Oracle Cloud

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What is Cloud???

Cloud computing is an Internet-based computing that provides shared computer processing resources; for instance, computer networks, servers, storage, applications, services and data using a network of remote servers hosted on the Internet, rather than a local server or a personal computer.
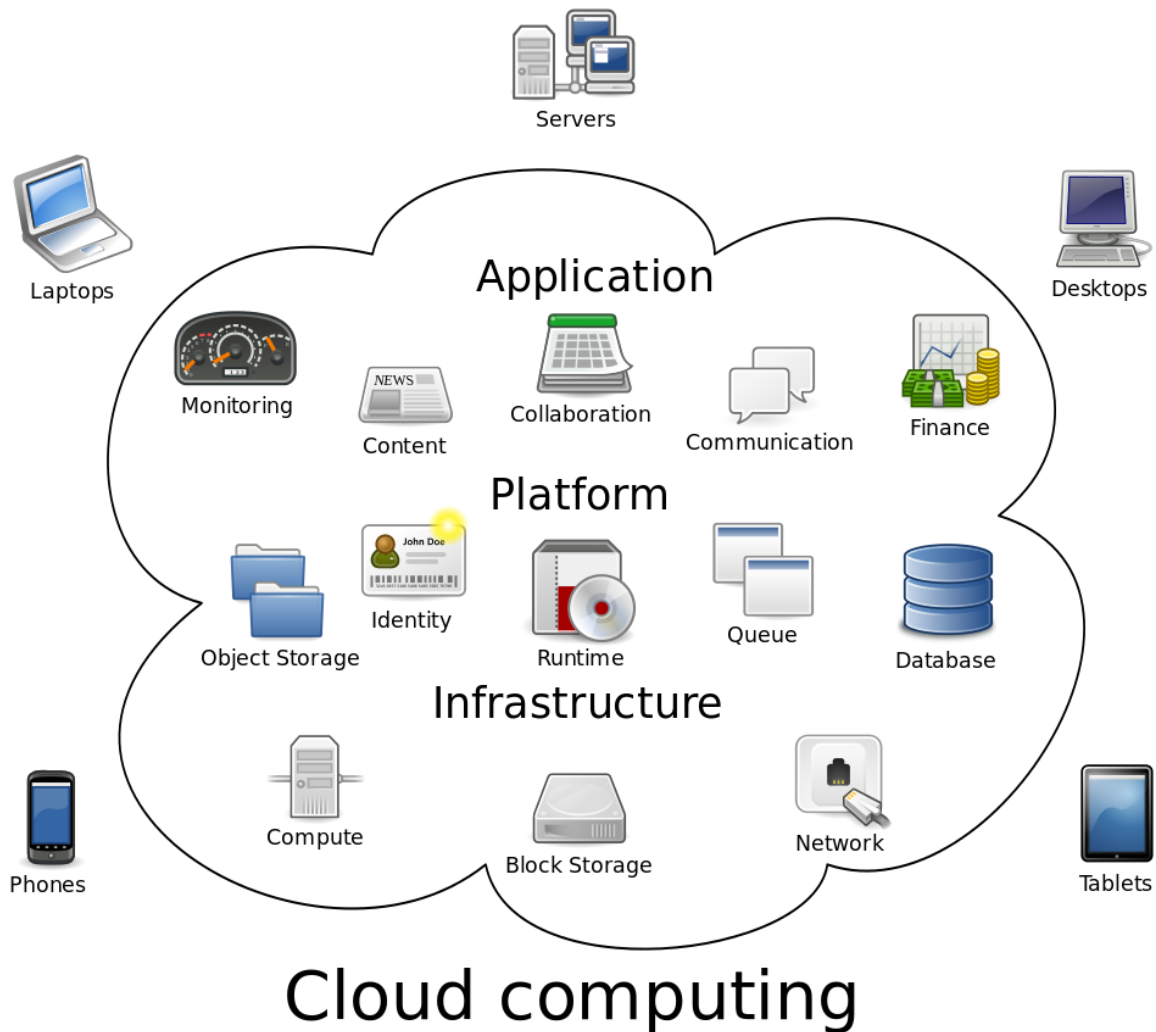

What does Cloud Computing offer?

Cloud being network of multiple servers, ensures that data or applications always stay accessible to one even in case of data disasters. Data/applications hosted on the cloud are replicated to multiple servers in order to deal with catastrophic circumstances like unplanned change of data, illegal use of data resources, data loss due to high latency and attack of malwares. It also provides zero maintenance headache as entire cloud architecture is maintained and managed by the experts at service provider's end. This in turn, enables businesses to focus on their contingencies rather than getting engrossed into intricate

management tasks. Moreover, cloud helps in blurring the geographical boundaries and platform dependency by allowing users to access their data/websites from any part of the world using any Internet compatible devices. The most significant feature is demand on provisioning, unlike other technological solutions, cloud enables businesses to quickly add/delete IT resources as per their requirements.

Oracle Cloud Services

Oracle Cloud offers self-service business solution applications providing tools to extend and create new services rapidly on an integrated development and deployment platform. By increasing business agility, lowering cost and reducing IT complexity, it is transforming business and helps organizations drive innovation. However, oracle is now providing a three-tier service facility that includes SaaS (Software as a service), PaaS (Platform as a Service) and IaaS (Infrastructure as a Service) which is getting popular.
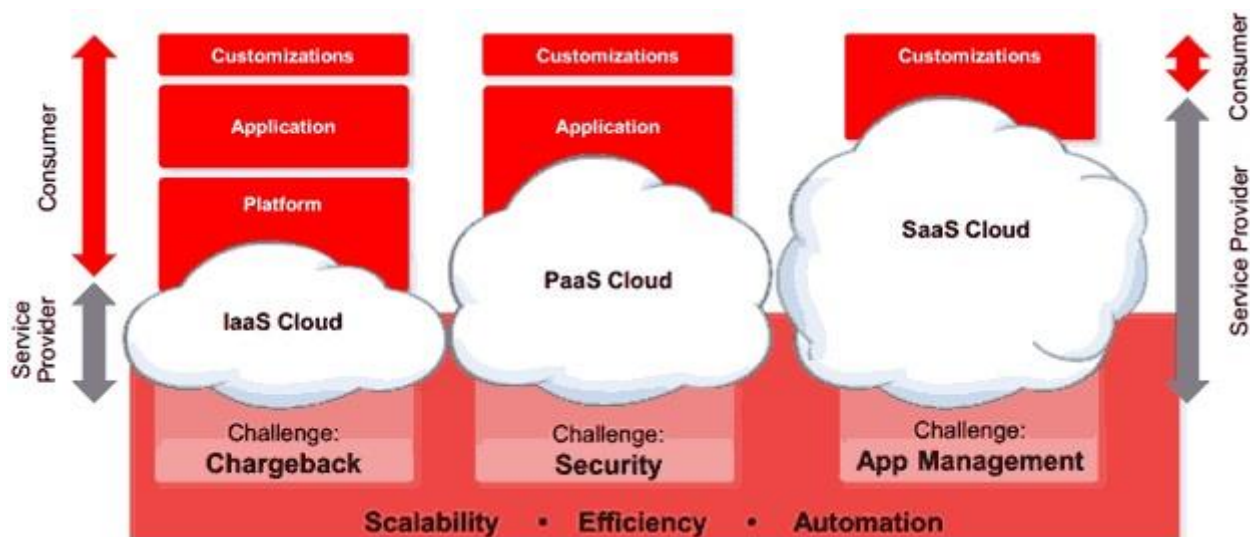
# SAAS (Software as a Service)

SaaS applications in Oracle Cloud are integrated with social, mobile, and analytic capabilities to deliver the experiences customers expect and the performance which is required by the market. SaaS platform provides following features to the clients:

- ✓ CX (Customer Experience)
- ✓ HCM (Human Capital Management)
- ✓ ERP (Enterprise Resource Planning)
- ✓ SPM (Supply Chain Management)
- ✓ EPM (Enterprise Performance Management)
- ✓ IoT (Internet of Things)
- ✓ Social Relationship Management
- ✓ SaaS Analytics (Business solution, Business Intelligence)

PaaS (Platform as a Service)

Oracle Cloud Platform as a Service (PaaS) helps enterprise IT and independent software vendor (ISV) developers rapidly build and deploy rich applications - or extend Oracle Cloud SaaS apps. PaaS platform provides following features to the clients:

- ➢ Data Management
- ➢ Application Development
- ➢ Integration
- ➢ Content and Experience
- ➢ Business Analytics
- ➢ Security
- ➢ Developer Portal
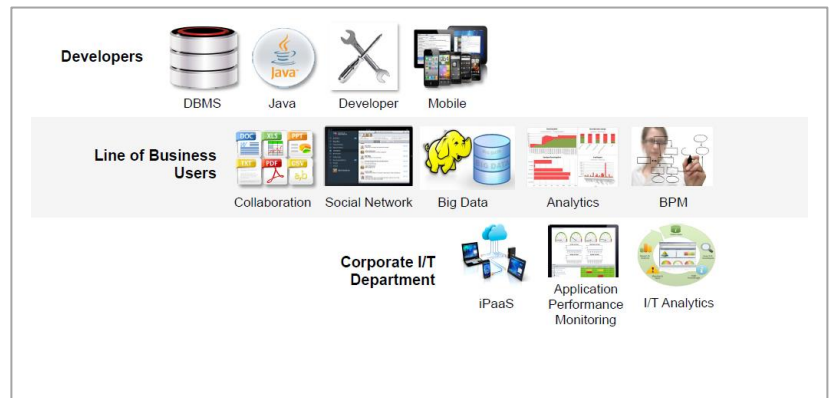
IaaS (Infrastructure as a Service)

A comprehensive set of integrated, subscription-based infrastructure services that enable businesses to run any workload in an enterprise-grade cloud managed, hosted, and supported by Oracle. IaaS platform provides following features to the clients:
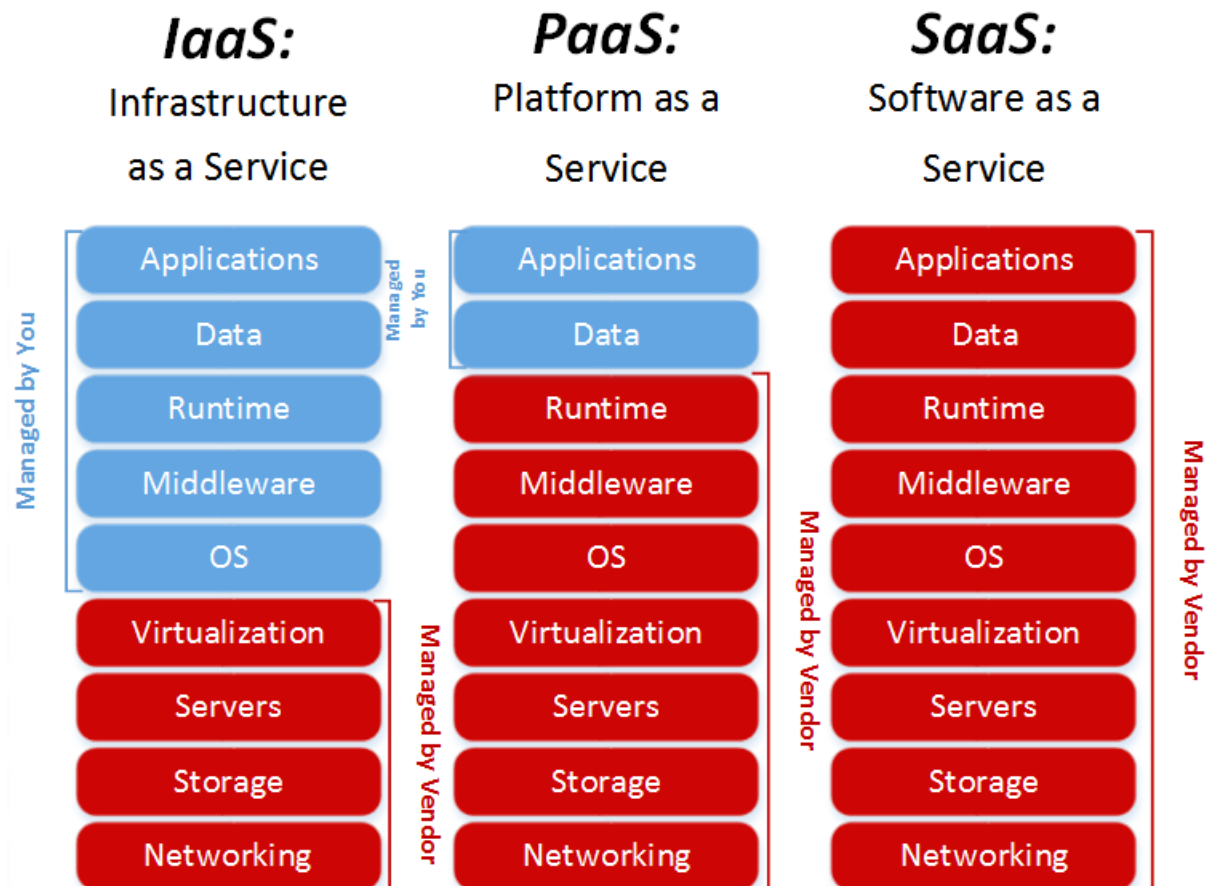
- ➢ Compute
- ➢ Storage
- ➢ Network
- ➢ Container
- ➢ Ravello
- ➢ Cloud Machine
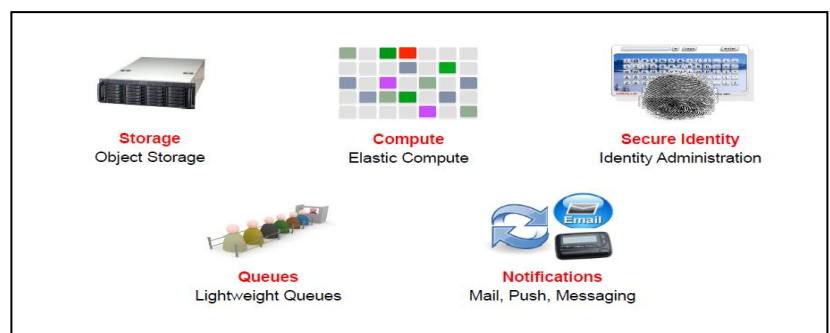
Cloud Service Model

Software as a service (SaaS) is a software distribution model where all the applications and resources are available to the customers over the internet hosted by a third-party provider. Example: Google Apps, Salesforce, Workday, Concur, Citrix GoToMeeting, Cisco WebEx. Platform as a service (PaaS) offers the opportunity for the customers to develop, run, and manage applications without the complexity of building and maintaining the application environment like database, programming language, web service or storage in their local PC. Example: AWS Elastic Beanstalk, Windows Azure, Heroku, Force.com, Google App Engine, Apache Stratos. Infrastructure as a Service (IaaS) provides virtualized computing resources,

such as computing capability, storage, physical security of data Centre location over the Internet. Example: AWS, Apache Hadoop, Microsoft Azure.

IaaS:
Infrastructure as a Service

Managed by You	
Applications	
Data	
Runtime	
Middleware	
OS	
Virtualization	Managed by Vendor
Servers	
Storage	
Networking	

PaaS:
Platform as a Service

	Managed by You
Applications	
Data	
Runtime	Managed by Vendor
Middleware	
OS	
Virtualization	
Servers	
Storage	
Networking	

SaaS:
Software as a Service

	Managed by Vendor
Applications	
Data	
Runtime	
Middleware	
OS	
Virtualization	
Servers	
Storage	
Networking	

Cloud Deployment Models

Private Cloud — Exclusive
- CapEx & OpEx Model
- Higher Investment
- In-house Services
- Total Control and Security
- Multiple Business Units Sharing Resources

Hybrid Cloud
- CapEx & OpEx Model
- Balanced Costs, Overhead, Control, Security, Services, and Tenancy
- Cloudbursting
- B2B Integration

Soon!

Community Cloud
- CapEx & OpEx Model
- Shared Investment
- Communal Services
- Limited Control and Security
- Multiple Tenants Sharing Resources

Public Cloud — Shared
- OpEx Model
- Fast & Inexpensive to Start
- Outsourced Services
- Limited Control and Security
- Multiple Tenants Sharing Resources

Core OCCS

Cloud Paradigm

Oracle Cloud is a key enabler in adoption of cloud technology and has several common deployments use cases. These are commonly known as Public, Private, community and Hybrid models. On public cloud platform, common user can access all resources as it is open for all. Whereas in public cloud infrastructure all the resources and computing capability can be shared by its tenants and hosted and provided by cloud service provider, on the other hand, private cloud platform can only be utilized by a single organization and managed and controlled by in-house IT. Besides, public cloud is effective for lower upfront cost, outsourced management and operation expenditure while private cloud can optimize total lower cost and provides greater control over security, compliance and QoS. A community cloud is one whose infrastructure is provisioned for the exclusive use by a specific community of consumers from organizations that have shared concerns. For example, mission, security requirements, policy, and compliance considerations. It may be owned, managed, and operated by one or more of the organizations in the community, a third-party, or some combination of them, and it may exist on or off premises. A hybrid cloud is a composition of two or more distinct cloud infrastructures, such as private, community, or public, that remain unique entities, but are bound together by standardized or proprietary technology that enables data and application portability, such as cloud bursting for load balancing between clouds.
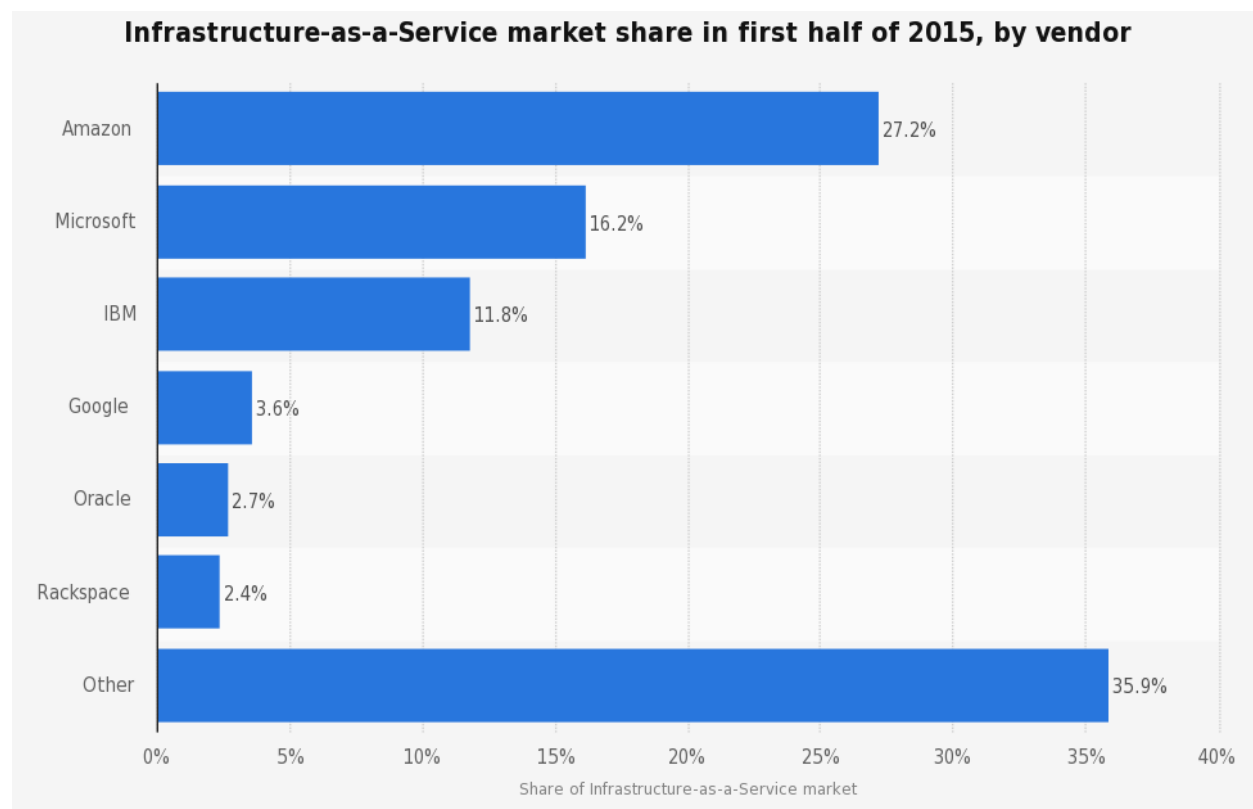
Oracle Cloud Architecture
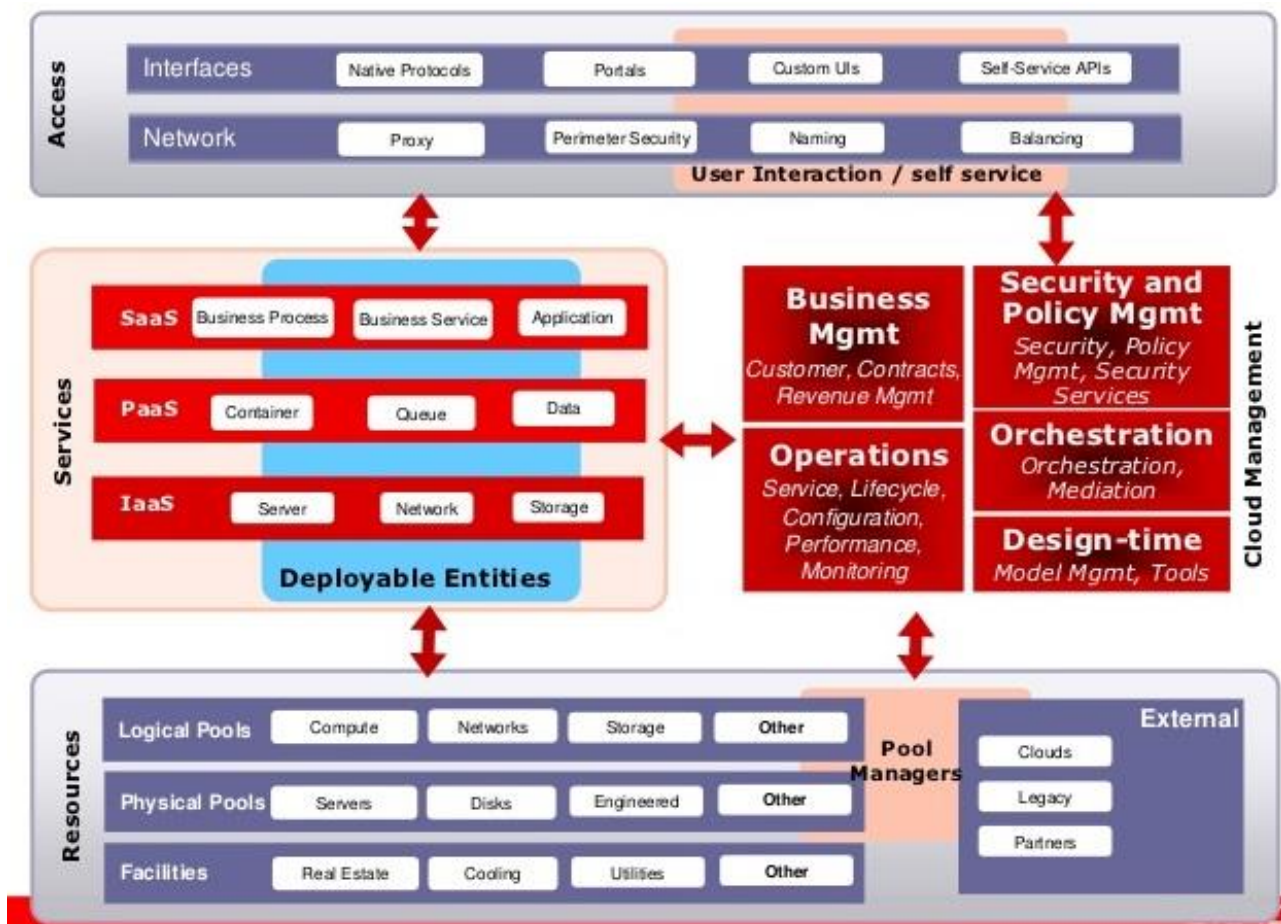
Oracle cloud embraces a modular architecture to provide a set of core services which facilitates scalability in a large resource pool and provides access availability to its clients from remote location reducing latency.
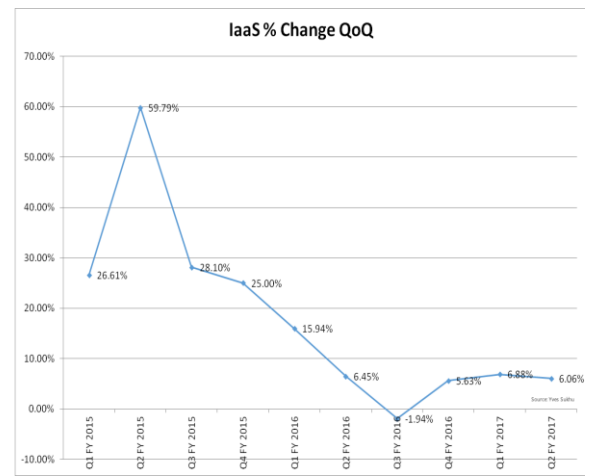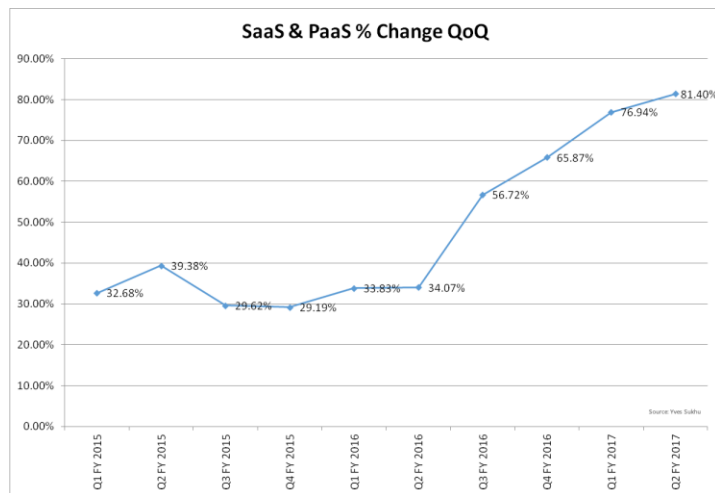
Reasons to choose Oracle Cloud

1. Oracle cloud can provide an end-to-end cloud solution to its customers, for instance SaaS applications for business users to gain economical expenditure or PaaS platform for developers to ensure the best value for the investment of those organizations with more speed and better economics to compete with other vendors.
2. Oracle cloud provides required environment and infrastructural design to run applications for Enterprise Resource Planning (ERP), Supply chain management (SCM), Product relationship management (PRM), Human capability management (HCM) so that the company can move their key business to the cloud for increasing operational efficiency and reduced capital investment.
3. It can provide comprehensive social relationship platform which can be intriguing for engaging partners, customers and employees.
4. Through the seamless integration of application and platform assets, Oracle Cloud allows sales and marketing teams to efficiently mine insights and engage with their communities.
5. Offers customers world-class security and architecture.

Comparison with other Cloud Service Providers

Infrastructure-as-a-Service market share in first half of 2015, by vendor

Vendor	Share
Amazon	27.2%
Microsoft	16.2%
IBM	11.8%
Google	3.6%
Oracle	2.7%
Rackspace	2.4%
Other	35.9%

Share of Infrastructure-as-a-Service market

Instead of being one of the most efficient cloud resources and application provider, oracle is not yet considered the top player in cloud marketplace. Oracle is a multinational company which is the biggest player of database technology and management along with software and application service providers. Oracle is beefing up its presence in the cloud in an effort to compete with the likes of Salesforce and Workday. Two of its cloud divisions, software-as-a-service and platform-as-a-service, led the way with robust growth of 66% year-over-year, which was better than the company had anticipated. Therefore, cloud infrastructure revenue rose just 5%. Now Oracle is expecting to become the first cloud company to reach $10 billion in SaaS and PaaS revenue. However, they are struggling with their IaaS services as they came late to realm of cloud and don't have sufficient data center that are distributed globally.

References for more information and implementation

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