

# The Cloud Ecosystem

Its more than just services

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2<sup>nd</sup> IndicThreads.com Conference On  
Cloud Computing

3,4 JUNE 2011



PUNE, INDIA

# About Me

Co-Founder and CTO of Talentica Software

At Talentica, we help companies transform their ideas to successful products.

We specialize in building scalable products using cutting edge technologies

Clouds - Amazon, Rackspace and Microsoft Azure

Technology areas - NLP, Analytics , mobile

Databases - Vertica, Mongo DB, Hbase, Cassandra on Amazon

BI - Microsoft (SSAS), Mondrian, jaspersoft



Have you used a cloud before?

For

Developing Apps?

IT infrastructure?

Personal?



# Ist Indictthreads conference



5-10 participants



Around 3-5 participants



Windows Azure

< 5 participants



Gartner puts cloud computing as the top of the list growth areas to watch for in 2011



# Hosting.com

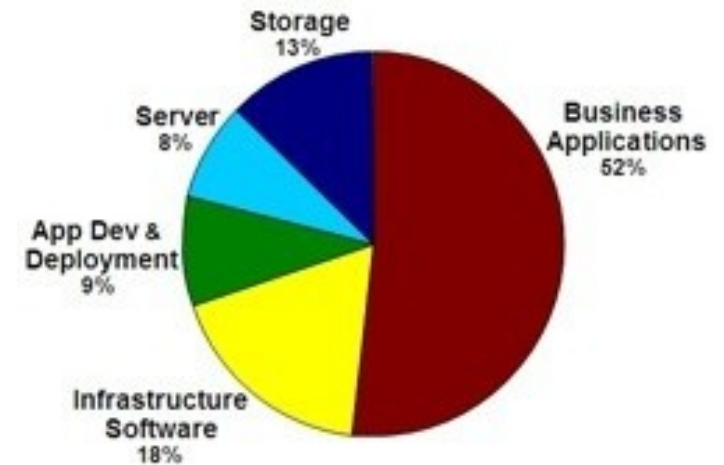
Cloud Computing is exploding

“...software vendors can no longer simply push customers to their products; rather, vendors’ products need to be where their customers want to be – in the cloud.”



# How big is big?

Global Market value -  
estimated to be \$241 billion  
by 2020 as compared to 40.4  
billion in 2010 -Forrester  
Research

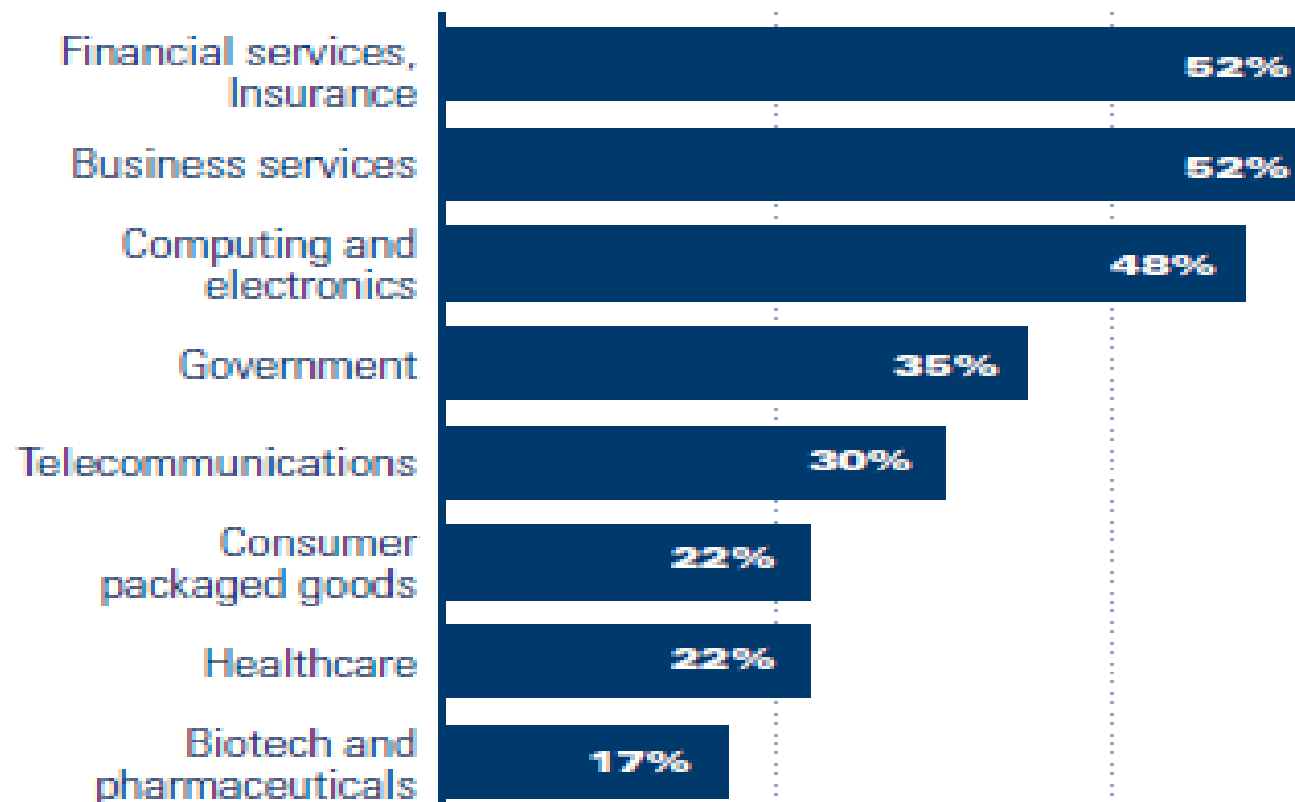


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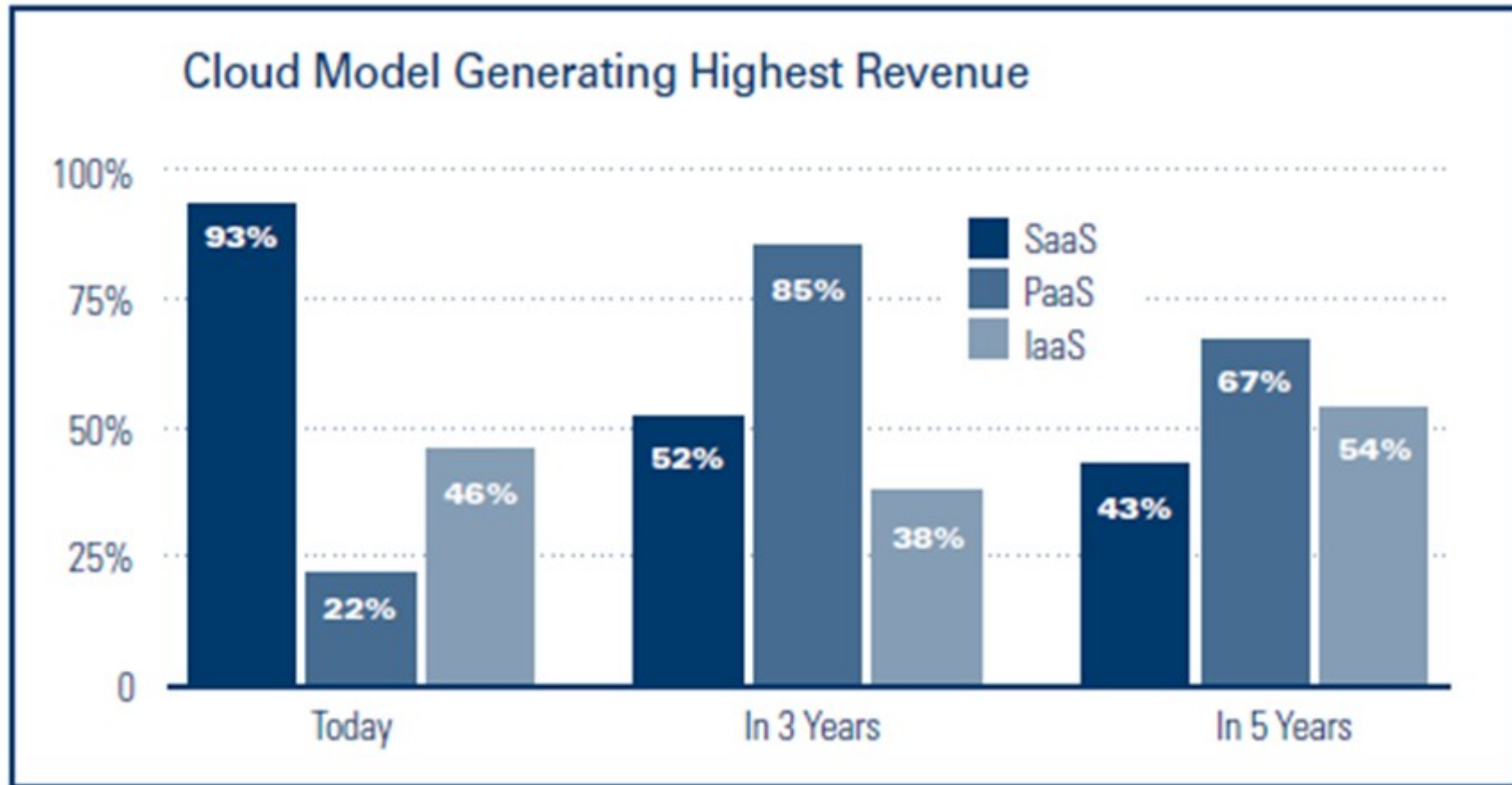
# Verticalization of Cloud

## Verticals Adopting Cloud Computing Most Quickly





# Cloud Models



# Main factors

- Cost – still the main factor
- Business continuity and Disaster Recovery ( new in 2011)

Automatic Failover, multiple data centers

- Easy migration – Quick Deploy

Amazon Elastic Beanstalk

- Flexibility
- Elasticity
- Technology / Tools support



# Flexibility

## Flexibility is the key

- Can use any language or programming model
- Use any service individually or together
  - Amazon email services*
  - Cloudera - Hadoop clusters*
- Pay as you use - Use as little or as much as you need and pay for that
  - On- demand instances, reserved instances, spot instances*
  - NY times wanted to convert about 11 million articles from TIFF to PDF ( 4TB ) data*
  - 100 EC2 instances running for 24 hours*
  - All data on S3 - Hadoop, iText, JetS3t*
- Use existing management tools or infrastructure
  - Private Clouds*

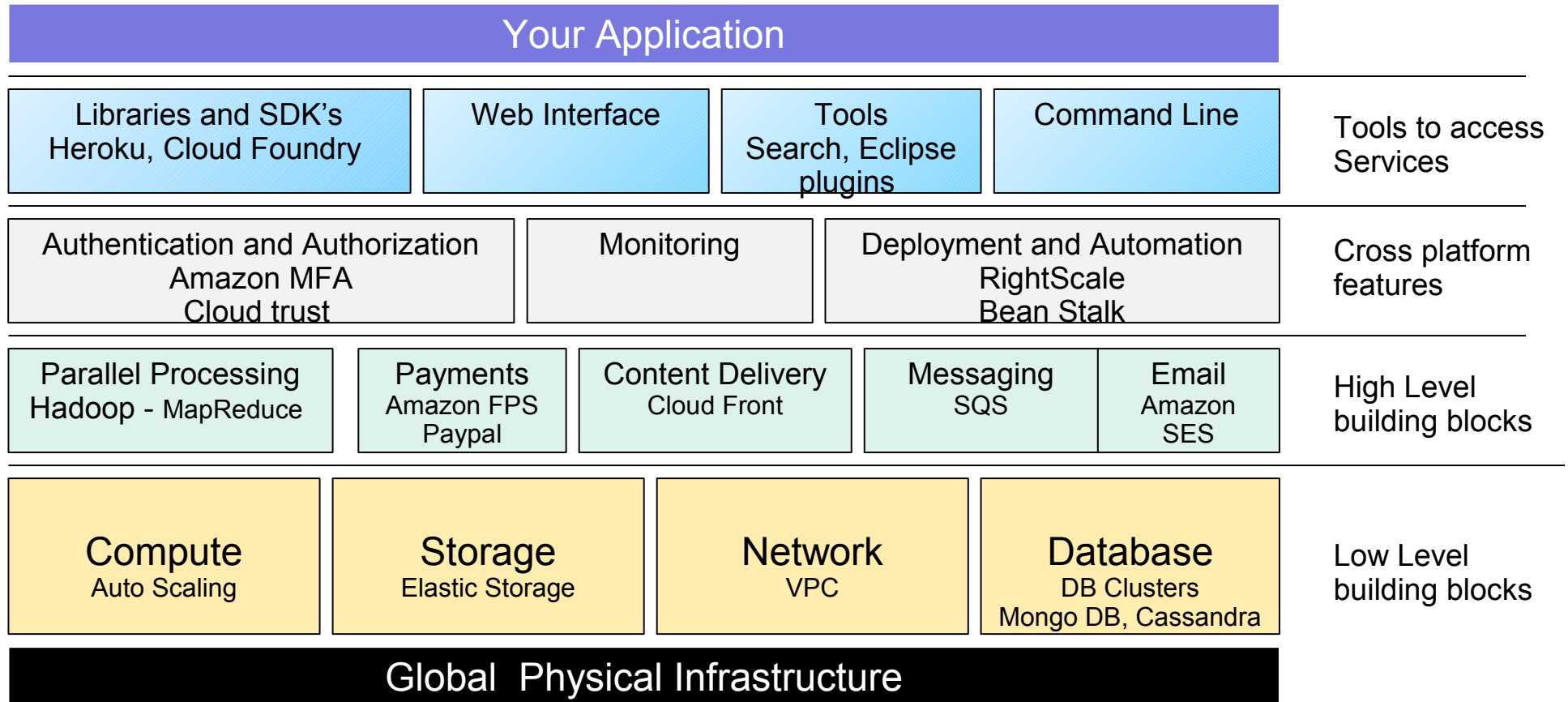


## Is the fundamental property of the cloud

- Turn off anytime – stop paying
- Let apps sleep during off peak hours  
*Shrinks itself when there are no users accessing it*
- Follow the sun – turn on servers at different locations based on the users
- Automation  
*Provision and attach a 1 TB storage in 2min from the back of an auto rickshaw*



# Technology and tools



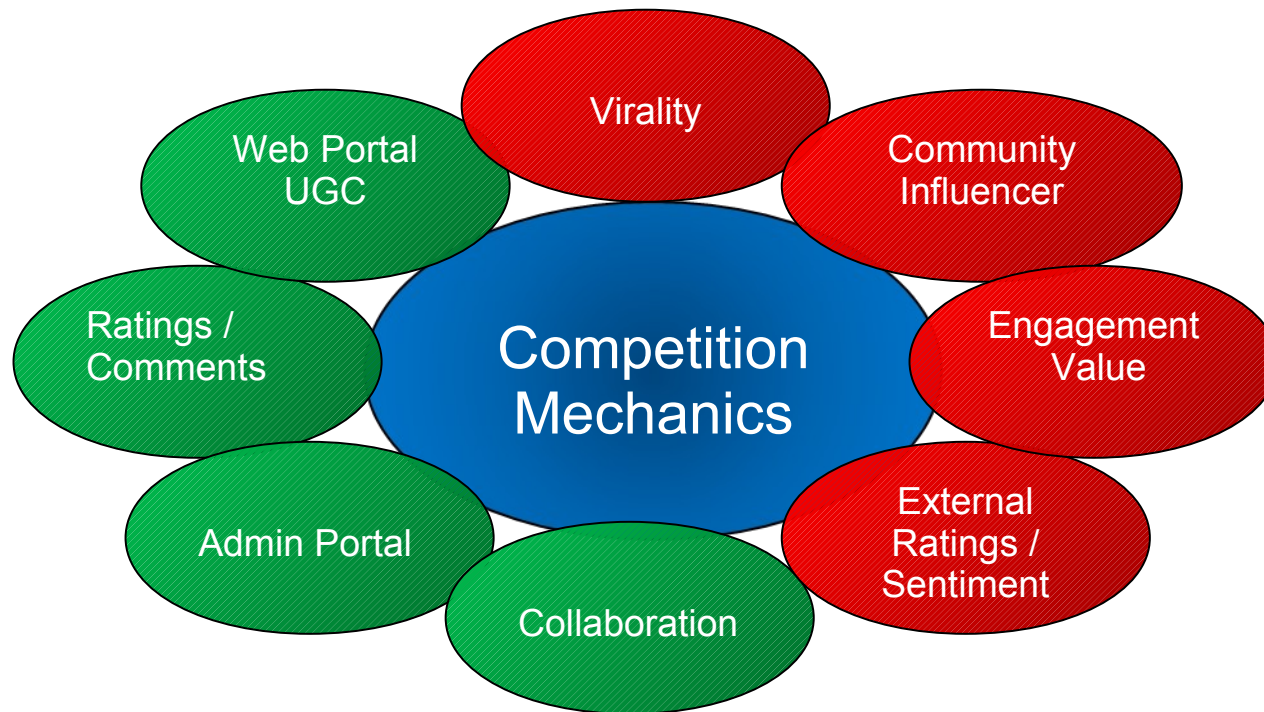
# Case Study

## Platform for managing competitions

1. Creating, running and tracking competitions
2. User generated content – videos, audio, blogs, etc.
3. Complex competition mechanics
4. Winner selection based on reviews / ratings internal and external to the system
5. Award points to each participant by the engagement value, sentiment on the web and community influence
6. Analytics to measure the performance of each of the competitions

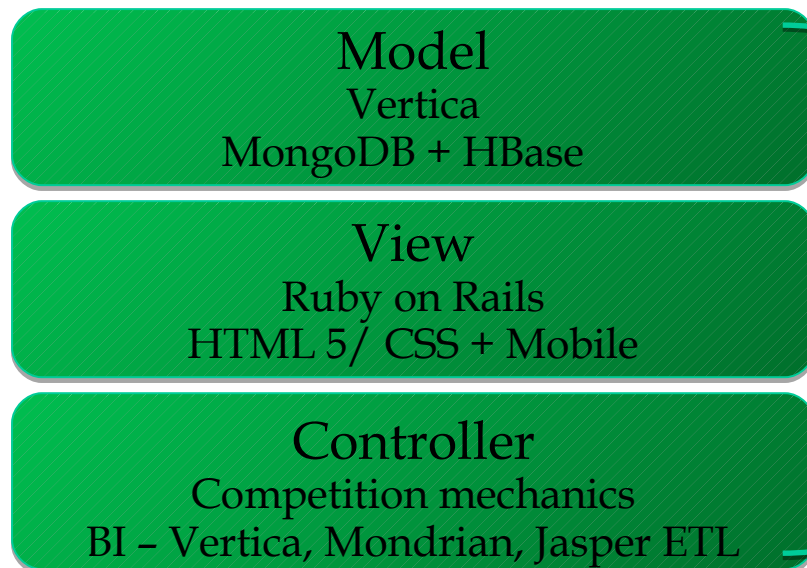


# What can you achieve?



# Typical stack

## Build a custom platform using MVC



Separate at Design Time

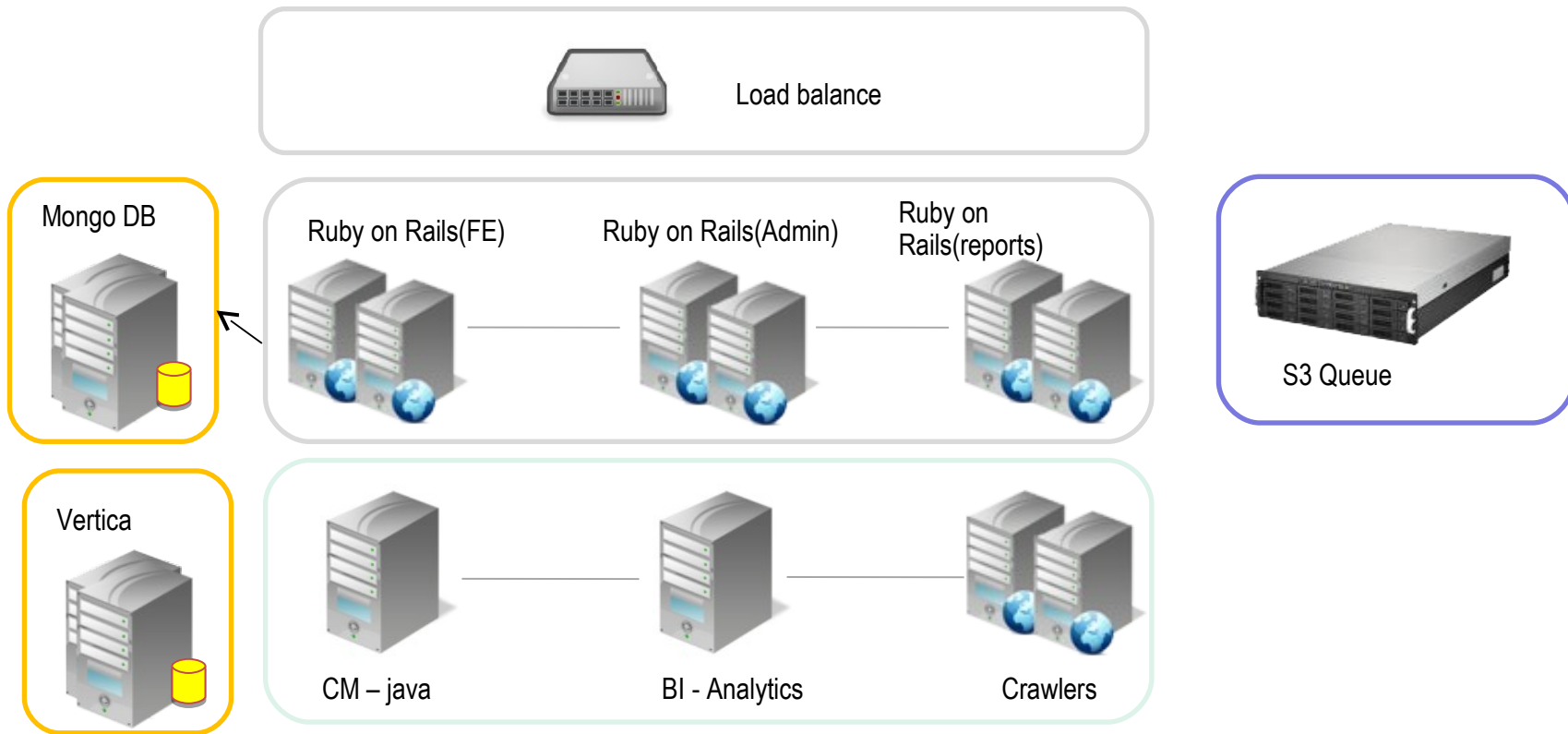
Separate at Deploy Time

Baked together at Run  
Time

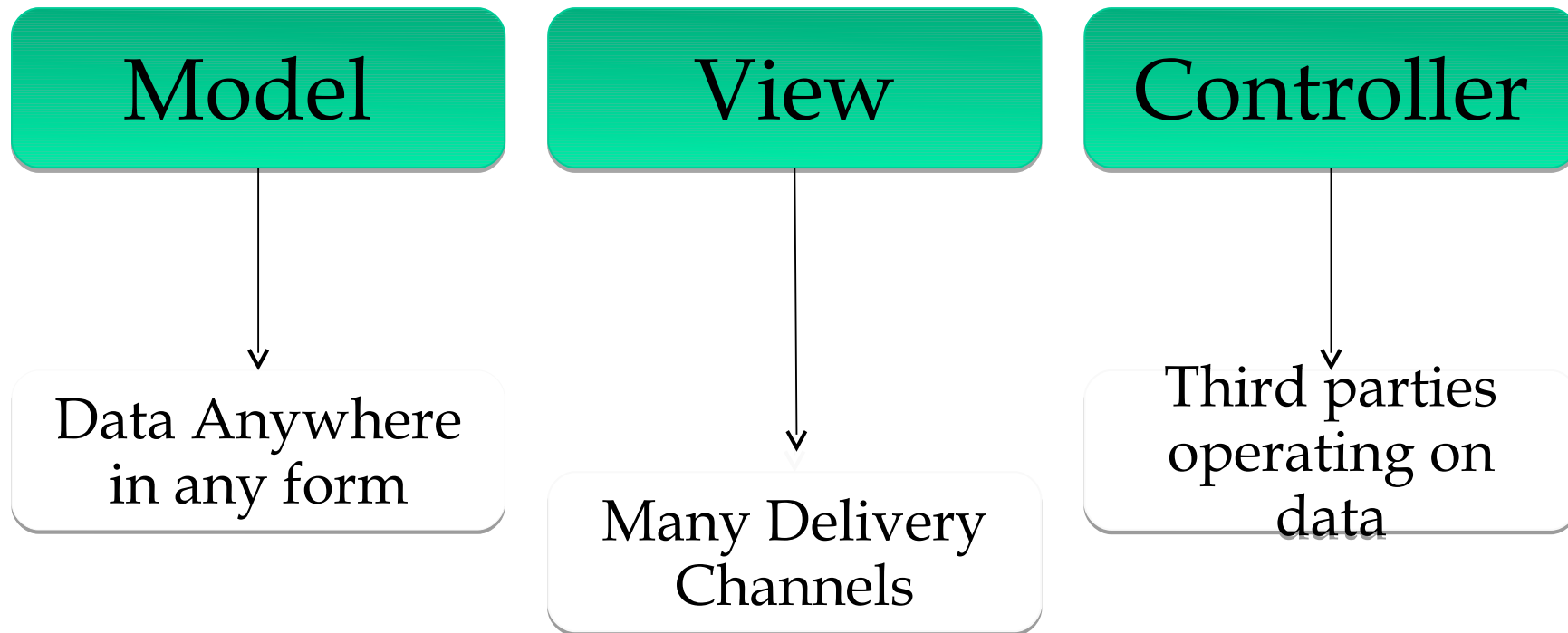




# Deployment



# MVC in the cloud



# Model = data

Data could be internal or external

## Internal

- User uploaded content
- Comments / Ratings by users
- Reviews by users

## External

- Shared on Youtube, Facebook, twitter
- Comments / Likes by friends
- Blog posts and comments



# View = Channels

Content could be viewed

- Web portal
- Iphone Application
- Android application
- Kiosk



# Controller = Business Logic

## The core business logic

- Competition mechanics
- Analytics Engagement, Sentiment, community influence
- User Maintenance and Reporting



# Internet as the Operating System of Services



# Cloud as a platform

Messaging

S3 Queue

Analytics

Vertica, Cloud Metrics

Conversations

contextvoice

RepuMetrix™  
Social media measurement and what is being said about business on the Web

Data Management Cloudera

amazon  
webservices™

RIGHT SCALE™

3tera™

Infrastructure

MOSSO™  
the hosting option



# What does it mean

- Focus on the core

Competition mechanics and Analytics measures

- Leverage the Cloud Ecosystem

- Companies are successful when they:

Focus on the core competency

Proactively manage the interfaces with other parts of the value chain





Today you can be wildly successful as a full stack (M+V+C)

Tomorrow you will need to make yourself indispensable in the value chain – otherwise someone may eat your lunch.



# Become a platform?

Go the API way



# Thank You

