
Cloud Computing

www.kaavo.com

Cloud Computing Why Should I Care?



By 2020, Forrester estimates*:

- ▶ Public cloud market size: USD 159.3B (USD 25.5B in 2011)
- ▶ Virtual private cloud market: USD 66.4B (USD 7.5B in 2011)
- ▶ Private cloud market at USD 15.9B (USD 7.8B in 2011)

* Source: InformationWeek News Network, April 26, 2011

What is Cloud Computing?

- Term Cloud Computing is used for hosted services delivered over Internet. Key characteristics that differentiates Cloud Computing from traditional hosting are:
 1. Sold **on Demand**
 2. Billing model is **Usage Based** (pay as you go)
 3. Services are **Elastic**, i.e. users can use as little or much of the service they want at any given time

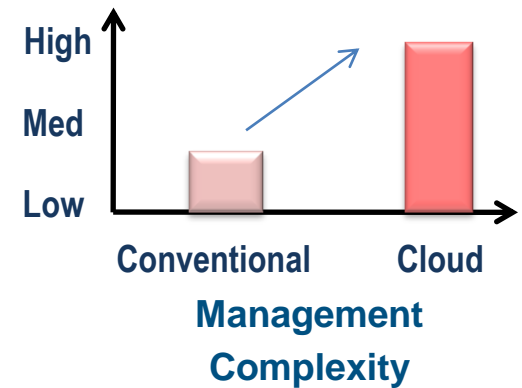
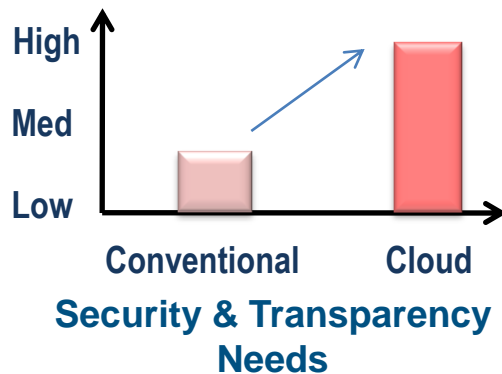
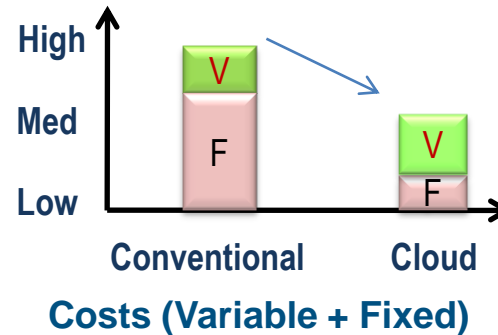
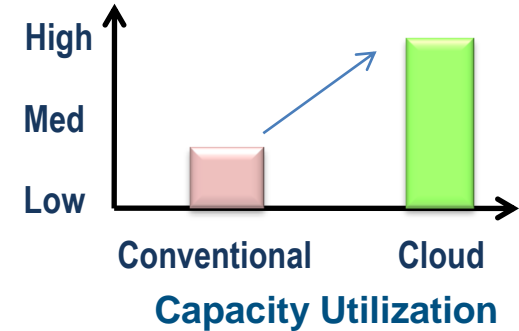
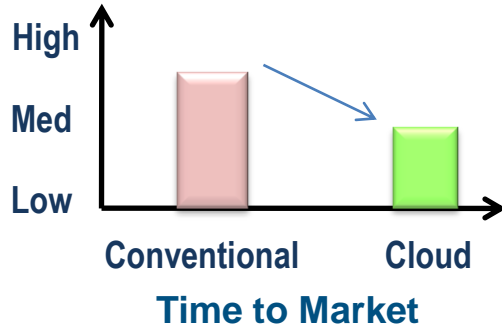
Categories of Cloud Computing

- Cloud Computing is broadly divided in three broad categories:
 1. **Software as a Service** (e.g. Gmail, Salesforce)
 2. **Platform as a Service** (e.g. Heroku, Google App Engine)
 3. **Infrastructure as a Service** (e.g. Amazon EC2, Rackspace)

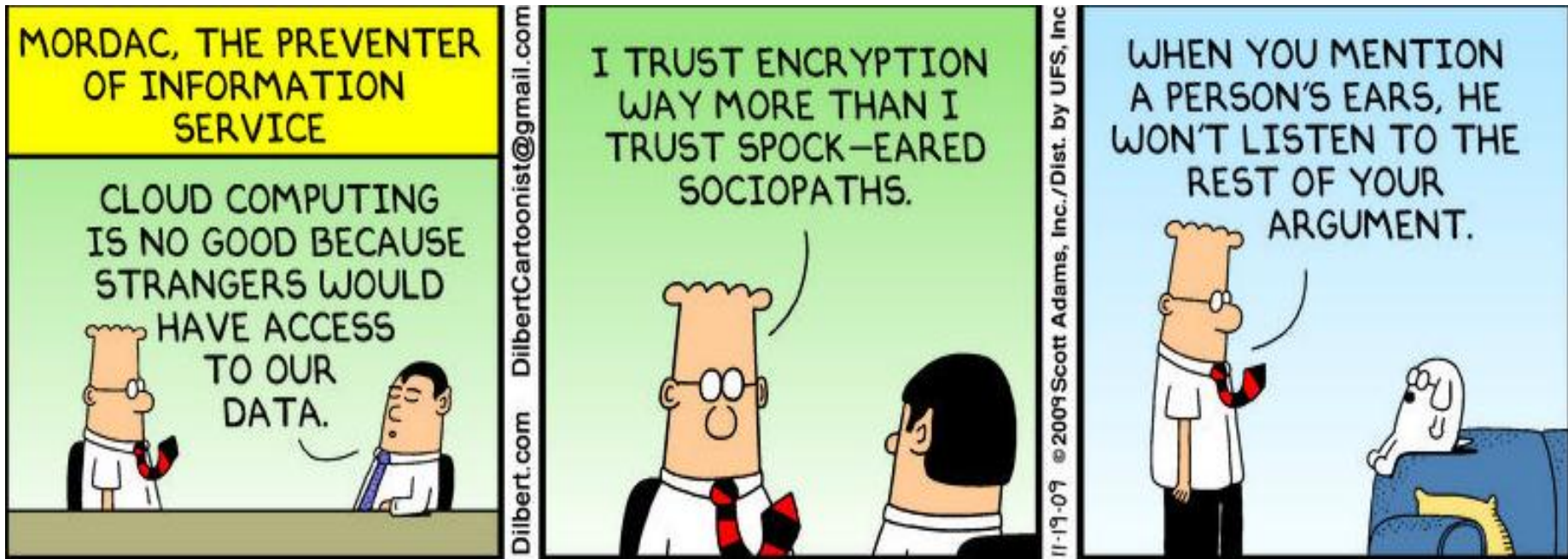
Public, Private, and Hybrid Clouds

- Infrastructure as a Service can be delivered as:
 - **Public Cloud**
 - Hosted by a Third Party accessible via public network
 - **Private Cloud**
 - Hosted/Managed by internal IT Teams on private network. Requires capital to implement, used when the business can't overcome concerns about using public cloud
 - **Hybrid Cloud**
 - Combination of Public and Private cloud deployment

Benefits and Challenges of Cloud Computing

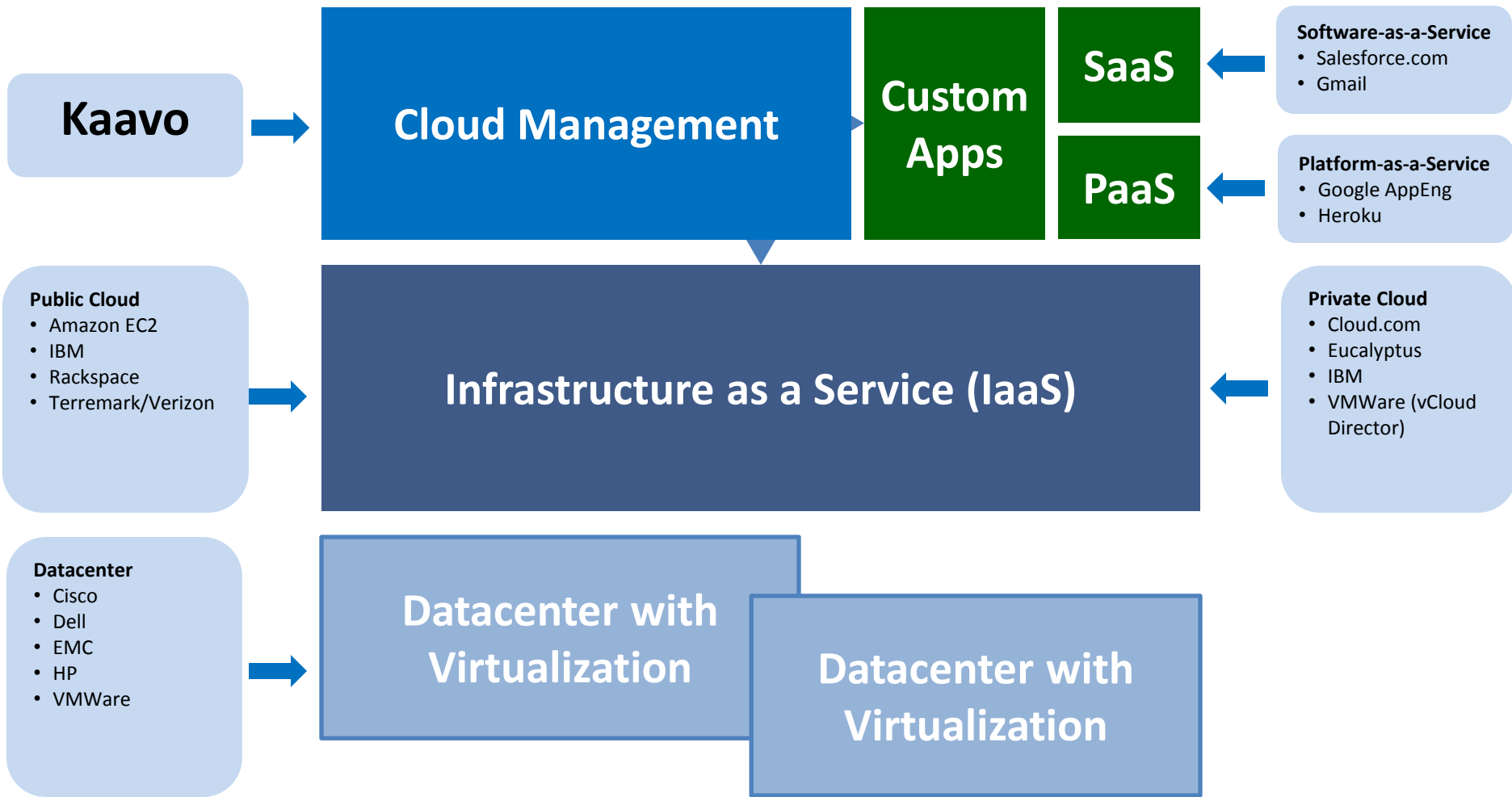


What about Data Security?



- Encrypted data in cloud is more secure than unencrypted data in private datacenters. ([Independent UC Berkley Study](#))

Cloud Computing Ecosystem



Cloud Adoption Requires Commitment



How to pick the Right Cloud Service?

- Software as a Service
 - Non Differentiating Applications
- Platform as a Service
 - Value delivered from the hosted middleware is much greater than the concerns about vendor lock
- Infrastructure as a Service
 - Custom or proprietary applications

Implications of Cloud Computing

- Communication
 - Mobile Devices Connected to Cloud Services
- Technology infrastructure is no longer a differentiator
- Early adopters have significant cost and time to market advantage

Links for additional information

- [Cloud Computing National Institute of Standards and Technology definition](#)
- [Short Video on Benefits and Challenges of Cloud Computing](#)
- [How do I start and successfully execute my enterprise cloud computing initiative?](#)
- [Is data in the cloud safer than the data in the internal datacenters?](#)
- [SaaS vs. IaaS: Key trade-off has nothing to do with vendor lock](#)

THANK YOU