

Agenda

- Updated IT strategy
 - What's new
- IT Spending
 - No strategic funding
 - New chart of accounts
- Largely federated IT organization
 - Achieving economies of scale
- DII Update
 - Initiatives
 - Oversight
 - Metrics
 - Future
- Alignment with the report of the Special Committee on the Utilization of Information Technology in Government
- Questions?

Updated IT Strategy

Improve state government effectiveness and productivity

Operate IT effectively and efficiently

- *Consolidation of common services*
- Leverage cloud services
- Leverage the success of others
- Incorporate metrics to measure performance

Enable Successful Projects

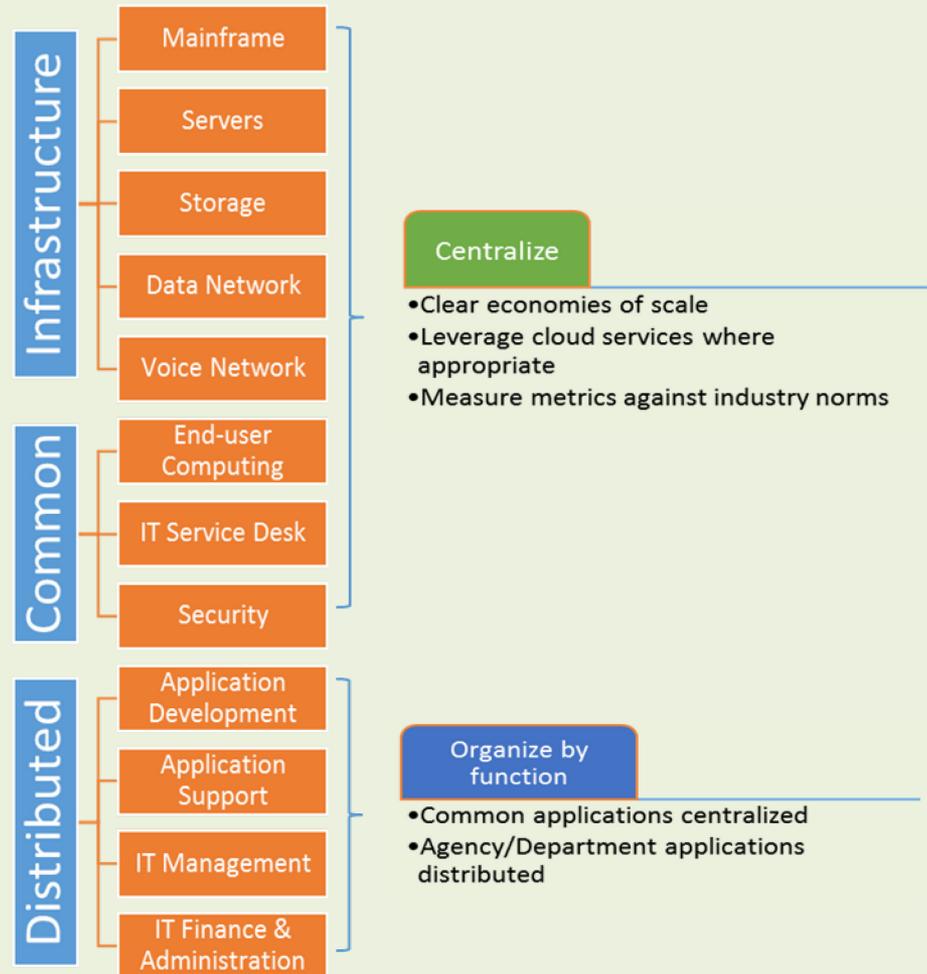
- Apply best practices for Project Management
- Leverage a business process optimization process
- Apply enterprise architecture
- *Limit size, complexity and scope*

Enhance Information Security

- Manage data commensurate with risk
- *Defense in depth*
- *Security awareness*

What's new

- Consolidation of common services
 - Industry best practice is to centralize infrastructure and common services to achieve:
 - Better economies of scale
 - Better compliance with standards
 - Better fault tolerance

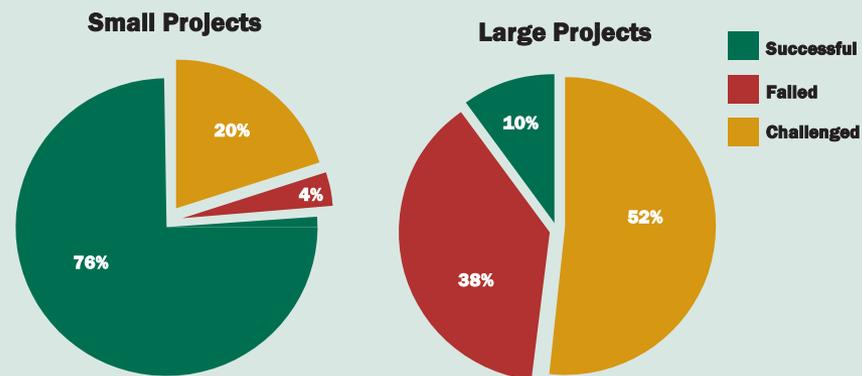


What's new

- Limit size, complexity and scope
 - The industry sees much higher failure rates for projects \$10 million or more
- Defense in depth
 - A comprehensive approach to security is industry best practice
- Security awareness
 - Historically, people cause a fair amount of security incidents

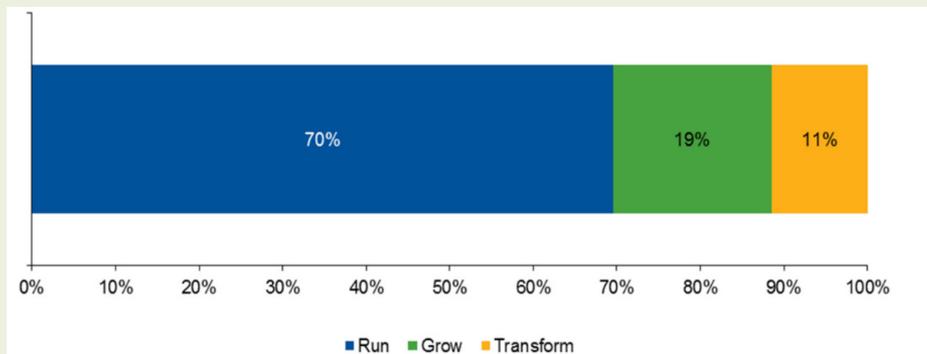
CHAOS RESOLUTION BY LARGE AND SMALL PROJECTS

Project resolution for the calendar year 2012 in the new CHAOS database. Small projects are defined as projects with less than \$1 million in labor content and large projects are considered projects with more than \$10 million in labor content.

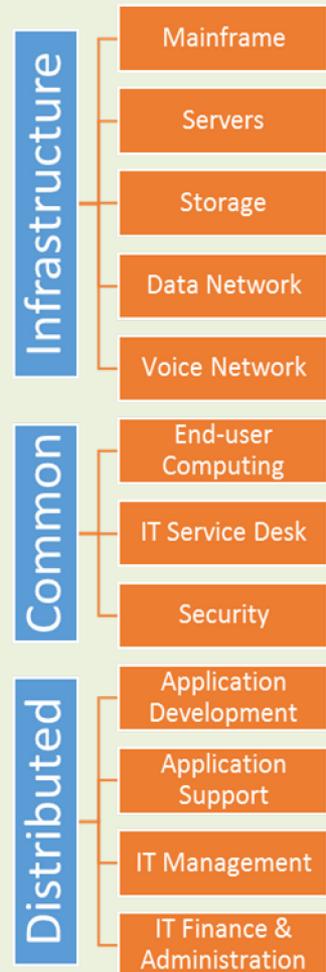


IT Spending

- New chart of accounts will lead to:
 - Greater transparency of our IT spend
 - Ability to compare ourselves with peers
- Lack of strategic funding leads to:
 - Heavier reliance on legacy/old systems that are manually intensive and require more staff (both on the business side and in IT) to operate
 - Large projects as opportunity funding (frequently federal) becomes available
 - Large projects have a much higher failure rate
 - Increased security risk



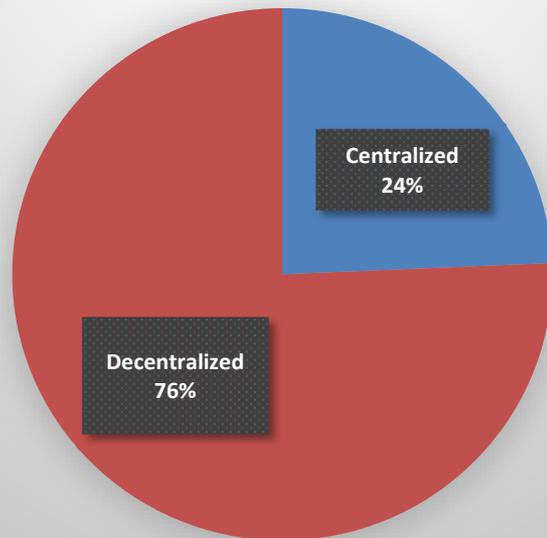
Gartner Cross Industry: IT Spending to Run, Grow and Transform the Business



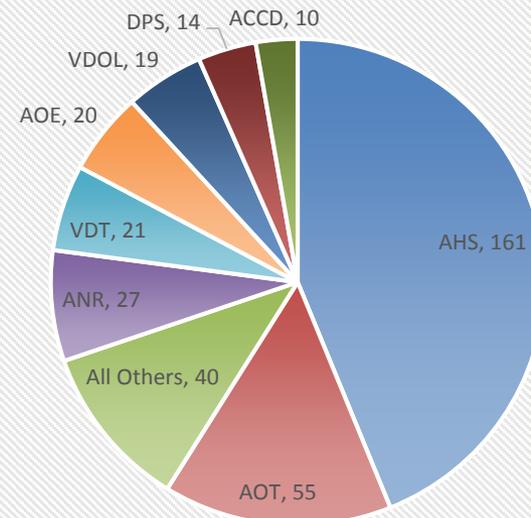
Largely federated IT organization

- DII has 24% of the IT positions
 - While we continue to consolidate infrastructure and common services, we are 80% done with consolidation efforts
 - Desktop support is one of the few areas left for consolidation

Centralized IT vs Decentralized IT
(based on number of IT positions)



Decentralized IT Positions



DII Update – Initiatives

- VOIP – New telephone system
 - Much cheaper
 - Supports integration with mobile devices
 - Supports E911
 - Requires consolidated network
 - Still a few outliers
- O365 – Microsoft Office 365
 - Cost neutral
 - Moves our email to the cloud
 - Future cost avoidance
 - Unlimited email retention
 - Legal discovery capabilities
 - Increases our number of SharePoint licenses
 - New capabilities being tested
- ITOP – Server and Network consolidation (began in 2009)
 - Approx. 85% complete

DII Update – Oversight

- New reporting for projects over \$1 million
 - JFO & DII collaborated on a list of 10 initial projects
 - Electronic Health Records for the Vermont Psychiatric Hospital (DMH)
 - Enterprise Content Management System (DEC)
 - ERP Expansion (AOA)
 - Integrated Eligibility (DVHA/DCF)
 - Integrated Tax System (VDT)
 - MMIS Care Management (DVHA)
 - MMIS Core Management (DVHA)
 - MMIS Pharmacy Benefits (DVHA)
 - Vermont Automated Data Reporting (AOE)
 - Voice Over Internet Protocol (DII)
 - VOIP report example
- New thresholds
 - Most statutory IT thresholds moved from \$100K to \$500K
- Observations



DII Update – Metrics

Metric Name	2016 Benchmark	DII	Analysis
Annual Storage Cost Per Raw TB of capacity	\$2,009	\$1,423	We spend 29% less on storage per TB than our peers.
Number of Raw TBs Supported per Storage FTE	344	649	DII uses less staff to manage storage than our peers.
Windows Server Cost Per Operating System (OS) Instance	\$5,662	\$3,499	Primarily a result of less staff per instance.
Windows OS Instances per Windows FTE	69.3	91	DII uses less staff to manage Windows OS than our peers.
Annual IT Service Desk Cost per Agent Handled Contact	\$19.07	\$16.70	DII service desk employees receive more requests which reflects our “no wrong door” philosophy.
Annual Contacts Handled per IT Service Desk FTE	6023	6905	We are 13% more efficient than our peers.
IT Service Desk First Call Resolution Rate	65.4%	36%	Need to take more advantage of creating a knowledge base.
Annual Mainframe Cost per Installed MIPS	\$3,507	\$9,360	We are looking to outsource our mainframe.
Average number of Installed MIPS Supported per Mainframe FTE	142	15	The metrics show that smaller organizations do not have the economies of scale. This is an additional reason to consider outsourcing.
Annual Data Network Cost per Employee	\$780	\$352	We support fewer ports per person than our peers.
Annual Local-Area Data Network Cost Per Active Port	\$100	\$86	Preliminary number requires verification.
Number of Active Ports per LAN full-time equivalent	3,352	2,267	We are smaller than our peers and have less economy of scale.
End User Devices per DII Support FTE	257	374	Through adoption of standards and limiting the use of administrative controls, we have achieved a high efficiency rate.
DII Annual End-User Computing Cost Per Personal Computing Device	\$1,015	\$702	We spend 31% less on end user support than our peers. This indicates additional workload taken on without additional FTE authorization.

DII Future

- Potential consolidation of desktop support
 - Peers have seen cost savings
 - Our consolidation of AHS desktop support resulted in lower costs and more rapid service
 - Our metrics are better than industry and peer averages
- Investigating enterprise Digital signatures
 - Currently have electronic signatures for a small subset
- State-wide IT financial reporting and metrics
 - Ability to compare ourselves with peers
 - More informed decision making
- Leverage more cloud services
 - Currently use Amazon and Microsoft cloud services
- Potential outsourcing of mainframe services



Alignment with the report of the Special Committee on the Utilization of Information Technology

Special Committee

- Precede IT projects with business process improvement
- Use professional Project Managers
- Break large projects into smaller ones
- Establish a targeted rate of spending on IT based on best practice
- Investigate utilizing COTS solutions

IT Strategic Plan

- Leverage a business process optimization process
- Apply best practices for Project Management
- Limit size, complexity and scope
- Create strategic funding for IT
- Leverage the success of others



State of Vermont
Office of the CIO
Department of Information & Innovation

Questions?