

Hampton's Cloud Experience



Hampton
VIRGINIA

Leslie Fuentes
Director of Information Technology
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Setting the Stage

✦ Hampton 1st Culture

- ✦ Management encourages innovation and being ahead of the pack
- ✦ Departments heads have power to make decisions
- ✦ Mistakes are okay if we learn and grow

✦ Pre FY09 Technology

- ✦ Niche software as a service (SAAS) solutions
- ✦ Concentration building a private cloud with virtualization (private cloud) and standardization of end user and development tools

The Budget Nudge



2008 – 34 IT Staff

2012 – 23 IT Staff

Restructure IT services and develop models of sustainability in light of recent resource reductions. Solutions with more reliance on vendor services and software as a service will reduce current and future IT resource support requirements but still provide essential city business process support

Update the IT Strategic Plan and revitalize the governance model to support IT's new reality and assist in prioritizing projects and workload.

FY11 Hampton Strategic Direction

- ✦ Use vendor products requiring less IT support and more customer self service
- ✦ Self Service collaboration tools for internal and external use
- ✦ Consultant resources for additional application and infrastructure support
- ✦ **Cloud services to reduce future costs of infrastructure, reduce IT support requirements, provide redundancy and DR**


Federal Definitions Adopted

- What is cloud computing?

Cloud computing describes a broad movement to treat IT services as a commodity with the ability to dynamically increase or decrease capacity to match usage needs. The city can spend less time managing complex IT resources and more time investing in core mission work.*

- Essential Characteristics of Cloud Computing

1. On- demand service
2. Broad network access
3. Resource pooling
4. Rapid elasticity
5. Measured service



Available
anywhere at
anytime and pay
only for what you
use

* Federal Cloud Computing Strategy, by Vivek Kundra, US Chief Information Officer, February 8, 2011

Cloud Benefits

Efficiency

Cloud Benefits

- Improved asset utilization
- Improved productivity
 - app development
 - app management
 - end user support
 - network access

Current

- Low asset utilization
- Difficult to manage
- Network access can be difficult

Agility

Cloud Benefits

- Near instantaneous capacity increases & decreases
- More responsive to urgent needs
- 24x7 availability

Current

- Longer process to increase or decrease capacity and build data center capacity

Innovation

Cloud Benefits

- Shift from asset mgmt to svc mgmt
- Private sector innovation
- Better linked to emerging technologies

Current

- Limited resources in infrastructure management
- Risk-adverse culture
- Difficult to keep up with Innovation

Hampton Cloud Strategy

1. Cloud and traditional solutions researched for all new systems
 - IT resources, assets and support are evaluated as part of new systems for a full TCO cost comparison
2. Develop partnerships with local vendors with cloud experience
3. Ensure cloud services have strong integration tools
4. Ensure new systems have “access anywhere” and “mobile” app capabilities
5. Ensure cloud vendors have DR, security and data ownership contract clauses
6. Procure multi purpose solutions where possible to reduce the number of contracts, systems & services supported
7. Solutions that reduce IT resources & support and provide more end user self service and management are preferred

Cloud Applications

Private cloud – shared IT infrastructure operated solely for an organization

- City is 98% virtualized
- Virtualized environment requires highly technical staff and capital funding

Public cloud – Infrastructure is made available to general public or a large industry group and is owned by an organization selling cloud services

- Very little use of this in Hampton today but may move in this direction

Cloud Software as a Service – Customer uses providers applications running on a cloud infrastructure

- Niche Applications – easy quick wins
- Enterprise SAAS Platform – longer term



Current SAAS Apps

First Wave - Niche Applications

- ✦ NeoGov – HR Recruitment
- ✦ GC Pay – Contractor Payments
- ✦ Constant Contact – Mass e-mail
- ✦ Qualtrics – Surveys & Polling
- ✦ Envista – Public Works Project Mgmt
- ✦ UseDirect – Recreation Mgmt
- ✦ Social Media

*Dept. specific,
lack of
enterprise
approach &
difficult
integrations*

Current SAAS Apps

Enterprise – Same Platform or Pre-Built Integrations

✦ Salesforce Platform, AppEx or Integrations

- ✦ Customer Relationship Mgmt
- ✦ BasicGov – Permits, Inspections, Planning
- ✦ Zendesk – Service Desk
- ✦ Box.net – External File Collaboration
- ✦ Formsite – Online Forms
- ✦ Spring – Document Mgmt
- ✦ Linvio – E-commerce & Payments

✦ Granicus

- ✦ Video Streaming
- ✦ Appointments
- ✦ Legislative Tracking

✦ ADP

- ✦ Online Pay Statements & W-2s

✦ CivicPlus – Content Management



*Migration over
time to
enterprise
approach*

Future

- ✦ Continue with enterprise migration
- ✦ Continue to build local vendor support
 - ✦ Zel Technologies
- ✦ Explore public cloud options when data center Expansions occur
 - ✦ Back Ups
 - ✦ Disaster Recovery
 - ✦ Major System Replacements or Upgrades