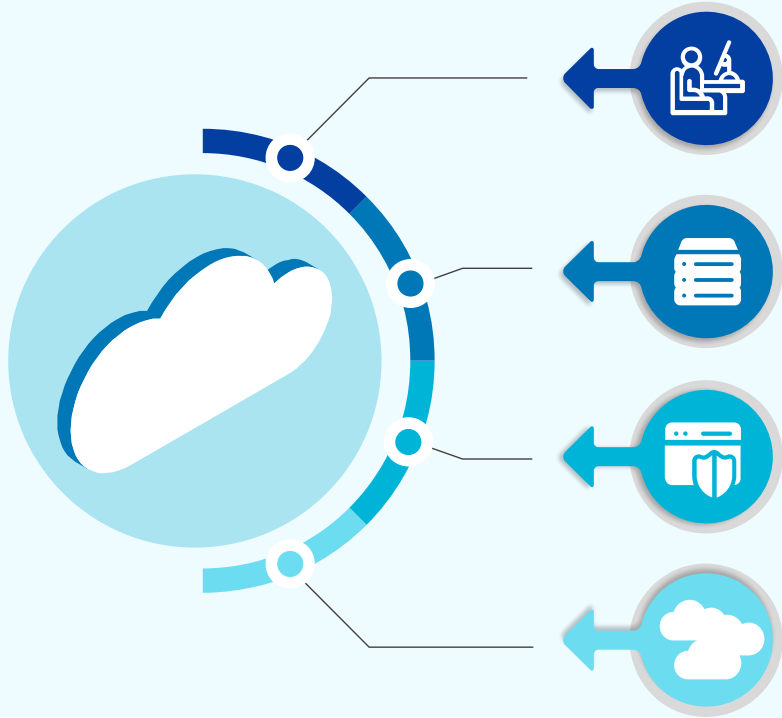
## Accessibility

- Remote access
- Collaboration

## Scalability

- Adjust to demand
- Efficient resource use

# Problems & Challenges

**01** Security

**02** Cost Management

**03** Internet Dependence

**04** Lack of Standardization

# Future Trends

**AI:** With artificial intelligence growing rapidly, more data is being processed, resulting in more storage being needed.

**Enhanced Data Storage:** Data storage capacities are constantly growing, making it easier/cheaper for businesses to store their data.

**Security:** Cloud providers are improving security measures with stricter controls on who has access to data and how it can be used.
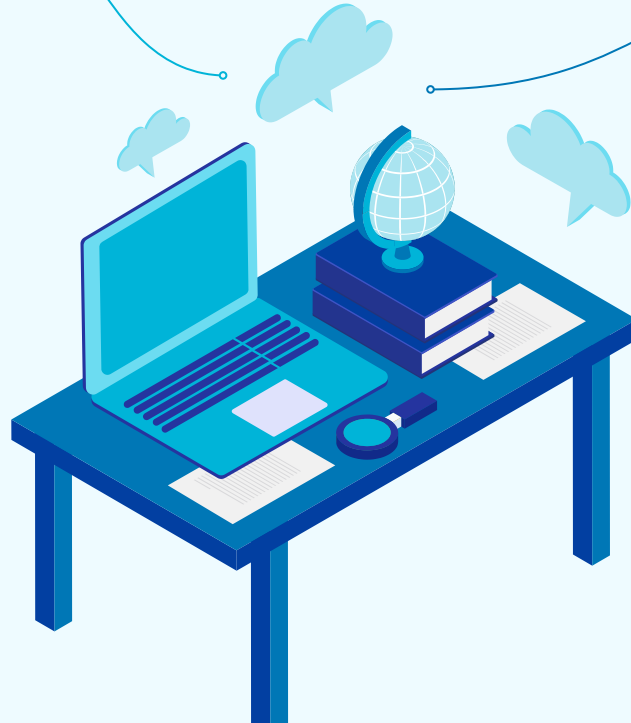
**Multi-cloud/Hybrid:** Businesses are increasingly using multiple public/private clouds, taking advantage of the best features in each provider.

# Conclusion

## The Future

- Challenges will contribute to the immediate enhancement of cloud technologies
- Lay the foundation for sophisticated cloud infrastructures
- This will shape the trajectory for years to come.

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# Q&A

- Why would you think some are afraid to use Cloud?

- To you, what makes Cloud more attractive than a in-house computing?