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State of Louisiana
Office of Information Technology

Organization Structure

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Executive Summary

IT Consolidation cannot be completed without a total redesign of the organizational structure and associated operating model. The new organization must be able to deliver high quality services to a greater number of end users, with more consistency, transparency, and predictability. The organization must also be adaptable and focused on continuous improvement, with the idea that transformation is never complete. This is a tenant of leading edge organizations—rather than stagnate once they are unified, successfully consolidated organizations continue to improve over time.

This is a keystone of the proposed organizational structure. The model takes three different forms, strengthening its customer engagement and service management capabilities as it matures.

Stage 1—A short term administrative consolidation, wherein budget and staff reporting relationships move to a central IT organization but services remain relatively unchanged.

Stage 2—Services will be built out with a focus on high quality service operations and a strong agency relationship management function to drive customer engagement.

Stage 3—Changes result in a matrix model focused on elevating service management capabilities

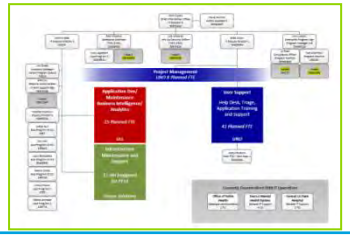
Paramount to the success of this plan is an executive mandate to bring into action the proposed organization model and functions to the Central IT, the active support from State leadership and the implementation of the human capital management plan to support IT staff maturity and long term organizational cohesion.

Current State Assessment

IT Organizational Models from a Sample Set of Agencies

DHH

- 4-layered organization structure
- Director reports to the Undersecretary of Office of Management and Finance
- Outsource majority of application development and end user support
- Project Management a stand alone function
- Enterprise program manager oversees compliance and program monitoring

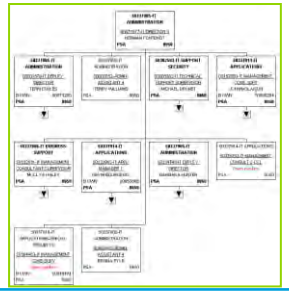


DNR

- 5-layered organization structure
- CIO reports to the Office of Management and Finance
- DNR CIO serves in cross department steering committee
- Divided functionally into procurement, operational services, App Dev, GIS, eCommerce, BI, Database Administration
- Uses a dispatch and matrix model for project management and application development

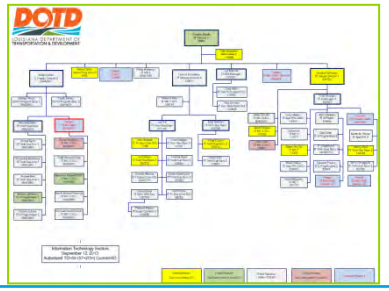
DCFS

- 5-layered organization structure
- Director reports to the Undersecretary‘s office under Management and Finance
- Structure includes Modernization unit, Operations, Support database, OSAS, User Support, Support Security, Applications, Business Support
- Units in the structure are based on clear functions / services or are dupliactive (ex. Multiple sub divisions called IT administration)



DOTD

- 5-layered organization structure
- Director reports to the Office of Management and Finance
- Director positions based on functions such as GIS, Applications., Technical Support
- Use of similar titles across functions indicate possibility of a mismatch with actual work performed
- Majority of staff sit under Applications & Tech support



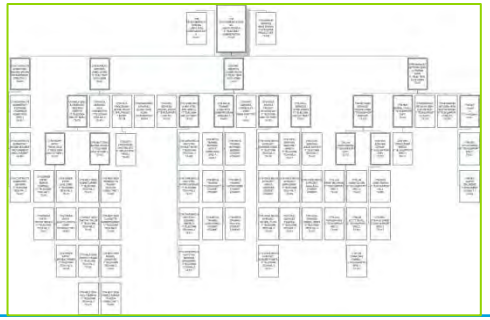
Central IT Organizational Structures

OIT

- Aggregate reporting for OIS, OCS, OTM, OGB, Project Management, Security
- Functional silos currently do not allow end-to-end responsibility or ownership for the services being supplied
- Majority of focus is on discrete tasks and grant management rather than comprehensive strategy and planning
- No specific ownership for innovation and introduction of new technologies
- Currently building out project management as a function, does not have portfolio management capa

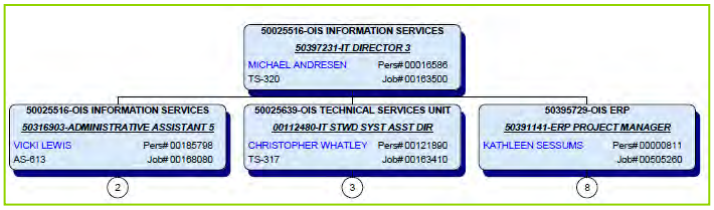
OTM

- Structured into Contracts & Procurement, Support, Applications, Enhanced Network Services
- Organized as a stand alone ancillary agency
- Heavy emphasis on contract administration due to brokering capabilities



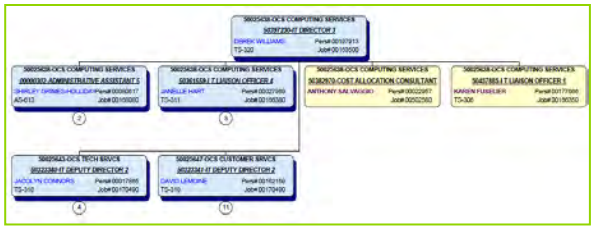
OIS

- Structured into Administrative, Technical Services, ERP Project Management
- Technical Services unit is further divided into Business Support, Applications, Web Apps, BI, Technical Infrastructure
- Organized as a stand alone auxiliary agency
- Same titles are used for almost all positions under different sub-functions

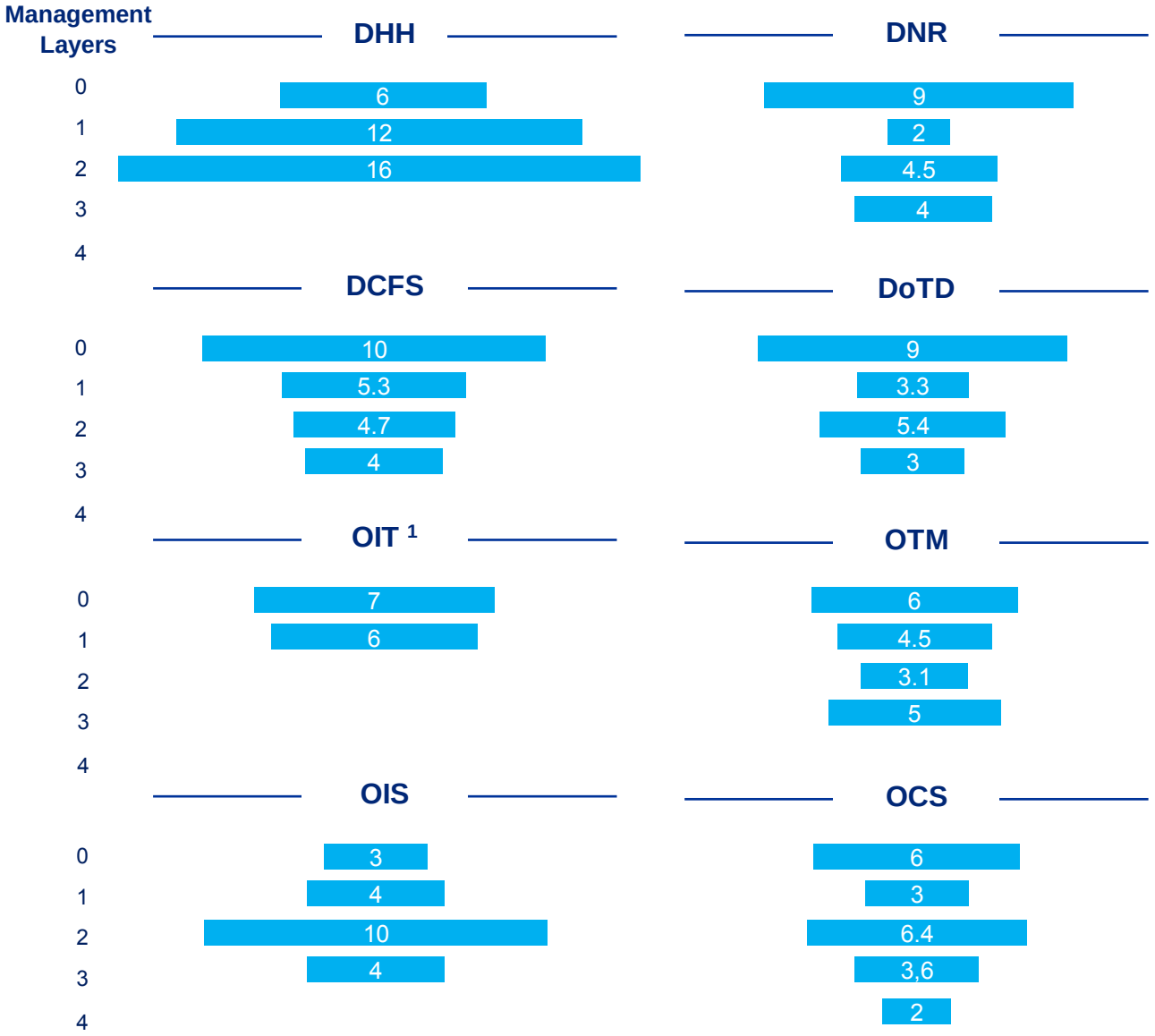


OCS

- Six layered organization structure with divisions of Computer Services, Customer Services and Technical Services
- Customer services has sub units of help desk, workstation and hardware services
- Organized as a stand alone auxiliary agency
- Similar titles are used across sub units / functional divisions indicating a mismatch with the actual work done



Reporting Layer Analysis



Understanding this Chart

- Bars indicate the number of people reporting into a layer
- Layer 0 represents the CIO/Director
- Each layer includes state staff, management consultants and vacant positions

Key Observations

- A future state organization will need to streamline organizational layers, which are currently inconsistent across agencies and organizations
- Reporting layers do not correlate to sophistication of work performed
- There are a large number of IT staff at the highest reporting layers
- Reporting structures do not correlate to seniority, job role or title

Note: 1 Does not include span of separate organization units such as OTM, OCS, OIS. Source: Department Organization Charts

Observations on Functions and Processes

Function	Key Observations
Office of the CIO	• Limited authority over agency IT organizations (including strategic direction, spending, and projects) • CIOs' role is relatively muted due to reporting within DOA versus serving at a cabinet level • Balance between administration versus strategy is heavily weighted to administration
Strategy and Planning Administration	• Each agency with their own IT strategy plan may or may not align with overall IT strategic vision of the State, leading to low control over strategic planning • Very little strategic planning in agency or central organizations and between OIT and agencies • Limited IT talent functions within agencies or OIT • Very few legal supports for IT contracting, licensing and other administrative activities
Office of Operations	• Few agencies have a mature service management capability or organizations to plan and manage service provisioning • IT procurement, contracting and vendor management is decentralized between OIT and agencies and within agencies • Decentralized procurement of IT equipment to agencies, leading to non-standardization and investment in assets across agencies with their use being limited to agencies only • IT Finance function and capabilities are absent from most agencies and limited in OIT, function is contracted out part time • Most agencies do not have a role or function devoted to end to end IT operations
IT Project Management	• The Statewide project management function is currently under development • Enterprise-wide/agency-wide project or portfolio management is limited • A few agencies use pooled resource models to deploy staff to strategic projects, though a common approach does not exist • Communication and training is often procured as part of system development project, State capabilities are limited
Business Analysis	• Significant resources aligned to business analysis role but there is no common process followed • Focus of current BA function is alignment to agency specific needs and goals, with little process in effect to promote enterprise goals, interoperability and alignment • Solutioning is need specific rather than in alignment with broader enterprise IT goals or overall state IT direction
End User Computing	• There are at least 16 different tools used for end user support ranging from industry leading to email • There are more licenses for end user support tools than there are IT employees • Currently, Help Desk staff serve anywhere between 2 and 18,000 users; industry benchmark is 517

Observations on Functions and Processes

Function	Key Observations
Applications and Data Management	• Staff augmentation levels are high for application development • There is no central web-service group to build and support one of the State's most citizen facing IT tools • Current processes for application development, deployment and maintenance are fragmented • Most agencies do not have a defined function, focused on Quality Assurance
Data Center Operations	• Use of vendors is common for data center hosting (e.g., Venyu) as well as infrastructure services like back-up and recovery • Both central and agency level DC organizations exist, with varying levels of sophistication and service approaches • Central DC and Network operations exist in two separate organizations which requires a great deal of coordination even though a service using both DC and Network infrastructure is a common end user need
Network / Tele-communications	• OTM is the largest provider of network services • DPS radio communications accounts for one of the largest networking/telecom groups of any agency including OTM • Existing Network and Telecom processes are not built on an industry standard IT Service Management foundation • There is a lack of a true „NOC" group to properly support and troubleshoot the service when issues arise • OTM acts as a catch all organization including supporting the environment; write RFP's for all network related procurements; act as a business owner to ensure new technologies cost can be recovered and as project managers
IT Security	• Role for CISO exists but the position is filled with an interim member at present; few staff support the central function • No strong coordination role for central CISO; agencies have a variety of roles in support of information security but a relatively incomplete approach to protecting the states IT assets • Very little attention is paid to privacy from a functional level or from an organizational support perspective
Architecture and Innovation	• There is no enterprise architect nor are there other architecture roles or functions • No organization exists to develop or drive an enterprise technology roadmap • Most agencies do not have a function or role devoted to identifying emerging technologies and facilitating organizational learning about new IT strategies and tools • Neither agencies nor central IT have a function or roles around data stewardship or management

Alternative Approaches for IT Organization Structure

Key Considerations for the New IT Organization Structure

Each of the elements diagramed below will be important to consider when building the new organizational structure. Certain elements will evolve over time and other elements will be taken on in later stages of organizational maturity.

Clients
What entities does the IT organization provide services to?

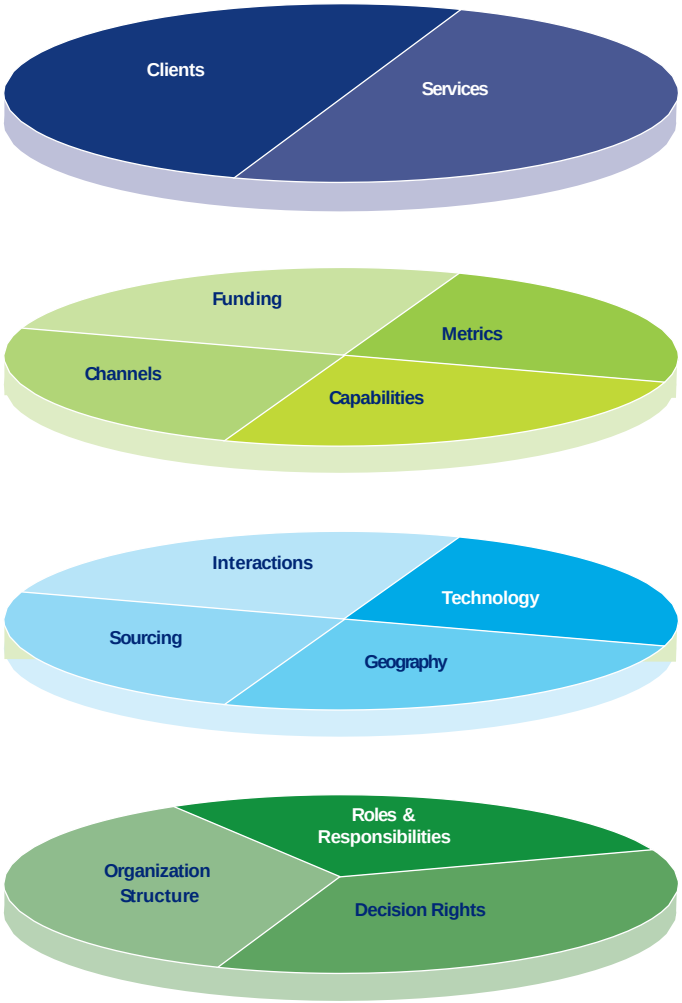
Funding
How will IT be funded? Is this consistent across all services and clients? What happens with over/under funding?

Channels
What channels do clients interact with to obtain the defined services?

Interactions
How do the capabilities interact to deliver the services?

Sourcing
How will capabilities be provided:
In house, vendor, hybrid?

Organization Structure
What does the IT organization structure look like?



Services
What macro level services does IT provide to the organization as a whole. What does IT not provide?

Metrics
What metrics need to be measured and reported on to managed the IT organization delivering its required services?

Capabilities
What capabilities does IT need to have in order to provide its services?

Technology
What underlying technologies are required to deliver the capabilities/services?

Geography
What services are provided in which locations?

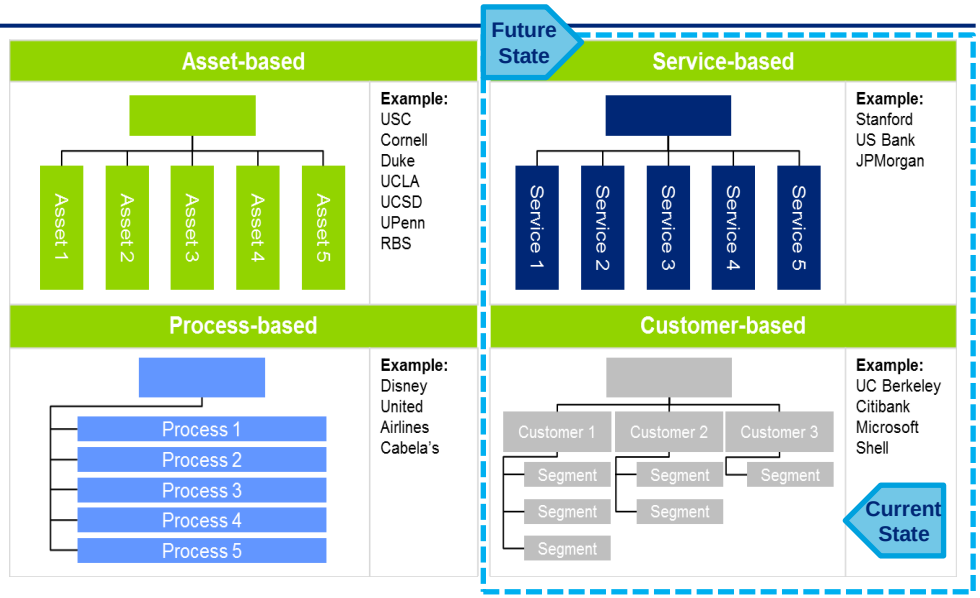
Roles and Responsibilities
What are the specific roles and respons bilities of the organization elements/departments in executing the operating model?

Decision Rights
What authorities/authorizations are distributed throughout the organization?

Organizational Orientation

- There are four different orientations an IT organization may have. Different orientations have different advantages and disadvantages.

- The proposed model incorporates three of the orientations, changing as the organization matures.
  - **Stage 1**: Will take primarily a customer based orientation similar to the existing agency based model today, only with central management.
  - **Stage 2**: The organization will operate as a hybrid of the customer and service orientations, with a strong focus on customer engagement and orientation towards service delivery
  - **Stage 3**: The organization will move to even more of a service based model, keeping the focus on customers, but delivering primarily oriented towards service excellence

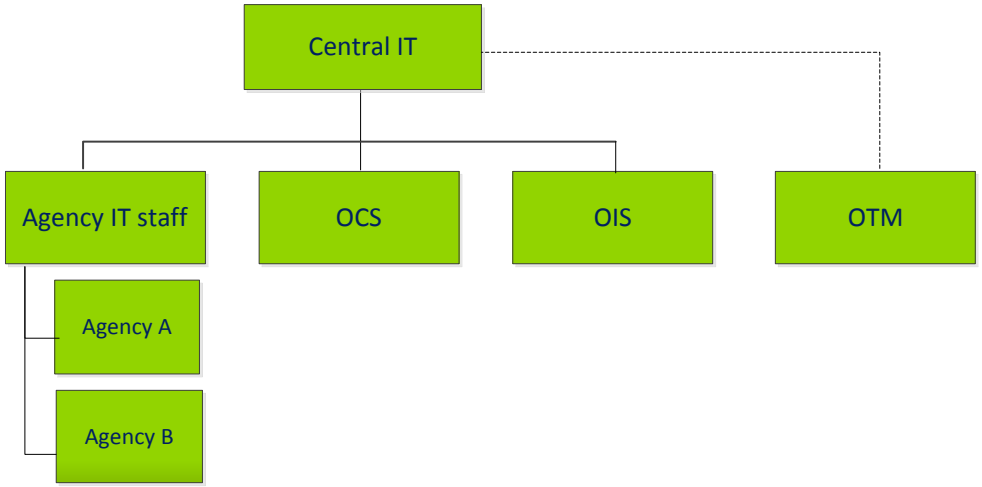


Summary of different archetypes emerging from above approach

	Asset-based	Process-based	Service-based	Customer-based
	Group like activities, keeping similar skill sets within groups to create economy of scale	Group like processes to focus on efficiency by optimizing processes, activities, and service delivery	Group like services to focus on key offerings	Group like customers together to enable customer focus and response
Advantages	• Best suited to organizations with few service lines and undifferentiated customer bases • Ideal and flexible when specialized resources are required • High accountability and role clarity	• Enables the organization to develop a customer perspective • Technical expertise maintained through centers of excellence • Business organized horizontally around end-to-end processes with focus on value chain	• Best suited to an organization with multiple services and differentiated customer base • Ideal when generalist resources are required • Collaboration and quality occurs within each service line	• Flexibility to respond to an environment that is dynamic with a need to be highly customer-interactive • Potential for rapid customer service cycles
Disadvantages	• Communication barriers may exist between groups; silos may form • Lack of end-to-end process accountability and/or ownership • Optimized group performance, but sub-optimized process and business performance	• More difficult to maintain skills or functional expertise • Roles and responsibilities must be redefined • Difficulty in coordination between centers of excellence and process areas	• Communication barriers between service lines • Lack of end-to-end process accountability and/or ownership • Optimized service delivery, but sub-optimized process and functional performance	• Communication barriers between customer groups • Lack of end-to-end process accountability and/or ownership • Optimized service delivery, but sub-optimized process and functional performance

Recommended Approach

Stage 1: Administrative Consolidation



Functional Unit	Notable Details
Agency IT staff	• Reporting lines and ultimate ownership of IT services and staff change to Central IT • Agencies continue conducting IT services as in the past but begin preparing for transition by supporting detailed design for stage 2
OCS	• Provides hardware and software support for servers and desktop computers, computing facilities management, statewide e-mail, consolidated monitoring, and mainframe support services to the State and its departments • Assists OIT in planning, budgeting, expense allocation and staffing for OCS services with ultimate accountability of OIT • Begins detailed design of future state infrastructure services
OIS	• Develops, implements and supports statewide administrative (ISIS, LAGOV) HR and Finance applications • Provide customer support (help desk, training and documentation) for applications and systems • Assists OIT in planning, budgeting, expense allocation and staffing for OIS services with ultimate accountability of OIT • Begins detailed design of future state application development and management services
OTM	• Establishes and coordinates all telecommunications systems and services • Connects the State and departments to State wired/wireless infrastructure with reliable performance and security, using standard protocols; moving wiring and construction support; resolves other network issues • Continue with other existing responsibilities with accountability and reporting relationships to OIT as per existing statute • Consults OIT in planning, budgeting, expense allocation and staffing for OTM services

Key Responsibilities of Central IT

From an organizational perspective, adapting to improve customer alignment and better use of resources are two major change themes

Manage Customer Relationships: Uses structured processes to engage with customer and meet their needs, collaborate across customers to identify enterprise wide solutions

Manage Vendor Relationships: Drives overall effectiveness through a holistic approach to sourcing and procuring assets and services in support of the overall mission of the State

Manage and Control: Supports services and systems , trains an engaged and effective staff, strong risk management and effective financial management

Plan: Drives strategy and sets overall direction for IT to be aligned with business needs, identifies best practices from other entities, and develop and implement IT best practices and standards

Build: Develops standards and processes for building services and systems most efficiently and effectively, supports solution development with management of the portfolio

Transition: Enables service transition through change management, ensures quality assurance and user acceptance with timely release and deployment, and enables continuous improvement through knowledge management

Run: Drives service level management and service operations through support and available systems and tools, responds to requests and incidents, generates resolutions to common problems and enables continuous improvement to ensure quality services are delivered on schedule and within budget

Future State Functions

Office of Operations	Strategy Planning and Admin.	IT Portfolio Management	Agency Relationship Management	End User Computing	Applications and Data	Data Center Operations	Network	IT Security
Service Planning and Mgmt.	IT Strategic Planning	Portfolio Mgmt.	Business Relationship Management	Service Desk	Application Development	Server Admin.	Data	Security Engineering
IT Finance and Budgeting	IT Human Resources	Program and Project Mgmt.			Application Mgmt.			
IT Purchasing and Procurement					Database Services	Storage Admin.	Voice	Threat Assessment and Risk Mgmt.
IT Licensing, Contract, and Vendor Mgmt.	IT Legal	Resource Deployment	Business Analysis	On-Boarding and Provisioning	Quality Assurance	Data Center Facilities		
Enterprise Architecture	IT Governance Coordination and Support	Communications and Training			Data and Information Mgmt.		Radio Coms.	Privacy
					Web/Portal	Messaging		
					GIS			
IT Funding Model								
IT Governance								

Stage 2: Service Build-outs Functions Summary

Functional Unit	Notable Details
Office of Operations	• Drives planning and management of all IT services, manages all IT contracts and vendors, serves as the central coordinating lead within IT for all services and services quality
Strategy, Planning and Administration	• Supports CIO in providing strategic direction, planning and administration of the Office
IT Portfolio Management	• Supports project management to portfolio management with standardized processes and tools through a pooled/dispatch resource model; begins to support governance bodies
Agency Relationship Management	• Creates a direct interface for engaging with customers, gathering agency requirements, managing and coordinating for solutions and supporting service quality
End User Computing	• Agency and central IT support staff providing level 1 support are consolidated into a single service center with a single multi-channel front end; provides on-site support based on geographic zones
Applications and Data Management	• All application development and maintenance (ADAM) staff consolidated; utility pools created which dispatch staff based on need and discrete projects, some agency application / specific skills dispatched back to agencies for specific applications and projects, enterprise application staff focus on enterprise applications
Data Center Operations	• Supports data center facilities in two data centers with streamlined infrastructure and all agency level assets, Supports the use of cloud based services
Network	• Manage Statewide networking needs including voice, video, telecom and radio; contract / vendor management aligns with the Office of Operations along with all other contract and vendor management
IT Security	• All security staff across the agencies move to a single function focused on comprehensively managing all IT security and privacy needs of the State

Office of the CIO

Functional Unit	Key Elements and Features
Office of Operations	**Service Planning and Management**: • Focuses on the operational and tactical issues in delivery of IT services such as service improvement and customer satisfaction to manage IT's service levels with the business stakeholders • Responsible for operational oversight of agency relationship management, portfolio management, operations and delivery of services such as end user support, applications and data management, data center operations, network and IT security • Participates and assists in the preparation of the annual budgeting plan for each IT functional area, and coordinates the contract and resource management efforts • Evaluates and refreshes the portfolio of services that can be offered most cost-effectively **Service Reporting and Analysis**: • Analyzes and reports on IT service quality and efficiency; identifies and reports on opportunities for improvement and key trends **IT Finance and Budgeting**: • Works closely with sub-function managers on cycle forecasts, chargeback management, contract management, rate case planning, and annual IT budget planning in collaboration with strategic planning /governance; seeks to manage the true costs of IT **IT Purchasing and Procurement**: • Enables effective decision-making on purchasing technology collaboratively and in accordance with enterprise standards **IT Licensing and Contracts Management**: • Provides a comprehensive support for all IT contracts and licensing **IT Vendor / Provider Management**: • Develops /implements the vendor sourcing strategy, manages performance to optimize cost, risk, benefit and service management **Chargeback/Rate Setting**: • Develops rates that reflect appropriate cost for each service and provides transparent information to end users about use and fees **Service Catalog Development**: • Develops service catalog in alignment with overall IT strategy; partners with functions to determine forward looking service needs • Assesses customer demand in support of development, transition, operation and retirement of services in the catalog **Enterprise Architecture**: • Drives the development of standards for integration, services and technologies; owns development of 3-5 year technology roadmap
Strategy and Planning Administration	**Strategic Planning/Governance**: • Provides structure, guidance and delivery of multi year IT strategic plan **Governance Coordination and Support** • Integrates planning with governance activities **IT Human Resources**: • Supports implementation of overall Human Capital Management including staffing plans, recruiting and staffing logistics, employee training, compensation and performance review management. *Plan is detailed in the Human Capital Management plan* **IT Legal**: • Provides legal support for IT such as technology license, maintenance, hosting, internet services, system development and implementation agreements, intellectual property, procurement laws, responses to public records requests, subpoenas, summons and other legal process, labor and employment matters, legislation and policy development

IT Portfolio Management

Functional Unit	Key Elements and Features
Portfolio Management	• Manages the portfolio of centrally-supplied IT services, projects, and reviews portfolio performance • Works with IT Governance groups to define scope and direction for overall investment • Conducts benefit and risk optimization, active portfolio monitoring and business environment change adaption • Supports generation and maintenance of an inventory of IT assets
Program and Project Management	• Pooled group of resources dispatched to specific projects • Manages the project schedule, scope, budget, and quality so they align with leadership expectations • Focuses on multiple project timing, sequencing and interdependencies and prioritize projects accordingly • Reviews project change requests in terms of their impact to the baseline schedule, cost, scope, and quality versus their expected benefits or necessity to stay aligned with the project's business objectives • Applies Louisiana project and portfolio management approach to manage projects and programs. *Detailed information covered in IT Project and Portfolio Management Strategy* • Manages the coordination of project delivery, measurement of results, change and risk management, budgeting, scheduling, resource allocation and metrics definition
Resource Deployment	• Manages and deploys pooled resources (application development, business analysis, communications and training etc.) • Assigns resources to projects, monitor deployment and redeployment to departments for IT projects • Tracks resources and shared pool utilization and other staff metrics to support allocation of staff • Supports alignment of IT strategy with resourcing plans
Communication and Training	• Pooled group of resources dispatched to specific projects • Provides communications about IT services, resources and develop training materials and conducts IT training • Engages end users about IT matters, integrates with service units to identify needs and creates end user training • Provides training support to projects – including project on-boarding, off-boarding, and other needs • Builds and manages IT staff training program • Conducts staff onboarding / integration

Agency Relationship Management

Functional Unit	Key Elements and Features
Business Relationship Management	**Supports service strategy**: • Identifies stakeholders and specify strategic requirements and funding to provide business case for potential opportunities to the IT organization **Facilitates service design**: • Validates customer requirements and ensures customer involvement in design activities **Coordinates service transition** • Coordinates customer involvement in service transition processes and ensures validation of release schedules • Plans, directs and coordinates the development and distribution of informational material about IT services to agencies • Communicates the scope, performance metrics, objectives, cost, and roles and responsibilities of services to end users **Supports service operations**: • Maintains the business relationships between Central IT and the departments to enable better linkage between IT as a service provider and the customer at the strategic and tactical levels • Provides the key point of contact for agencies to provide direct support for agency IT operations • Communicates scheduled outages, updates on major incidents **Drives continuous service improvement**: • Develops, negotiates, maintains and monitors shared service level agreements (SLAs) with agencies • Reports service performance, facilitates reviews on ability to meet strategic objectives and initiate service improvement plans • Evaluates and responds to customer satisfaction through service reviews, customer feedback and service level monitoring
Business Analysis	• Pooled group of resources that will be dispatched to different projects on a requested basis • Provides business and IT analysis in support of project conception, initiation and completion • Supports requirements gathering from departments, development of customer solutions • Supports alignment between business and IT and with enterprise IT standards • Identifies changes to the customer environment that could potentially impact the type, level or utilization of services provided • Helps preparing business case for change drivers and transformational changes

End User Computing

Functional Unit	Key Elements and Features
Service Desk	• Single point of contact for end users for all incidents / issues / service requests regarding end user services • Access to the service desk services to users through multiple channels – Phone, Chat, Web-form etc. • Manages questions, service requests and incidents • Prioritizes and classifies events and determines the appropriate course of action • Restores normal service operation as quickly as possible to minimize the adverse impact on business operations • Proactively eliminates recurring incidents and minimizes the impact of incidents that cannot be prevented • Designs and collects customer service metrics and generate KPI reports • Support diagnoses and resolves issues using remote tools and manages knowledge base to improve service times and consistency • On-Site support provides support for end user HW/SW/Mobile/collaboration via dispatch processes • Level 2+ support facilitates support that requires escalation and intervention of functional teams
On-boarding and Provisioning	• Provides for basic IT employee tools (laptops / desktops / mobile) • Creates and provides standard images as employee is on-boarded • Ensures that authorizes users for approved access for needed services, • Decommissions/de-provisions access rights to non-authorized users or departing employees

Applications and Data Management

Functional Unit	Key Elements and Features
Application Development	• Includes application development, business process support, reporting and administration and application architecture • Develops and maintains user interfaces, business logic tier and database elements for custom applications • Interacts heavily with end-users in partnership with Agency Relationship Managers, throughout the development life-cycle, including requirements gathering, testing, implementation and production support • Uses problem solving skills and new technology research to enhance enterprise systems, software packages, and internal tools • Creates and conducts test plans for development projects and evaluates third-party products • Analyzes existing systems against IT and business strategies and makes well-defined recommendations and execution plans for efficiency and architecture/design improvements within and outside the execution of current projects • Resources delegated back to the agencies for certain applications
Application Management	• Supports and monitors applications; supports and effectively transitions ongoing improvements to end users • Manages the release build process, including bug resolution and determining the features to be included in each build • Support and maintains multiple application environments (Development, Quality Assurance, Staging and Production) required for software fixes and new features to be developed, tested and approved for use in the production system • Resources delegated back to the agencies for certain applications
Database Services	• Involved in the analysis, design, development, and maintenance of enterprise data models • Responsible for formulating and implementing client database needs, providing insight into data architecture and uses of the design • Designs for recovery, high availability, performance and maintenance and monitors the standards, procedures, integrity and integration • Collaborates with data modelers to facilitate design for logical and physical database models
Quality Assurance	• Maintains rigorous quality controls throughout the application project lifecycle helping ensure both the right solution is delivered and the solution is delivered to meet the quality standards • Maintains test instances and standard test protocols for State systems, and conducts technical validation and user-acceptance testing • Contributes to maintenance for the lifecycle of existing applications
Data and Information Management	• Works with management to create reports based on ad hoc user needs • Takes requirements from management and turns them into design specifications used to develop reports • Writes extract programs and develops statistical reports to meet the operational needs of the departments • Responsible for the development and maintenance of data warehouse application programs
Web / Portal Services	• Responsible for website design, development and hosting of State and department websites as needed • Provides solutions, technical consulting, design, and coding for projects for the enterprise • Researches new technology and development approaches and creates best practices along with the architecture and strategy teams • Mentors various teams on design and coding best practices, portal design, service-oriented architecture, and reuse opportunities • Meets predefined service level expectations to serve the need of the departments
GIS	• Manages application development, enhancement, maintenance and administration for GIS applications and data management • Supports GIS users throughout a variety of State agencies, departments and offices • Ensures that system and functional architecture priorities are consistently applied to GIS applications

Data Center Operations

Functional Unit	Key Elements and Features
Server Administration	• Provides customers convenient, affordable access to physical or virtual computing and data-storage capacity, offering standard configurations and support levels, configuring, monitoring and sustained operation of server resources • Builds and deploys various server environments in support of applications • Focuses on performance management, troubleshooting and tuning of operating systems as used by the applications • Write scripts to automate, manage, and monitor the applications and the environment on the servers • Monitors, manages and reports the states and performance of the server with respect to the applications • Develops and implements policies and procedures to ensure server provisioning and maintenance • Supervises and/or coordinates the best use of server resources for open systems operations
Storage Administration	• Builds and deploys various server environments in support of applications • Plans, designs and performance-tunes storage environments (SAN/NAS/Direct attached) to maintain data quality and availability • Oversees the day-to-day delivery of storage and backup services including technical operations of storage devices, data replication using storage software, and routine health checks • Ensures that service levels and compliance are maintained • Monitors all operational parameters done onsite or remotely with tools that provide utilization, performance and availability reports
Data Center Facilities	• Responsible for data center operations and support • Responsible for handling backups, monitoring error logs, supporting desktops/peripherals/office equipment, supporting the data center infrastructure, and application support • Evaluates performance of computer system and peripheral data processing equipment; determine cause of system and program failure • Monitors the infrastructure and its environment for changes and correlate instantly to system performance deviations, availability problems or security and compliance issues
Messaging	• Administers email accounts, mail lists, and general purpose mailboxes • Maintains server configurations and client accounts and SPAM filtering solutions • Provides Directory and network administration to support messaging services • Monitors email services and log files on a routine basis to identify problems with the messaging servers

Network

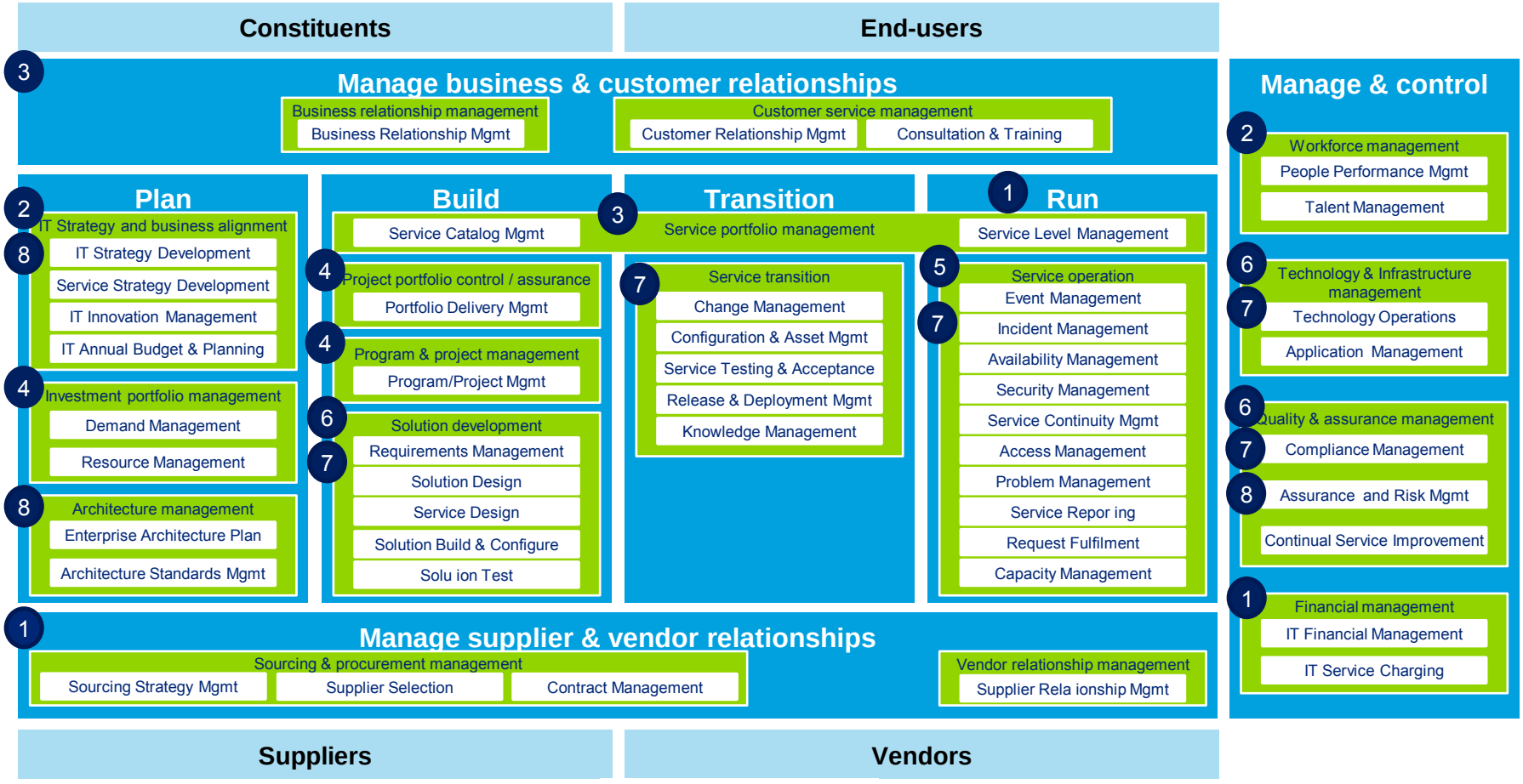
Functional Unit	Key Elements and Features
Voice	• Responsible for hands-on implementation and maintenance of the voice and video conferencing systems, and all related hardware, software and telephone line configurations • Plans, designs, and implements voice services using VoIP technology and Unified Communications principles • Performs the installation, maintenance, trouble isolation and repair of telecommunication and data equipment as engineered and designed • Reviews, analyzes and governs the telecommunication systems and services for the State and all departments • Defines and communicates service level requirements for ~~c~~ore" and ~~e~~nhanced" offerings for publishing in the IT service catalog • Develops and implements policies and procedures to ensure high availability of voice service in coordination with data networks team • Provides customer training on the telecommunications features and functionality
Data	• Connects the State and departments to State wired/wireless infrastructure with reliable performance, using standard protocols • Manage the network service vendors performance against SLAs • Performs the installation, maintenance, trouble isolation and repair of data network equipment as engineered and designed • Works with vendors to expand the capabilities of the state's Wide Area Network to provide the fastest circuits available while maintaining a cost effective price point • Establishes communications with various departments as required to assure that network expansions, system expansions, service orders and service repairs are completed on time and within cost estimates as appropriate • Serves as an advisor for agencies to help design network solutions to support applications • Leverages alternative topologies to address challenges with great understanding of network topologies • Conducts analysis and repair on all trouble reports and participates in on-call support programs
Radio Coms	• Manage the radio communications infrastructure and network to support dispatch radios • Manages the applications that support the radio communications • Monitors the radio communications networks, proactively identifies issues and tracks issues to resolution

IT Security

Functional Unit	Key Elements and Features
Security Engineering	• Plans, develops and implement security standards and policies across multiple platforms • Designs, implements, and monitors a comprehensive information security infrastructure • Supports security solutions and infrastructure with critical reliability and maximum uptime • Performs technical functions including supporting, evaluating, implementing and troubleshooting hardware, software, and systems • Monitors adherence to security standards and practice • Implements operational controls relative to data security and assess their effectiveness
Threat Assessment & Risk Management	• Defines and communicates security policies, procedures, and standards throughout the organization • Reviews and assesses security risks and develops risk mitigation plans • Provides operational design consulting • Conducts threat analysis as well as contract with a third party to do such analysis, if needed • Responsible for the disaster recovery, business continuity, and integrity of organizational business processes, electronic data, data systems and networks • Develops requirements and guidelines for disaster recovery and business continuity plans and tests all elements of the plan to ensure effectiveness
Privacy	• Develops and implements privacy programs • Develops privacy standards and policies and monitor users adherence to them • Informs the agencies about organizational policies, the nature of prevailing threats, and required technologies to keep data and personal information safe • Researches industry sources to stay ahead of emerging trends and recommend improved prevention techniques where necessary • Manages the analysis of damage from a confirmed security / privacy compromise, producing forensic data as may be necessary and helps teams to remediate the effects of incidents

Movement to a more process oriented organization

Stage 3 is marked by a movement from operational focus to more of a process focus. The framework below provides information on the kinds of processes each function is performing as the organization matures.



Key Functions

1. Office of Operations
2. Strategy and Planning Administration
3. Service Planning and Management
4. IT Portfolio Management
5. End User Computing
6. Applications and Data Management
7. Infrastructure and Operations
8. Architecture and Innovation

Key New Roles and Responsibilities

Key responsibilities

- Oversees the delivery of centralized IT services to the enterprise
- Continually seeks to balance the benefits of the enterprise as a whole with the specific needs of the agencies
- Establishes operational and performance standards
- Reviews and monitors SLA‘s with agencies
- Develops transparent chargeback models
- Identifies enhancements to the Service Catalog
- Plans, leads and controls the operation of the State‘s IT Shared Services to ensure that short and long term financial and other agreed business targets are met

- Establishes and maintains a vision, strategy and program that enables the State‘s physical and data assets to be adequately protected
- Directs staff in identifying, developing, implementing and maintaining policies and processes to reduce risks
- Anticipates, responds to, monitors and develops mitigation procedures for enterprise security incidents

- Oversees the ~~-b~~usiness side” of the State‘s information assets
- Focuses on establishing and ensuring adherence to a framework for data governance policies standards and practices
- Formulates near-term and long-range strategies for sharing data across the enterprise and between agencies
- Defines required level of data consistency and quality to meet business needs

- Defines the IT architecture to align key technologies with the mission and priorities of the State
- Leads all aspects of developing and implementing a comprehensive technology strategy
- Collaborates with key stakeholders to identify opportunities to reduce overall IT costs, share IT services, and improve effectiveness of State operations through IT development of architectural solutions and promulgation of technology standards
- Promotes technology innovation in support of the State‘s business needs

Key New Roles and Responsibilities

	5 Director / Function Lead	6 Business Relationship Manager	7 QA Manager	8 Service Manager
Key responsibilities	• Leads and directs the planning and operations of their respective function • Ensures alignment of function operations to business needs and overall IT strategy • Ensures appropriate staffing levels • Optimizes cost of operations • Assists the COO in planning of overall functional and service strategy	• Acts as a key point of IT engagement for business customers • Identifies customer needs and ensure that the IT service provider is able to meet these needs as the business needs change over time • Brings innovation, ideas and clarity to business users • Coordinates with IT groups to develop optimal resolutions to business needs • Sets strategic direction and forward thinking for services to be provided to agencies	• Ensures consistency and quality in each functional operations • Maintains rigorous quality controls throughout the application project lifecycle helping to ensure both the right solution is delivered and the solution meets the quality standards • Collaborates with project teams, enterprise architects and customer stakeholders to confirm service requirements and acceptance criteria • Provides critical input to production-readiness reviews and post-implementation reviews based on monitoring of incidents during testing and deployment	• Manages the overall delivery of IT services and manages the SLA performance against the goals • Collaborates with the project teams on customer's goals, requirements, interests and helps project teams to remove roadblocks • Communicates chargeback policy, guidelines and methodology to customers • Meets regularly with customers to review the quality of service delivery • Maintains awareness of customer's current and future requirements and communicates any updates to service delivery model

Implementation Considerations

Function	Implementation Enablers	Key Risks
Office of Operations	• Strong chargeback capabilities and trained staff to support IT finance • Strong service management orientation and training to enable all staff to speak the same language about services • Gain support for the vision of the technology roadmap • Effective segregation and cooperation of duties between service planning and functional deli\very teams with clear lines of accountability	• Stage 2 of the organization will involve development of many new services and associated rates which can be complex to administer • Service management is a highly data driven process so the organization must be prepared to gather and use data to drive quality
Strategy and Planning Administration	• Creation of a clear roadmap and strategy to drive activities and decision making • Thorough understanding of the business and its direction • Broad knowledge of the key technology components that make up the current and future IT environment	• Need governance bodies to help oversee and support IT strategy in addition to this operational group • IT talent needs could be a significant draw on resources of this group during start up phases
IT Portfolio Management	• Effective implementation of IT Project and Portfolio Management Framework and Processes • Quickly standing up the function to support the rest of implementation • Governance groups in place to support portfolio direction setting	• Lack of governance groups can hinder decision the effectiveness of the ITPM and increase confusion as ITPM is implemented
Agency Relationship Management	• Training on customer engagement approach and processes (per the Customer Engagement Plan) • Continuous monitoring and correction of measures of success • Identification suite of core BRM tools and associated use cases • Close synchronization with the Project Management approach • Roles, responsibilities, and accountabilities are well defined and communicated to relevant stakeholders	• Achieving the right balance between service provider and advocate especially as relationships between staff and their respective agencies change • Lack of coordination across relationship managers can lead to creation of an environment where shared solutions may not be developed
End User Computing	• Knowledge transfer and training of service desk resources across all services • Process training (ITIL) for staff to ensure consistent customer service • Common tools, processes and end user entry points • Use of a single helpdesk and knowledge management tool • Standardization of hardware and software to streamline support needs	• The number of applications and tools dispersed across IT organizations creates a heavy service burden for a new organization • Provisioning without standards creates a heavy service burden

Implementation Considerations

Function	Implementation Enablers	Key Risks
Applications and Data Management	• Staff cross-trained on multiple-application development languages • Functional requirements are clearly written by business analysts • Continuous cross agency training / deployment for all application staff • Technical architecture to guide decision making • Quality assurance , capacity planning, processes and standards	• Current state environment requires steps to increase interoperability, standardization and reuse • Institutional knowledge of custom systems and lack of cross training perpetuates siloed environment • Resistance from staff to work across agencies
Data Center Operations	• Effective implementation of data center consolidation strategy • Standardization of methodologies for major types of services • ITIL/service management training to transition from technology silos to a managed services approach • Staff knowledge and training for services to be developed and provided	• Inability to cross train staff to provide services holistically • Maintenance of old and outdated data centers after consolidation
Network	• Enhanced controls over delegated spend • Ability to absorb radio group which has typically resided outside central network group • Staff knowledge and training for the new service model	• Perpetuating existing silos • Difficulty in training existing employees, or staffing new roles to support the various technologies
IT Security	• Development and adherence to security standards and policies • Communication and collaboration with the Infrastructure and Operations Group in order for consultative security management to be realized	• Lack of enforcement in governance bodies • Lack of decisions in policy making to act quickly to potential threats

Organizational Structure Recommended Policy Changes

Recommendations	Policy Area		
	1	2	3
Organization restructure – Consolidate OTM's separate ancillary organization into the new IT organization from the start to create a holistic and unified IT delivery model	■	■	■
Organizational Alignment: Allow for on-going organizational transformation using appropriate legislative language so that it does not tie the State IT department to certain internal structures and allows for evolution over time	■	■	
Key roles and responsibilities – Ensure the legislation enabling the roles and responsibilities of new Central IT organization allows for new key leaders	■	■	■
Office of the CIO – Consider elevating the role of the Office of the CIO to cabinet level role		■	
T.O.s that support organizational restructuring– Ensure designated T.O.s allow for appropriate staffing levels and support the organization in transition	■	■	
Job titles – Realign existing IT job titles for certain jobs to standard families and functions to better align with new organization, to allow for consistency across all IT staff and enable future flexibility		■	■
Continuous improvement – Set up a process to identify potential opportunities for continuous improvement after the organization structure change		■	■

Legend

1 Restructuring

2 Organizational Effectiveness

3 Organizational Management

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