

The Future is Now

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TechAmerica | INPUT
September 9, 2010

Context

◎ Evolve

- > Organization
- > Service Management

◎ Modernize

- > Facilities
- > Applications

◎ Transform

- > Cloud Services
- > CalNet 3

Evolution of the Organization

In the last five years, OTech has transitioned to a shared services organization and reduced rates by more than \$75M.

2005: Department of Technology Services (DTS) formed when HHSDC and Teale merge.

2007:
Office of the State CIO (OCIO) established by Legislation.

2009:
OCIO and DTS merge. DTS becomes the Office of Technology Services (OTech).

FY 09/10 :

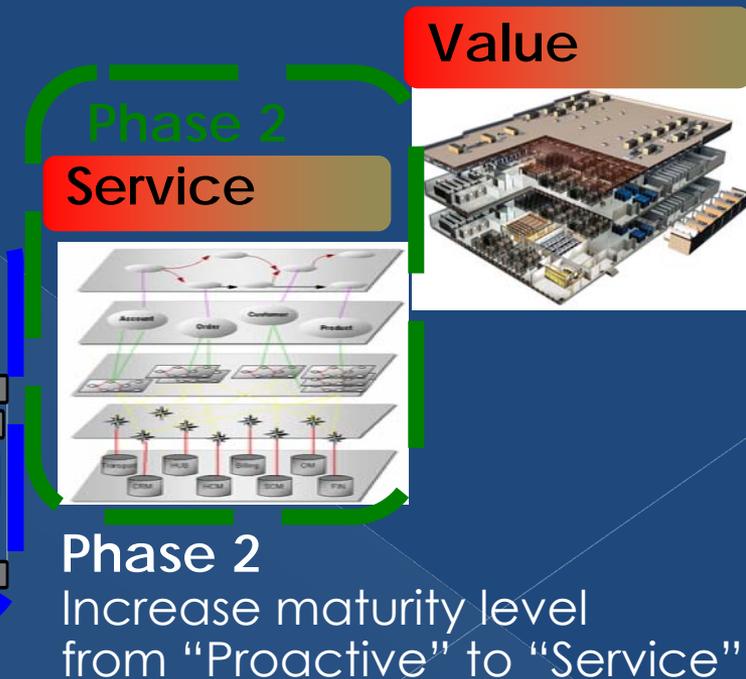
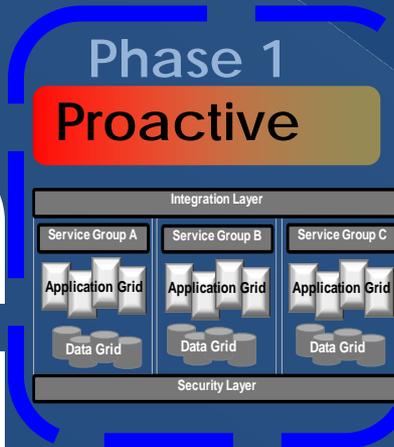
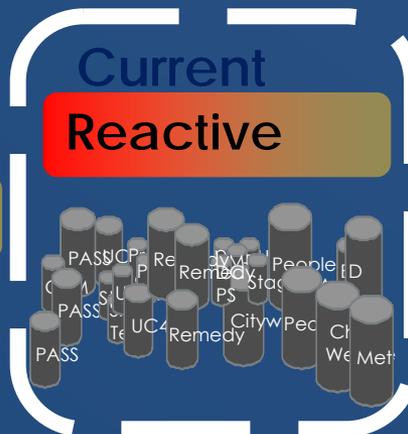
- ~\$400,000 in revenue per employee.
- 13.6% increase in revenues.
- Expenses increased by >1.5%.



Evolution of Service Management Service Improvement Program

- Provide best of class IT services using ITIL based processes, automated with a standard toolset.
- Establish a culture of continuous improvement.

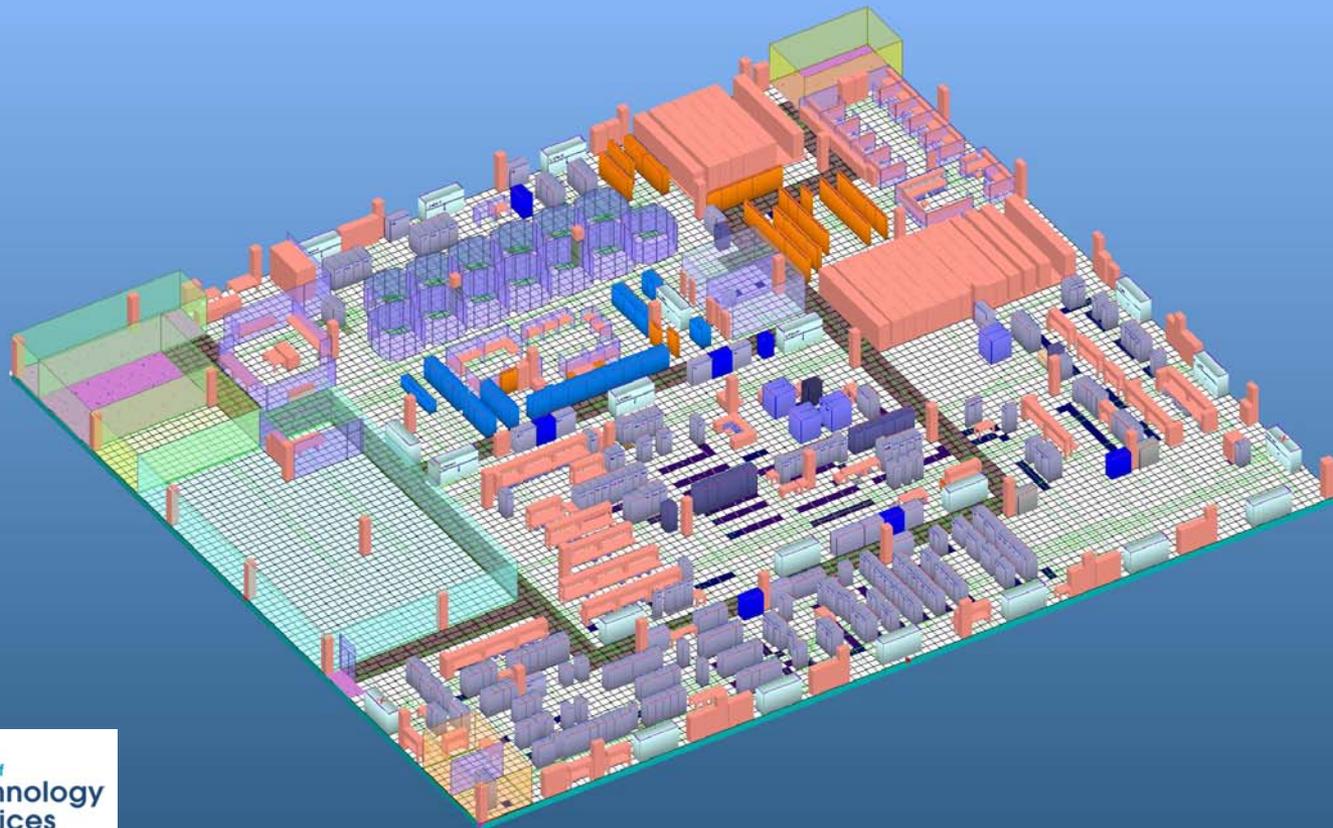
Phase 1 (1 - 2 years)
Increase maturity level from
"Reactive" to "Proactive"



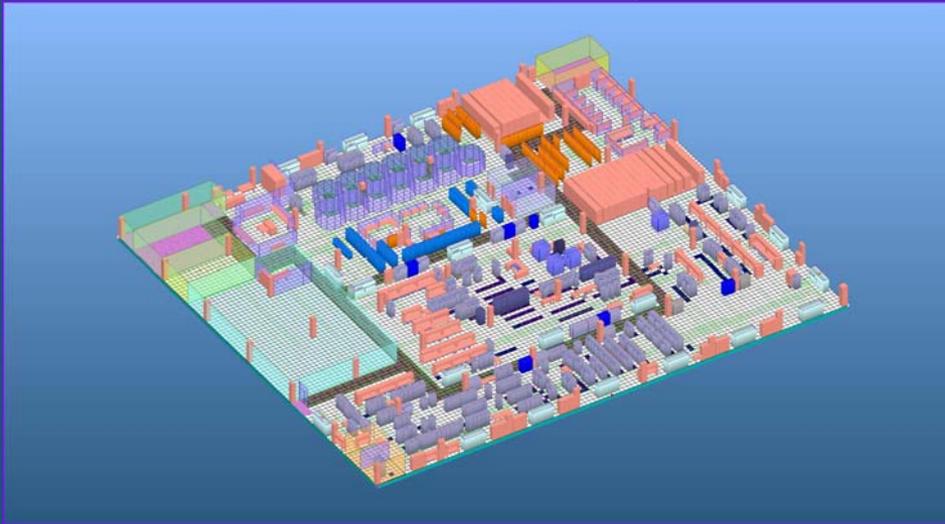
Phase 2
Increase maturity level
from "Proactive" to "Service"

Change Management is our #1 priority because ~80% of DC downtime is due to unauthorized changes.

Data Center Modernization: Gold Camp as built in 2000

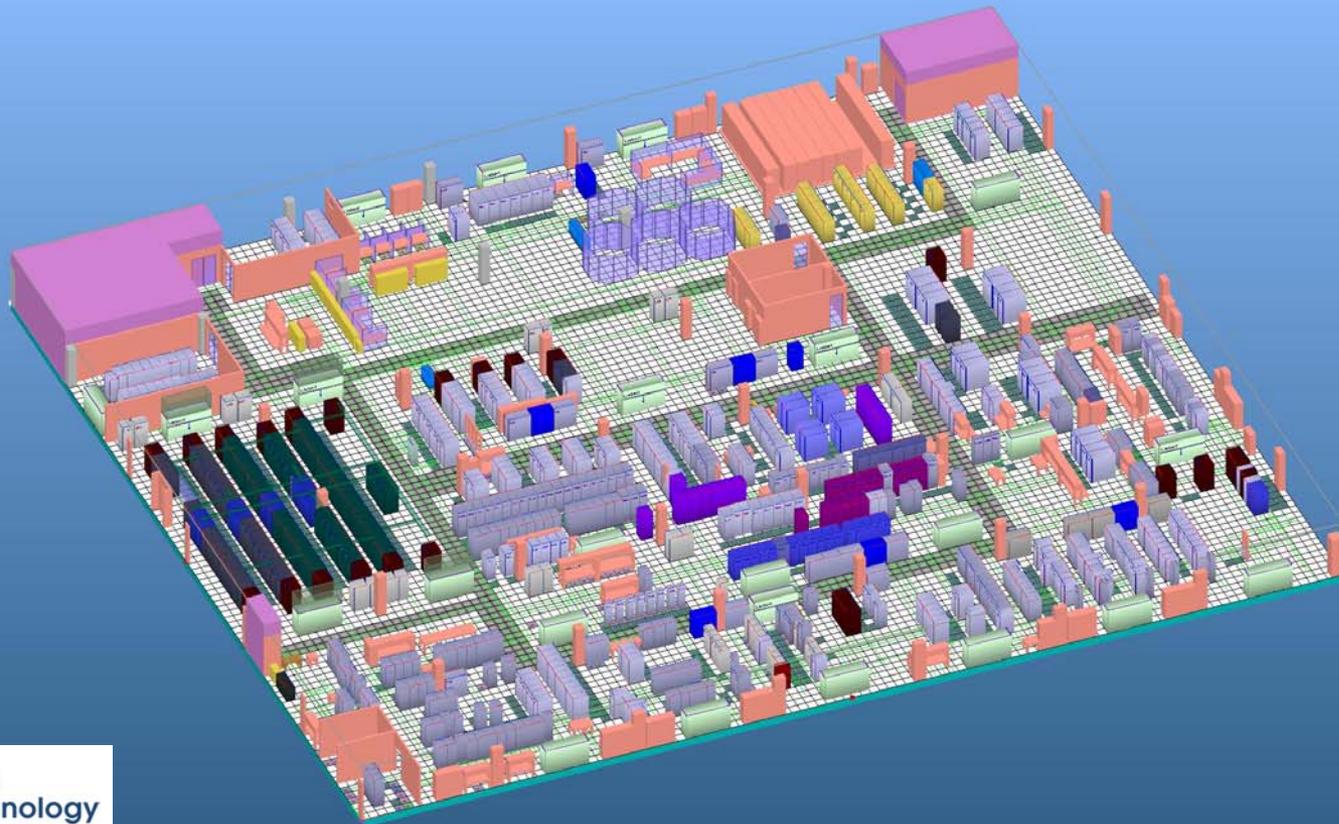


Data Center Modernization: Gold Camp as built in 2000

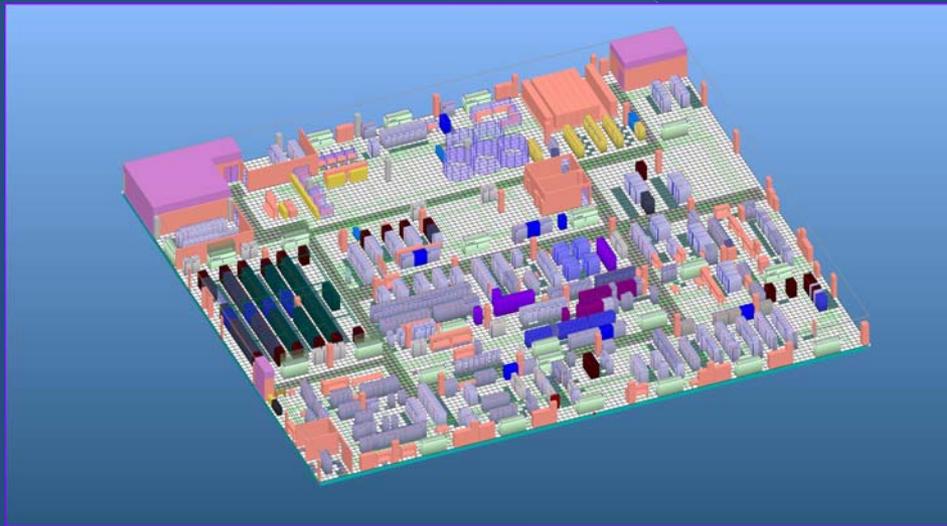


- Gold Camp opened in 2000, designed as mainframe-centric data center.
- No Co-Location area in original design.
- Low density power and cooling requirements
- Configured for 100Mb network design.
- Large physical tape library footprint.
- Few server-based systems (total racks < 50).

Data Center Modernization: Gold Camp in 2010

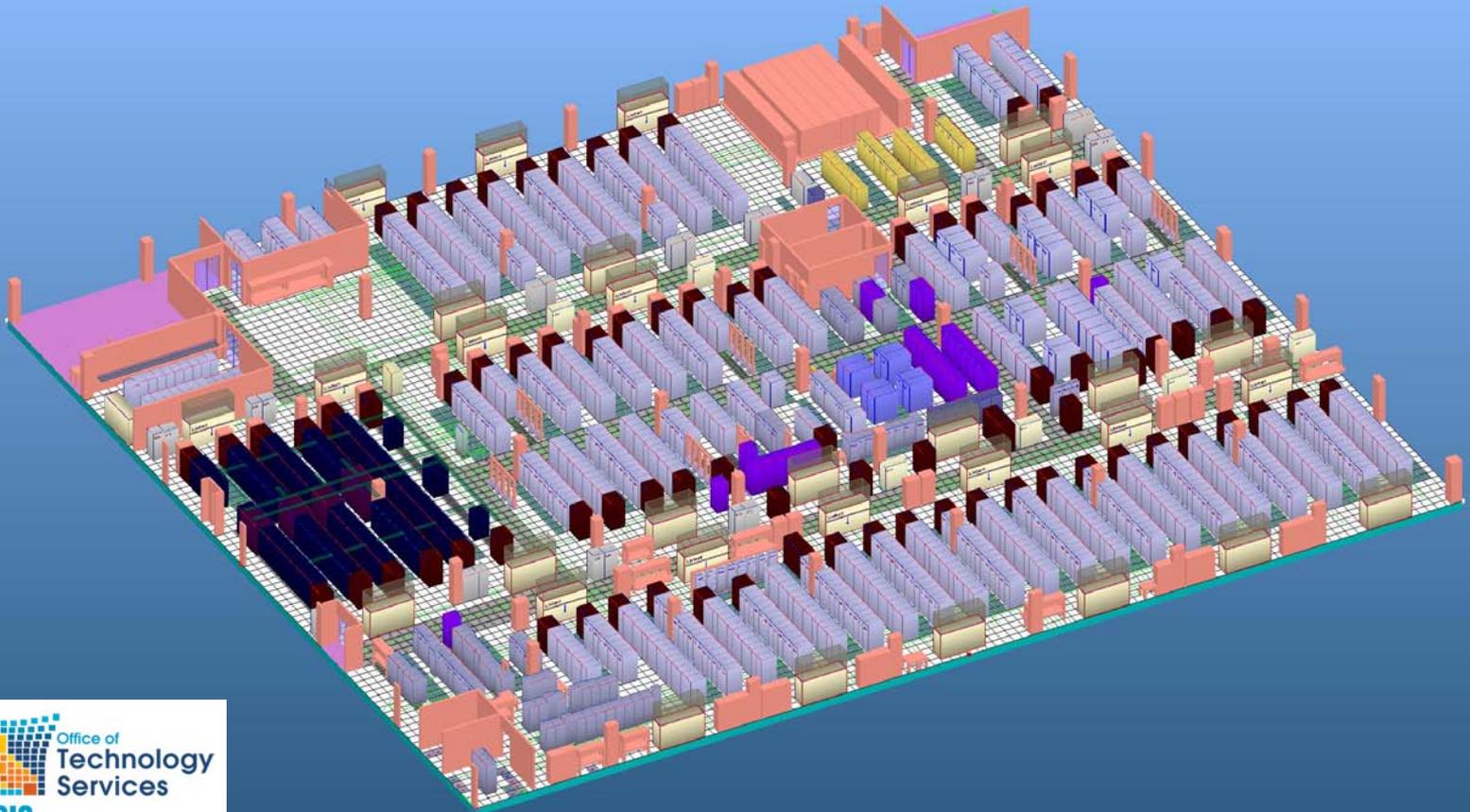


Data Center Modernization: Gold Camp in 2010

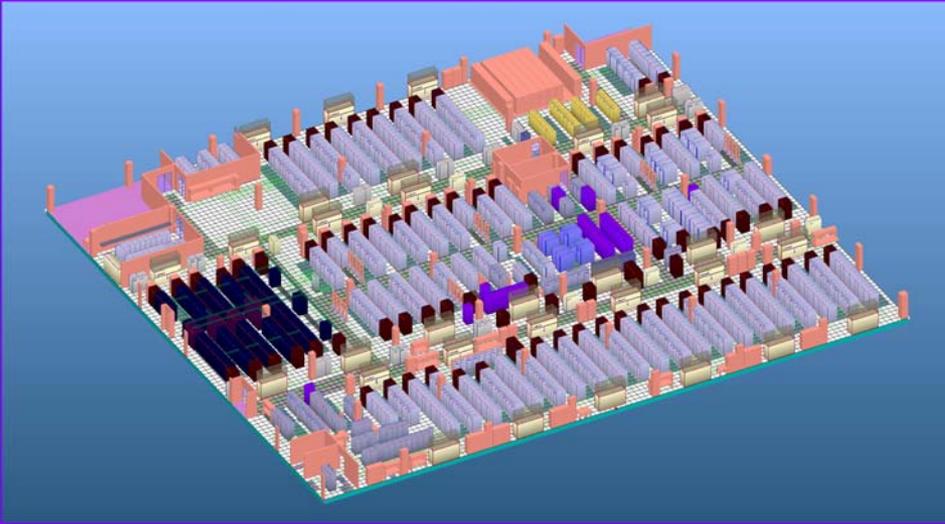


- Tier III data center with >100 customers.
- Converted 4,000 sq. ft. of office space into the Federated Data Center with capacity for 115 racks.
- Co-Lo environment supports 27 state agencies.
- Medium density power and cooling requirements.
- Configured for 1Gb network design.
- Converting physical tape to virtual.
- 665 server rack spaces.

Data Center Modernization: Gold Camp in 2012



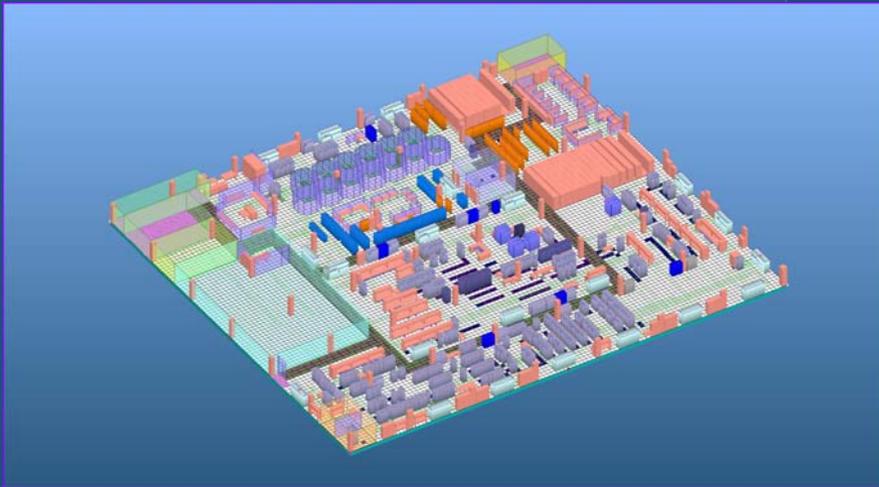
Data Center Modernization: Gold Camp in 2012



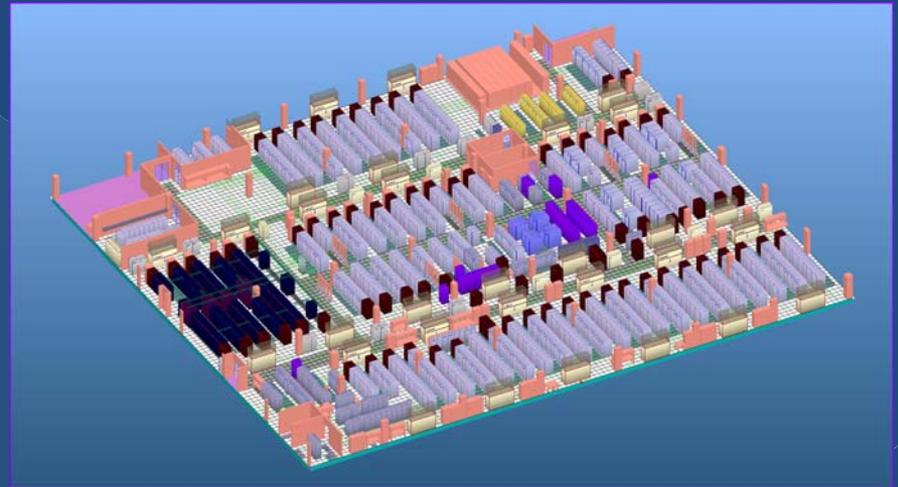
- >50% increase in energy efficiency.
 - PUE reduced to 1.6.
- Double power capacity
 - 1800kW to 3600kW.
- Upgraded energy management systems.
- 100X Increase in network capacity
 - 100 Megabit to 10 Gigabit.
- Increased utilization of available raised floor space.
 - Avoided more than \$100 Million in capital expenditure.
- Increased rack space capacity from ~50 to ≥ 1000 .

Data Center Modernization

2000



2012



Application Modernization

Problem:

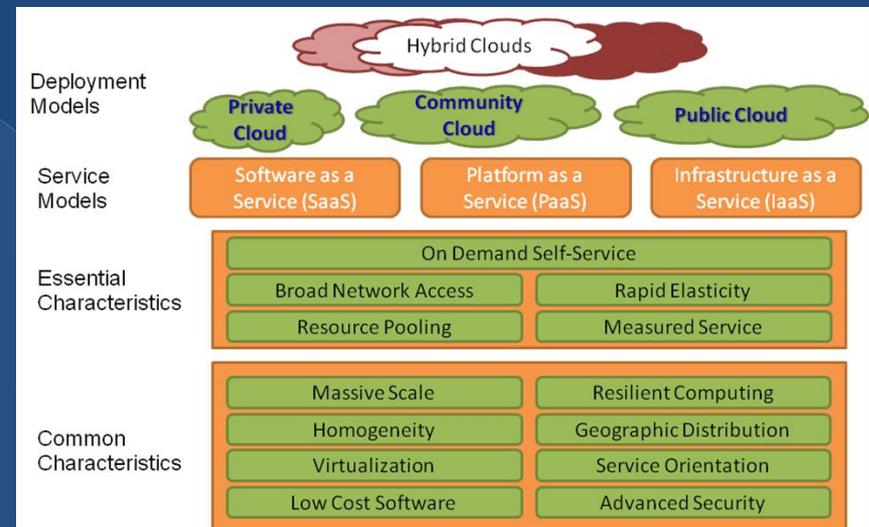
- Dozens of state agencies run legacy applications that are expensive to operate and difficult to maintain.

Solution:

- Develop streamlined process for agencies to access skilled resources to assist with modernization.
- Three service categories:
 - > Replatform – Move to less expensive platform.
 - > Modernize – Change code or database.
 - > Transformation – Redesign business processes.

Approach to Cloud Computing: A valuable service delivery paradigm, not a panacea

- Governance & Policy
- Profile candidates for cloud adoption
- Develop a Private Cloud Model.



Framework for the Cloud: Governance & Policy

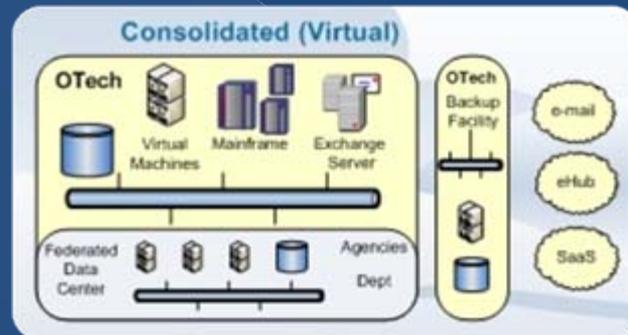
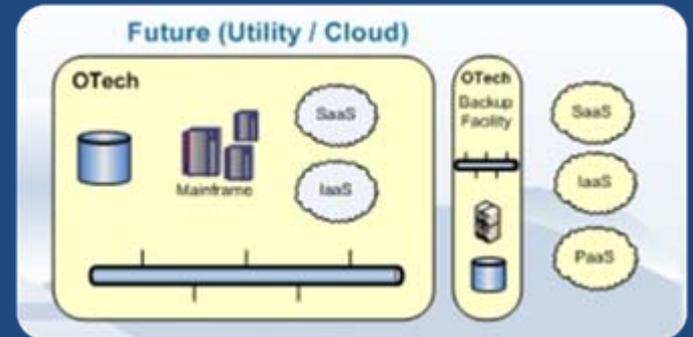
- ⦿ Governance provides the framework to determine what goes to the cloud and the right deployment model.
 - > Business Process Profiling (SaaS).
 - > Application Profiling (IaaS).
- ⦿ Well defined policies will enable the state to address the challenges presented by the cloud.
 - > Interoperability;
 - > Security & Compliance;
 - > Provisioning (approval processes) and Procurement (acquisition process, terms and conditions); and
 - > Service Levels.

Framework for the Cloud: Provisioning & Deployment

- ◎ OTech will serve as the broker for Cloud Services.
 - > Develop an on-premise private cloud.
 - Rapid provisioning capability of virtual servers, storage and network resources under development.
 - Developing Database as a Service capability.
 - Opportunities exist for on premise IaaS offerings.
 - > Establish contracts with cloud service providers to meet the needs of state agencies.
 - Specific use cases include:
 - Email, Archiving and E-discovery.
 - Short Term projects/prototypes/POCs.
 - Burst capabilities.
 - DR/Backup.
 - > OTech will utilize a decision matrix to determine the right service based on a customer's business requirements.

Path to the Private Cloud

OTech will take on the role of both a provider of cloud services and a broker of cloud services.



Current: Establish Private Cloud

Interim: Transition existing environment to Private Cloud

Future: Integrate Private Clouds with external cloud resources

CalNet 3

- CalNet 2 is primarily focused on legacy service offerings with few converged service offerings.
- There are many lessons learned that will be applied to CalNet 3.
- Key point – Contract flexibility has allowed it to improve over time.
- Key elements of CalNet 3
 - › Capability and Service Level focused rather than technology or commodity focused.
 - Convergence and Mobility.
 - › Multiple vendors in each category to ensure continuous competition and promote innovative solutions.
- Tentative Schedule
 - › RFI release – late Q1/early Q2, FY 10-11
 - › RFP release – late Q2/early Q3, FY 11-12
 - › Award - TBD

Thank You

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