

# Cloud Computing Service Providers and Business Models

**Dr. Rajendra Babu H**



# Agenda

- Cloud Computing
- Cloud Computing business models
- Cloud Computing Services
  - Categories
  - Providers
- Top Cloud service providers
- Evaluation for cloud implementation
- Conclusion

# Cloud Computing

- A paradigm shift is taking place in the IT industry.
- Companies who want to support their business processes with IT, need
  - Hardware
  - operating systems and
  - other components and
  - decide on a software platform on a pure leasing model where they merely pay for what they use with
    - assured security.
- IT will be delivered as a service in future.
  - On the basis of “pay-as-you-go” models.

# Cloud Computing Service Categories

## Software as a Service (SaaS)

- Makes the users connect to the applications through the Internet on a subscription basis.
  - Google Applications
  - Salesforce

# Cloud Computing Service Categories

## Infrastructure as a Service (IaaS)

- Provides the infrastructure (like Servers & so on)
- Operating Systems
- Virtual Machines
- Networks, and
- Storage on a rental basis.
  - Eg: Amazon Web Service
  - Microsoft Azure

# Cloud Computing Service Categories

## Infrastructure as a Service (IaaS)

- Provides the infrastructure (like Servers & so on)
- Operating Systems
- Virtual Machines
- Networks, and
- Storage on a rental basis.
  - Eg: Amazon Web Service
  - Microsoft Azure

# Cloud Computing Service Categories

## Platform as a Service (PaaS)

- Used in developing software.
- Testing and maintaining of software.
- PaaS is same as IaaS but also provides the additional tools like DBMS, BI services etc.
  - Apprenda
  - Red Hat OpenShift



# Cloud Computing Service Providers



# Top Cloud Computing Companies



**KAMATERA**

*99.95% Uptime Guaranteed*  
*Low cost*



Gain value for  
businesses and  
industry



*uses compression and  
encryption techniques*



*The safest and protected platform*



Google Cloud Platform  
Pay-As-You-Go

**Microsoft Azure**

**Support OS, DB's, Prog. languages & frameworks**

**vmware®**

Universal leader in virtualization  
& Cloud Infrastructure



**Adobe**

A complete solution for  
digital documentation



Offers CRM, ERP,  
customer service, sales,  
mob apps, and marketing



**open cloud technology for  
agile and flexible solutions**

# Top CC company Activities

- File sharing and File locking
- Automatic backup of files
- Notifications to users regarding updates and so on
- Cloud Backup - compression and encryption techniques
  - Provides file-level backups with low cost.
- Maximization of organization's profits by combining the services, technologies, guidance needed to operate and manage the staff.
- Provides low-maintenance and high-performance cloud infrastructure services
- Anywhere, anytime customer support
- Deliver agile and flexible technology solutions
- Offers free trial

# Cloud Computing Business Models

- Cloud Strategy and Architecture
- “Pay-as-you-go” models
- Transition from the PC age to utility computing

# Criteria for Choosing Cloud Platform

- Security
- Infrastructure
- Storage
- Applications
- Database
- Deployment and Management
- Support
- Integration with Existing Infrastructure (MGP)
- Pricing
- Ease of Use
- Service Level Agreement
- Performance Guarantee

# Criteria for Choosing Cloud Platform

## Security

- Recognized independent third-party attestations, reports and certifications
- Certification for data security
- Routine, comprehensive audits and risk assessment for customer data
- Control access to ones cloud resources at a granular level
- Integrate with your existing identity and access management systems
- Utilize multi-level authentication to access cloud resources

# Criteria for Choosing Cloud Platform

## Global Infrastructure

- Deploy applications near to the customer location
- Maintain and ensure data locality
- Faster downloads, and lower time-lag access for customers
- Ensure applications are always reachable even during site outages and with low latency

# Criteria for Choosing Cloud Platform

## Compute

- Compute, Memory and storage -optimized instances
- Pay as you go pricing
- Sell reserved capacity in the open market
- Achieve/negotiable further discounts when buying in bulk
- Create multiple private and public subnets
- Control traffic to and fro at a granular level
- Provide VPN connection to cloud resources
- Automatically scale up or down to meet customer demand
- Automatically balance variable request loads
- An operating system designed for the cloud
- Red Hat Enterprise Linux
- Obtain information about the health of your instances

# Criteria for Choosing Cloud Platform

## Storage

- Highly durable storage for all types of data
- Archival storage for infrequently accessed data
- Versioning and Multi-factor delete
- Encryption (converting data or information into code)
- Flexible Access Control Mechanisms
- Time-limited access to objects/items
- Audit logs
- Define policies to delete old data, or move to archival storage
- Cost Control
- Automatic back up of data in the cloud
- Corporate integrated file sharing
- Persistent storage, with provision for Input/Output



# Criteria for Choosing Cloud Platform

## Content delivery

- Deliver the website content to users around the world with low latency
- Deliver software or large files to end users
- Deliver streaming of pre-recorded media, progressive download for the end users
- User access control to the content

# Criteria for Choosing Cloud Platform

## Database

- Managed MySQL, Oracle and Microsoft SQL Server Database
- Provisioned I/O throughput (Output relative to input)
- Easy Scaling
- have your own licensing in place
- Ensured Security and Compliance
- High availability
- Petabyte-scale managed data warehouse service
- Fast query performance regardless of the size of the data set/input
- Use the familiar tools

# Criteria for Choosing Cloud Platform

## Application Services

- Managed search service
- Bulk email delivery
- Media transcoding (one digital encoding to another)
- Managed Application Streaming

# Criteria for Choosing Cloud Platform

## Deployment and Management

- Deploy infrastructure with templates
- Container-based (bulk) deployment
- Application lifecycle management
  - Built-in monitoring tools with alerts
- Consistent management tools

# Criteria for Choosing Cloud Platform

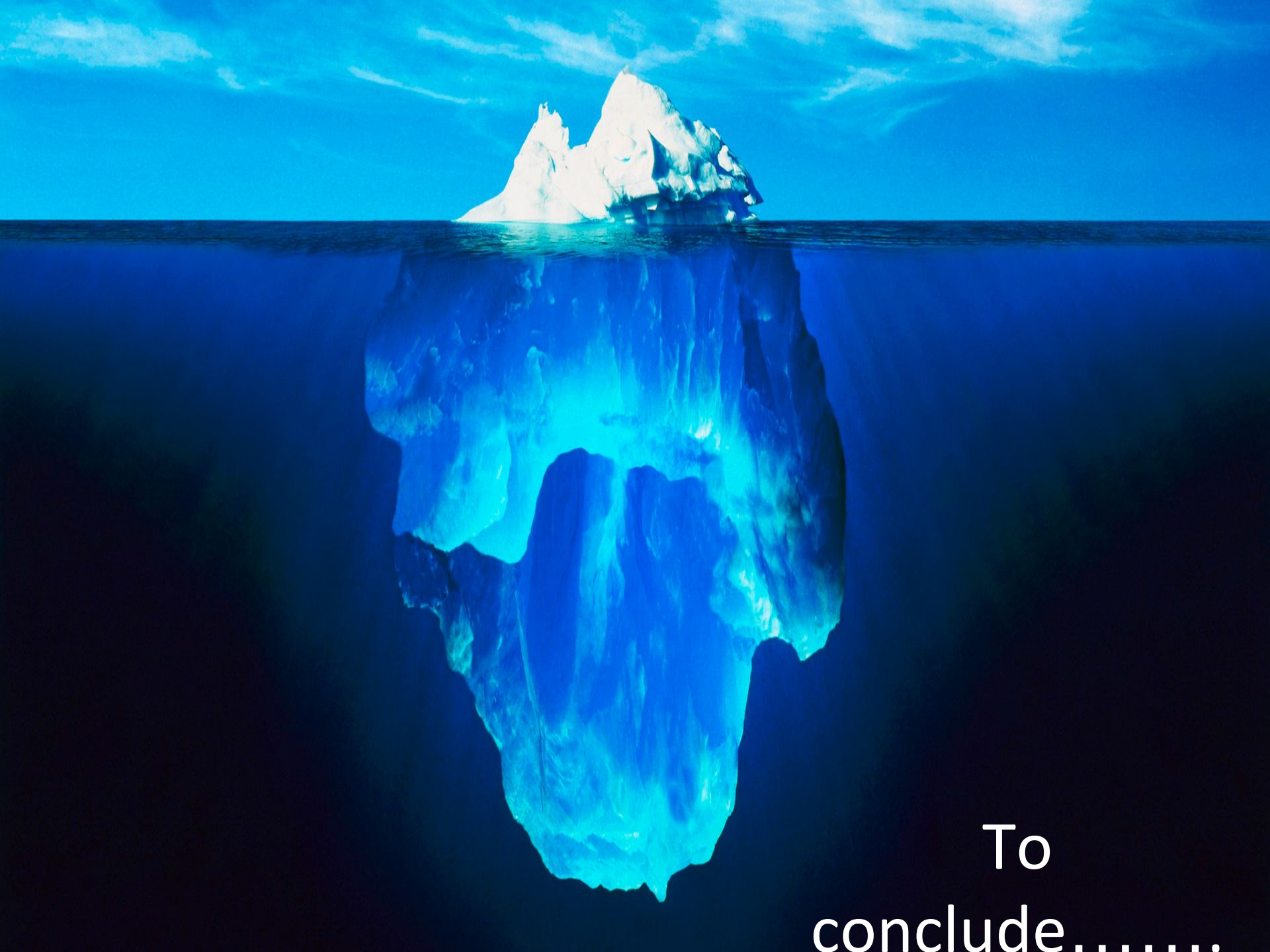
## Support

- Round the clock support options
- Direct, one to one technical support and rapid case review
- Regular, actionable guidance on how to optimize cloud infrastructure and reduce costs
- Direct channels of communication and support
- Integration with Existing Infrastructure

# Criteria for Choosing Cloud Platform

## Big Data

- Managed heavy workloads and dynamic clusters
- Analytics in client's choice of language
- Durable storage for large data volumes
- Query capability for complete data
- Integration across one's data formats
- High performance from solid state drives
- Easy integration across multiple big data services
- Low cost, high performance data warehousing
- Low latency, high bandwidth networking
- Real-time processing of streaming data



To  
conclude.....

# Thanks

**Any clarifications please**

[hrajendra.babu@gmail.com](mailto:hrajendra.babu@gmail.com)