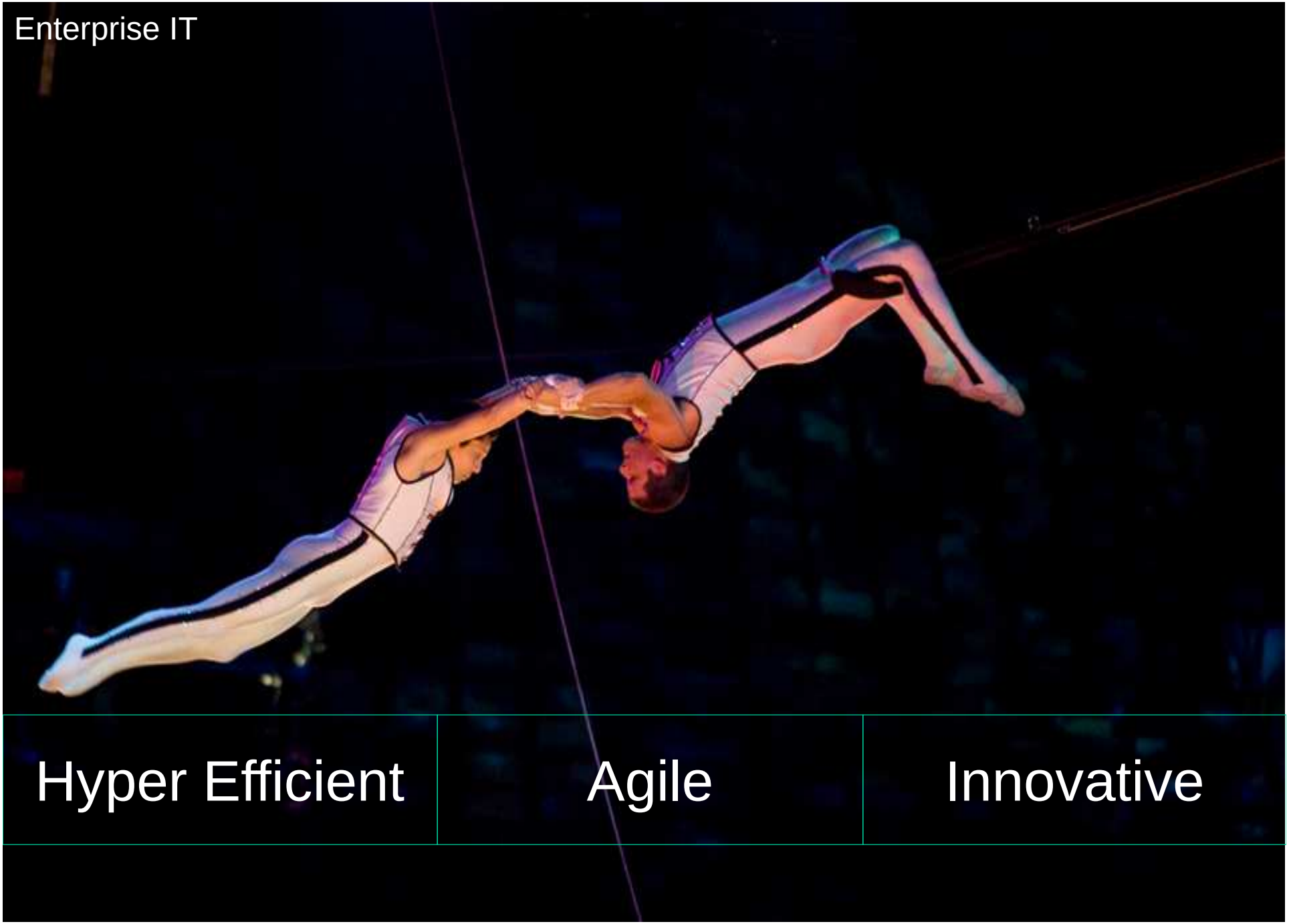
Managing the parallels – Efficiency & Agility

Enterprise IT



Hyper Efficient	Agile	Innovative

Business challenges

Falling Profitability

Strategic re-focus

Performance Improvement

Faster time to Value

Enterprise IT Challenges

Control over Costs

Control over Operations / Security

Mitigate Technology & Skill Obsolescence

Increase Variability

How Do We Align to Enterprise IT

Customer Priorities

MODULAR Solution : Plug & Play for regions or workloads

'Consume IT as Service' : Provider to own entire scope

'Scale-up – Scale-down or Scale Out': Zero Capex

Mitigate Technology **Obsolescence**

Next-Gen IT at Lowest TCO

Solution Alignment

SUPPLY-CHAIN MODEL: Best-Fit clouds & ROBODO

'Single-Pane of Glass' Delivery for Hybrid IT

Cloud-First Strategy: Top Priority to Exit Legacy Assets; Non-cloud by exception ONLY

for New Apps

Subscription Economy

Dynamic Sourcing: LOWEST TCO

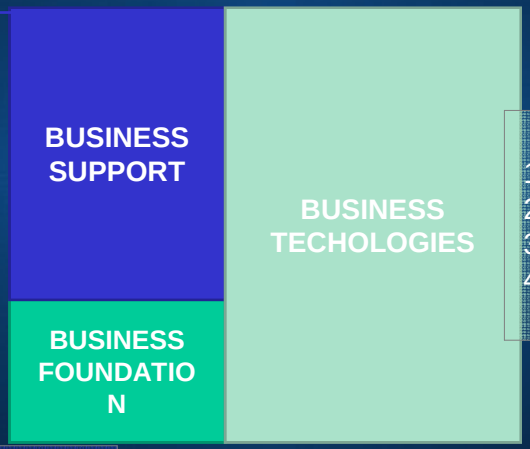
Eliminate Technology Debt

Adopt Open Standards as Weapon

Accelerate As-A-Service Model, Manage Hybrid, Adopt Open Standards

How do We Get There - Three Distinct workload and viewpoint

1. **Reduce fat and extreme Optimization in infrastructure**
2. **Outsourcing of services to low cost models**
3. **Cost effective utility models like clouds**
4. **Limited self service and provisioning requirement**



Enterprise data centers are 3 distinct slices and have very different requirements in terms of availability, scalability, agility, security, manageability.

1. Enabling scale out & ubiquitous architecture
2. New platform enablement
3. Innovative Business & Delivery approach
4. Research and workload driven with self service

1. Enhance Business intelligence
2. Application Modernization
3. Robust security, BCP & Disaster Recovery redesign
4. User empowerment real time tools

Designing new data center or Transformation of existing data centers need to take this distinct viewpoint into consideration and suitable treatment applied

Redefining deployment and consumption of applications

Application

Deploy

Device

New bars have been set for flexibility, agility and simplicity of applications deployment and consumptions

Device Type	Requirement Definition	Capability Definition	Device Type
Device Template	Requirement	Capability	Device Template

Redefining deployment and consumption of Services

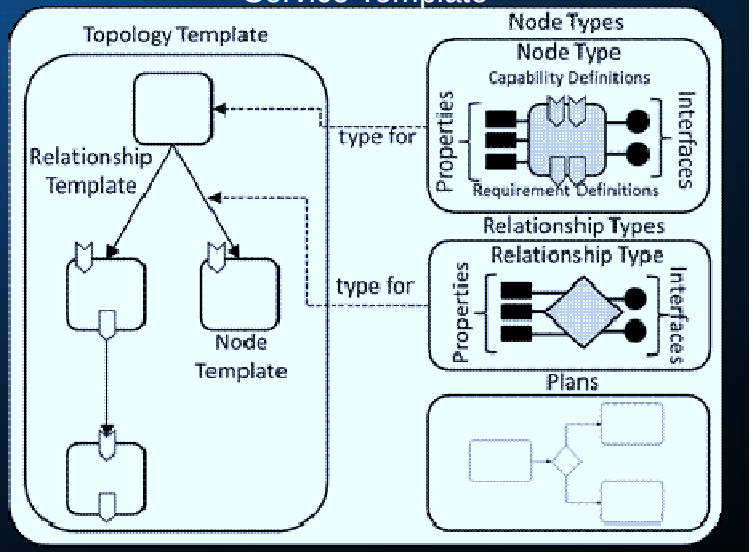
Service

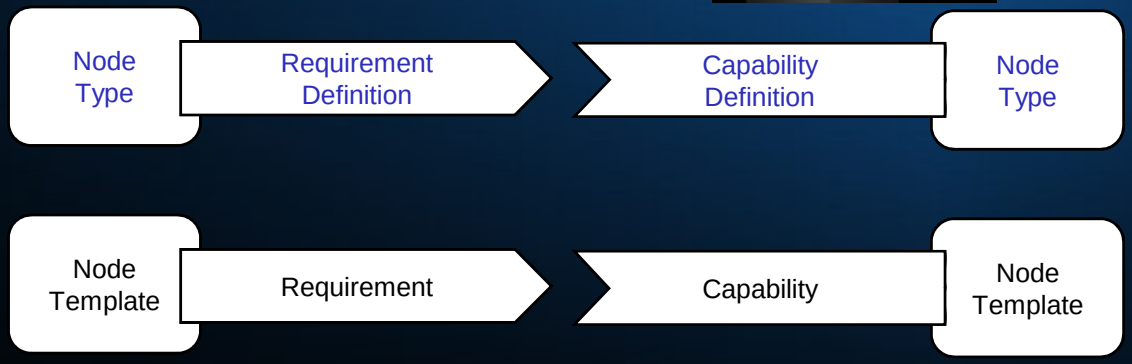
Deploy

Application lifecycle management will be a key focus to empower users

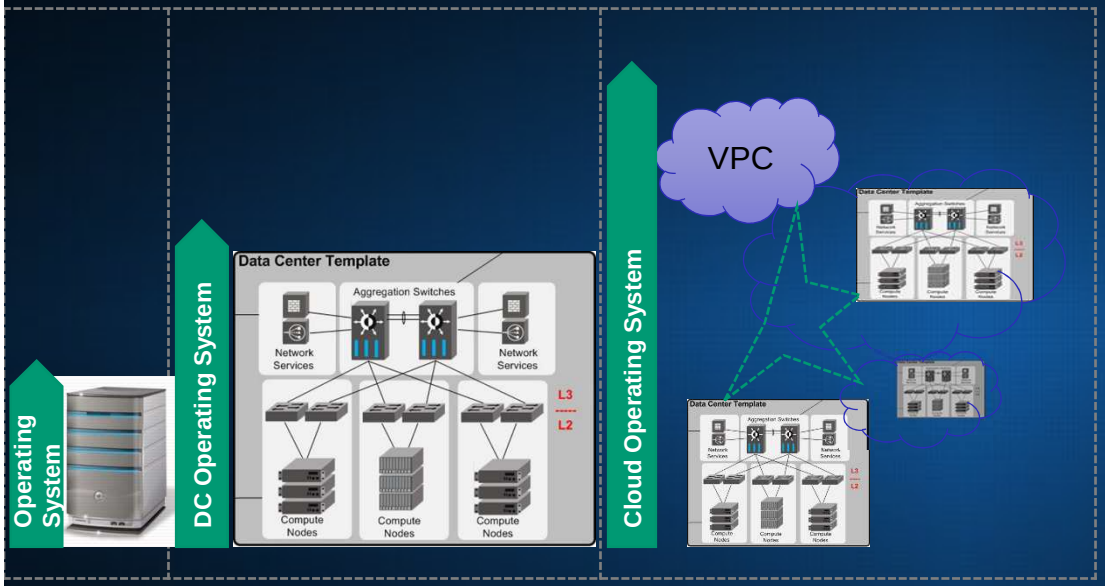
Initiatives like TOSCA from Oasis along with CloudOS will redefine the level of flexibility, agility and simplicity in Data Center services lifecycle

Service Template

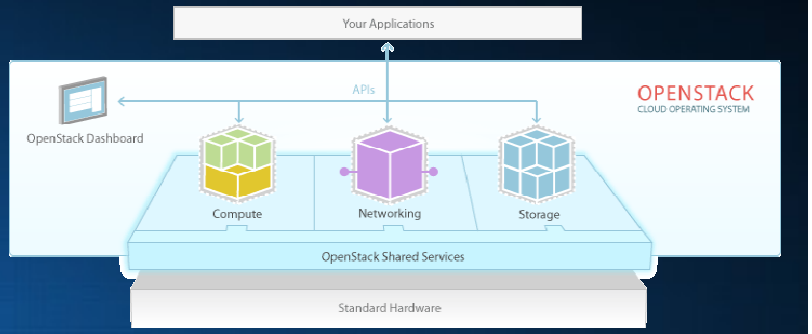




Cloud OS : A defining moment in the Data Center evolution



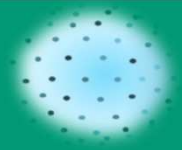
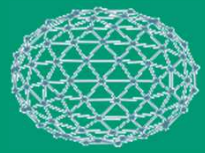
Operating systems have scaled up over the years in terms of scope and capability



Compute	**- Nova**
Object Storage	**- Swift**
Block Storage	**- Cinder**
Networking	**- Neutron**
Dashboard	**- Horizon**
Identity Service	**- Keystone**
Image Service	**- Glance**
Telemetry	**- Ceilometer**
Orchestration	**- Heat**
Database	**- Trove**
Map Reduce	**- Sahara**

OpenStack is the clear winner in the CloudOS war. It has the potential to do in Data Center what TCP/IP did to Networking

New world – The Paradigm Shift

 "Old World"	"New World" 
Over Engineer to not fail	Design for failure
SQL	No SQL
Fit all x86 Blades	Platform Optimized Engineering
Waterfall - PMBOK	Agile - SCRUM
Infinite Service lifetime	Uncertain Service Lifetime
Virtualization	Containers
Consolidate, virtualize, Cloud - Leverage Moore's law	Problem in Storage, Network – Moore's law doesn't help
ITIL	?
ISVs will innovate	Innovation is in Open Source Community
.net, J2ee	NodeJS, Caffeine, HTML5


Case Studies

Takk for oppmerksomheten