By 2017, Web-Scale IT will be an architectural approach found operating in 50 percent of Global Enterprises

Gartner, 2014
What is Web-Scale IT?

Web-scale IT is a pattern of global class computing that delivers capabilities of large cloud services providers to the enterprise.

Architectures, processes, practices to not just Scale in terms of sheer Size but for Speed and Agility
1. Open Source

Open source OS
Open and freely available blueprints
2. Industrial designed infrastructures

Reduce cost & waste
Energy efficient
Software defined ‘everything’
3. Web-oriented Architectures

Flexible
Resilient and Self healing
Scale out vs Scale up
Web Scale Architecture Features

4. API based Management

Automation, Metrics, Analytics, Updates

Source: http://www.gartner.com/newsroom/id/2675916
Features

5. Velocity focused processes

DevOps
Agile
Continuous Delivery/Deployment

“Risk embracing culture”

Source: http://www.gartner.com/newsroom/id/2675916
Web Scale

Open Source
Resiliency
Services
DevOps
Sharing & Learning
Scale Out
New-Age Vendors

Proprietary
Complexity
GUIs
ITIL
Heroes
Scale up
Old School Vendors
Web Scale PaaS

Platform-as-a-Service that enables Web-Scale IT

- Container based and runs on light-weight OS
- Deploys anywhere
- Brings industry best practices to Enterprise IT
- Enables DevOps and Automation
OpenShift Enterprise

Routing Layer

Master
- API/Authentication
- Data Store
- Scheduler
- Management/Replication

Node
- Pod
- RHET
- Pod
- RHET
- Pod
- RHET

Persistant Storage

Service Layer
- Physical
- Virtual
- Private
- Public

Developer

SCM
(Git/Svn)

CI/CD

Automation Toolset

Operations
IT Scales Like a Factory with PaaS
Core Features of a Web Scale PaaS

1. Scalability
2. High availability
3. Orchestration
4. Ease of installation and seamless upgrades
LEARN. NETWORK.
EXPERIENCE OPEN SOURCE.