



# **IT HUMAN CAPITAL MANAGEMENT STRATEGIC PLAN**

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## **1.0 EXECUTIVE SUMMARY**

# 1.0 EXECUTIVE SUMMARY

## 1.1 BACKGROUND – THE VALUE CHAIN AND VALUE PROPOSITION

The business and Information Technology (IT) environment provides context for the size, scope, and complexity of the transformation challenges and opportunities for the State of Hawai'i. The Executive branch of Government of the State of Hawai'i is a large \$11 billion dollar business enterprise with 18 departments and 41,000 employees serving 1.4 million residents/citizens with 204 services across 34 lines of business (LOBs). The concomitant IT organization is a \$157 million dollar (1.5%) enterprise with no central IT Department and 746 IT staff fragmented across 18 organizations that support over 700 legacy systems and applications and one LOB (six functions). Not surprisingly, Hawai'i is mired in ineffective and inefficient paper-based, manual business processes with old technology that does not promote interoperability, reliability, security, privacy, and maintainability. Therefore, Hawai'i is not positioned to capitalize on the promise of the 21st century's information age.

**“Information technology can expect to improve business processes about 10%. However, redesigning a process and then adding technology can improve the process up to 90%.”**

– Bill Gates, *Business @ the Speed of Thought*, 1999

The State of Hawai'i's Value Chain, shown in Figure 1 below, provides the State with an actionable framework for redefining the IT organization. There are 204 services/business functions across 34 LOBs in the portfolio that meet the State's goals. These outputs provide the real value to the organization. The value chain helps to identify opportunities for streamlining business processes, integrating technology, and realizing cost savings. The value proposition is simple: standardize the common shared services that can be used by all, and then optimize the mission-unique functions to serve citizens more effectively and efficiently.

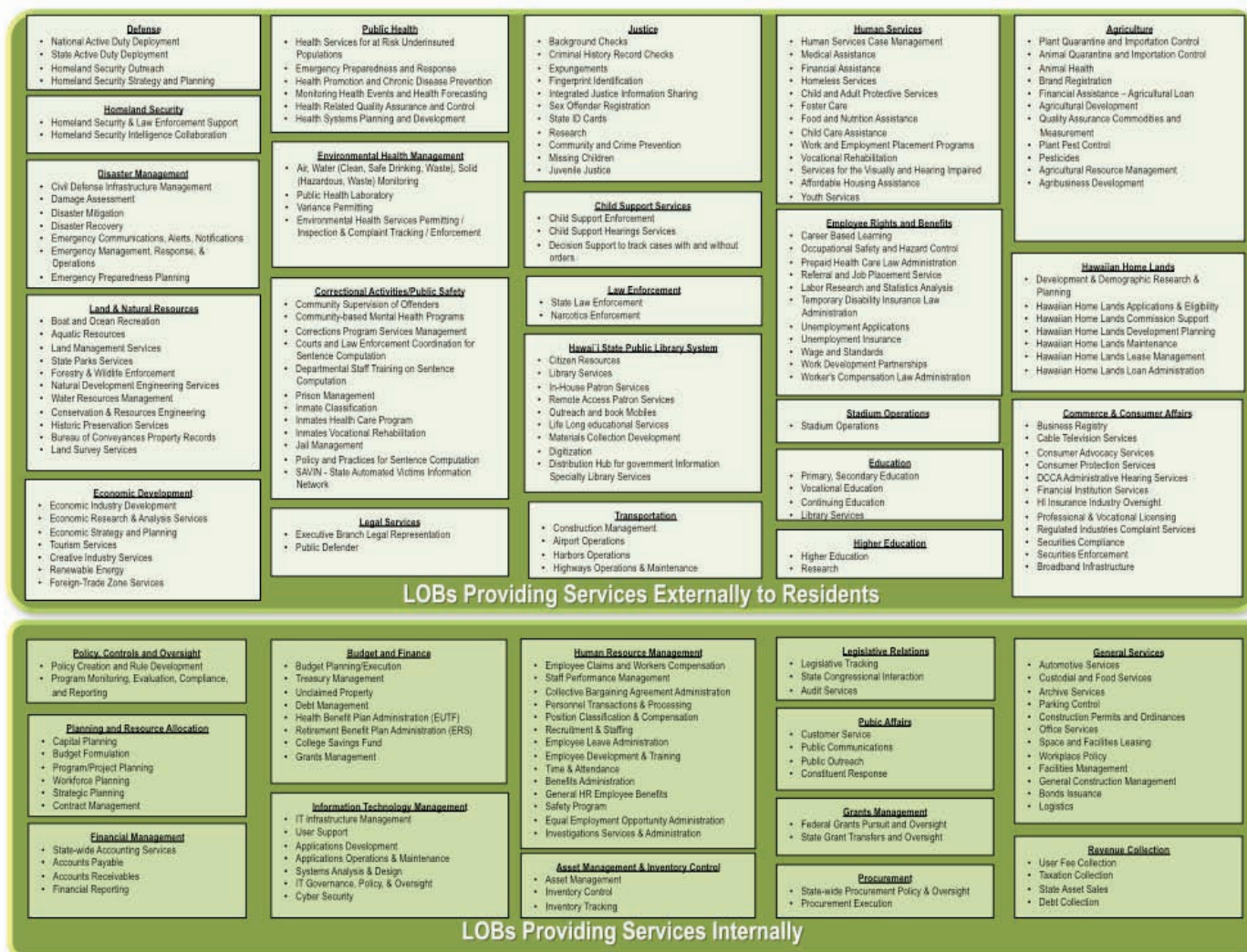


Figure 1: Hawai'i's Lines of Business

## 1.2 A CLEAR CASE FOR CHANGE AND TRANSFORMATION

In September 2011, the state completed and released the first-ever comprehensive assessment of its IT assets, policies, and procedures in a baseline report. This was completed over a period of four months (after the new CIO was in place). To complete the report, over 200 individuals from 18 departments, offices, and attached agencies were interviewed, and more than 1,500 pages of notes and background material were cataloged. The baseline report identified 204 business functions and services delivered by State government employees in 18 departments and over 700 IT applications currently in use. The report identified widespread symptoms of Information Technology/Information Resource Management (IT/IRM) challenges including: inefficient manual interfaces; minimal enterprise integration and sharing; narrowly focused federally funded solutions; limited use of IT/IRM to enable mission service delivery; the condition of aging legacy systems (20+ years old); the proliferation of all types of IT/IRM products and services; and little business process coordination or information sharing across departments (and programs). The symptoms are driven by three root causes: 1) no coordinating authority for managing information resources and technology across the State; 2) lack of cross-cutting business process re-engineering (BPR); and 3) deep cuts in resources and budget reductions in the State over the past decade (up to 50%).

The 20 key recommendations and findings in the baseline report provided the basis for the priorities, architecture, and projects required for change. Four key themes emerged:

- Enterprise focus for projects
- Establish enterprise governance
- Re-engineer business processes
- Strengthen technical infrastructure

The need for change/transformation was echoed in reports by the auditor: *Audit of the State of Hawai'i's Information Technology: Who's in Charge?* (2009), *Report of the Task Force on Reinventing Government* (January 2010), State of Hawai'i Information Technology Transition Document (February 2011), and the *Baseline Assessment* (September 2011).

## 1.3 NEW DAY VISION: NEW HOPE — NEW IDEAS — NEW WAY OF DOING BUSINESS AND IT

The Governor has envisioned a new day in Hawai'i with a *New Day Plan* that is committed to three waves of change that comprise a winning strategy for Hawai'i: growing a sustainable economy, investing in people, and transforming government.

**"Automating a mess yields an automated mess."**

- *Reengineering the Corporation*  
by Michael Hammer & James Champy (1993)

There is also a new sense of urgency in Hawai'i—leapfrog to the front with a *Business and IT Transformation Plan* that seeks to reorganize government while striving for world-class excellence with Aloha. The plan is to do a comprehensive make-over of business and IT in several phases over several years.

This effort will:

- Operationalize the New Day Vision into an actionable, measurable plan
- Help State agencies publicize and manage key activities
- Demonstrate State agencies' responsiveness to State legislators and to the congressional delegation in Washington, D.C.
- Result in one cohesive statewide, long-range vision that drives the business and IT improvements
- Educate the public about State agency unity and progress in transforming government



# 2.0 INTRODUCTION

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## 2.1 PURPOSE

The *State of Hawai'i IT Human Capital Management Strategic Plan* establishes the guidelines and principles that will define the roadmap to establish a unified and progressive IT organization for the State of Hawai'i. The Plan defines the stages that will be taken to implement IT leadership and create and build on a foundation of strategic and thoughtful steps that combine the goals of government and the community. The Plan is not just about technology—the goals, objectives, and performance measures to be established will guide the use of information services in support of the State of Hawai'i's diverse missions and business objectives. This plan sets the strategy for implementing the vision and describes the recommended next phases to establish an information-enabled enterprise that benefits all the citizens, stakeholders, and employees of the State of Hawai'i.

The purpose of this plan is to present the future state of the State of Hawai'i's IT organization and how it can best leverage IT to assist agencies in the effective, efficient, and convenient delivery of programs and services to the residents and businesses of the State. As the implementation phases roll out, the Plan is expected to evolve and adjust based on discovery and through coordination with the other strategies such as the *Enterprise Architecture (EA) Sequencing Plan*.

## 2.2 SCOPE

The *State of Hawai'i IT Human Capital Management Strategic Plan* has been developed to ensure that the necessary information services are appropriately planned, invested in, and implemented based on a future information service environment that must be secure, well-managed, and delivered by a highly skilled and trained workforce.

To define this Plan, first the As-Is state of IT in the State of Hawai'i was examined. Before new technologies can be implemented, it makes sense to re-examine and analyze the processes in use. Some of these processes were developed before the current IT capabilities were available and before the State of Hawai'i experienced its current growth and diversification. Care will be taken throughout the system reorganization efforts to incorporate process improvements and assure that system support and development is done in a way that achieves efficiency and promotion of business goals. This transformation effort has a set of objectives and performance metrics that will be used to assess the success of the transformation and the continuity of the reorganization effort going forward: functional organization, human capital management, implementation strategy, and funding considerations.

## 2.3 DOCUMENT OVERVIEW

The *State of Hawai'i IT Human Capital Management Strategic Plan* describes the strategy, decisions, and executable roadmaps that will be addressed in the next phase of this initiative.

The first part of this document is a review of the current environment and the strategic goals to be used to define the new environment. Several phases will be implemented to build the foundation for the ultimate functional design and organizational structure that is described along with the checks and balances that will be put in place to ensure its integrity and efficiency.

The next part of the document covers human resource considerations, especially the highly researched and defined reclassification strategy. The reclassification plan is built on the past efforts of two initiatives to address IT in the State of Hawai'i. Those efforts also defined the importance of recruitment strategy. The results are also leveraged in addressing staff recruitment and professional development plans that will optimize the steps taken to develop a world-class IT department. All of these items, as well as business and EA strategies, are utilized in the definition of the timelines and considerations for implementation of the plan.

The intended audience for this document is not limited. It is the goal of those involved with the State of Hawai'i IT transformation initiative to be transparent and welcoming to all contributors and stakeholders.

## 2.4 ASSOCIATED DOCUMENTS

- *State of Hawai'i Business Transformation Strategy and IT/IRM Strategic Plan, 2012*
- *Baseline of Information Management and Technology and Comprehensive View of State Services* (referred to as the Final Report), prepared by SAIC
- *Federal Segment Architecture Methodology (FSAM)*





# 3.0 BACKGROUND

# 3.0 BACKGROUND

## 3.1 CURRENT AS-IS ENVIRONMENT

The current IT environment is characterized by widely distributed and duplicated resources, non-integrated systems, non-standardized enterprise systems (e.g., email, purchasing, etc.), and the lack of vision and leadership. There are 18 compartmentalized departments with siloed IT efforts and limited centralized IT functions. Fundamental objectives and service levels are undefined. Talented resources are hard to obtain and retain. As a result, costs, efficiencies, and internal and external customer service have suffered.

The 2009 Audit Report describes the State's IT environment in these terms:

- No clearly defined roles, duties, and responsibilities for IT leadership
- A focus that is more operational rather than strategic
- Concentrates on the maintenance of the State's data center and computer networking, leaving departments without guidance and direction
- Does not maintain up-to-date technology standards
- Does not enforce and monitor compliance with technology standards
- Has not addressed nor provided guidance for critical processes such as disaster recovery
- Does not offer relevant services and support to effectively assist departments in carrying out their missions
- Does not ensure that IT investments are cost effective, optimally utilized, adequately planned for future growth, or have the operational flexibility to easily adapt to changing requirements

## 3.2 STRATEGY FOR IMPLEMENTING THE VISION (BEST PRACTICES AND INDUSTRY STANDARDS)

It was agreed that a strategy and implementation plan would be created utilizing best practices and industry standards. CIOs from other states who executed similar consolidation efforts were contacted for their recommendations and guiding principle solutions.

Key concepts identified to guide the initiative included the following:

- CIO leadership strategy
- Implementation strategy
- IT/IRM and business transformation strategy

### 3.2.1 CIO LEADERSHIP STRATEGY

The CIO will provide IT/IRM leadership through the following priorities:

- Develop, implement, and manage IT/IRM governance.
- Establish and enforce policies and standards.
- Create architectural requirements.
- Provide statewide IT/IRM investment oversight.



## 3.2.2 IMPLEMENTATION STRATEGY

The initiative will follow a widely accepted and proven Performance Improvement Life Cycle (Figure 2) that the U.S. Federal Government Office of Management and Budget (OMB) utilizes to allow Federal agencies to assess, report, and advance their enterprise architecture activity and maturity. While originally identified for EA management, the ideals and approach of this process have been adopted and incorporated into every aspect of technology and functionality as a best practice for assessing, designing, and implementing change.



Figure 2: Performance Improvement Life Cycle

Each phase of the life cycle is comprised of integrated processes that, together, transform the defined top-down strategic goals and bottom-up system needs into a logical series of work products designed to achieve strategic results. The Performance Improvement Life Cycle is proven to provide the foundation for sound information and IT management practices, end-to-end governance of IT investments, and alignment of IT investments with an agency’s strategic goals.

Phase	Description
Architect	Define current (baseline) and future (target) states, and plan to transition from the current to the future state, with a focus on strategy, performance improvements and IT investments.
Invest	Performance improvement opportunities identified during the Architect process are addressed through portfolio investment and tactical solutions. This step defines the implementation and funding strategy for individual initiatives that are part of the overall Plan.
Implement	Projects are executed and tracked throughout the system development life cycle (SDLC). Achievement of the program/project plan within acceptable variance for schedule and budget is measured and reported through Earned Value Management (EVM) process. Performance is measured to determine how well the implemented solutions achieve the desired outputs and mission outcomes, and provide feedback to all invested parties.

### 3.2.3 IT/IRM AND BUSINESS TRANSFORMATION STRATEGY

The strategy for improving and transforming IT/IRM for the State of Hawai'i will focus on business transformation while incorporating the guiding principles surrounding human resource capital management. Business Transformation is a change management strategy that aligns three separate initiatives: people, process, and technology.

Figure 3 identifies how these initiatives are brought together in the process. CIOs build effective IT/IRM through transforming resources and management practices.

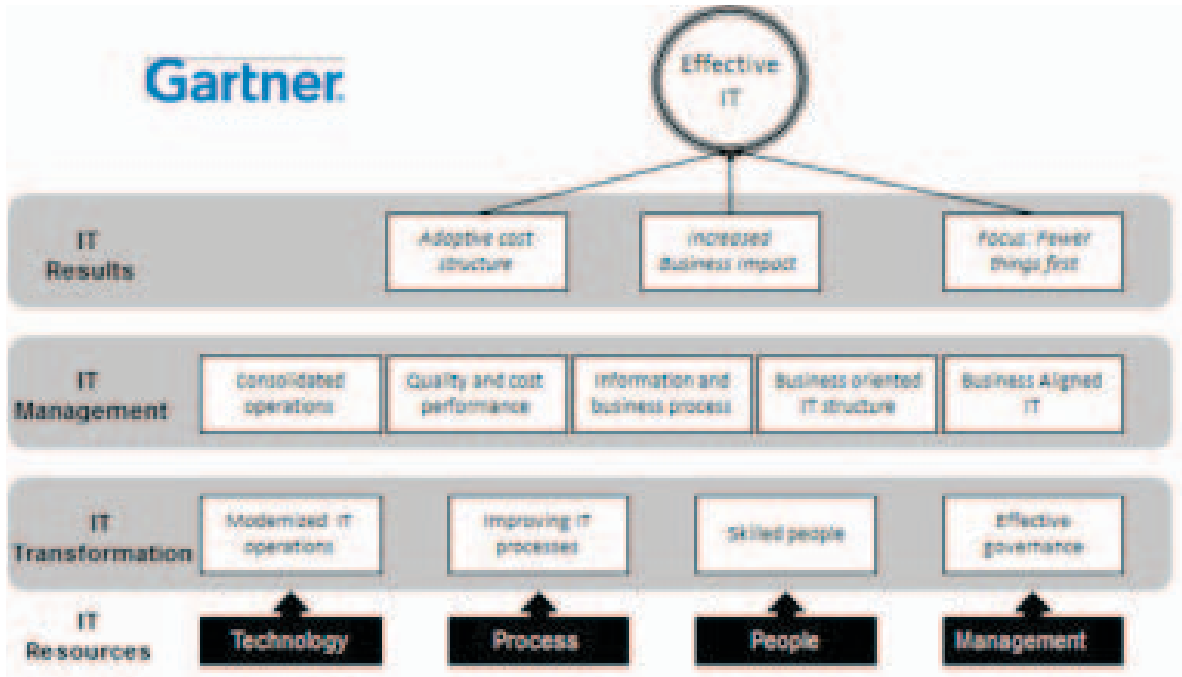


Figure 3 - Business and IT/IRM Transformation Strategy



**4.0**

**PROPOSED FUTURE INFORMATION  
TECHNOLOGY ORGANIZATION**

# 4.0 PROPOSED FUTURE INFORMATION TECHNOLOGY ORGANIZATION

A new, consolidated IT organization will be designed to address the current technology management challenges faced by the State of Hawai'i by:

- Centralizing maintenance of the State's data center and computer networking incorporating LOB applications
- Defining and maintaining up-to-date technology standards
- Enforcing and monitoring compliance with technology standards
- Establishing and providing guidance for critical processes such as data backups and disaster recovery
- Offering relevant services and the creation of enterprise solutions necessary to support and effectively assist departments in carrying out their missions
- Establishing a customer service environment and technological expertise that instills department managers' confidence in the Department of IT's (DoIT's) ability to provide support for their applications
- Ensuring that IT investments are cost effective, optimally utilized, adequately planned for future growth, and have the operational flexibility to easily adapt to changing requirements

## 4.1 MISSION AND VISION OF THE DEPARTMENT OF INFORMATION TECHNOLOGY (DOIT)

The DoIT mission: To assist agencies in the effective, efficient, and convenient delivery of programs and services to the public through business transformation and IT modernization.

The DoIT vision is a State where:

- The public engages with an open and transparent government.
- State employees, citizens, and businesses have convenient and secure access to reliable information.

- Government processes are streamlined, integrated, and implemented to meet the public's service expectations.
- IT and information capabilities align and support business needs, strategies, and outcomes.
- Innovation and continuous improvement are fostered.

## 4.2 GUIDING PRINCIPLES

The initiative's guiding principles are clear and well defined:

- People first - *Kuleana*:
  - Each job and role is valued.
  - Everyone is accountable; everyone is responsible.
  - Change management will be essential.
- Collaborative, open, and transparent - *Laulima*:
  - Teamwork is achieved across all levels of staff among departments and between branches of government.
  - Central oversight is accomplished with local presence and agility.
- Effective and efficient - *Kūlia i ka Nu'u* (strive for the summit):
  - The organization is built to last and adaptive to change.
  - Best practice frameworks are followed.
  - There is a phased implementation approach.

## 4.3 ROADMAP TO CONSOLIDATION

The remainder of this document lays out the strategies and implementation timeline for instituting a new, consolidated IT organization. A high-level view of the strategic roadmap is described in this section. Several phases will create the progression and interim structure that are the necessary foundation for building the new, unified organization. Definition of these phases includes the thoughtful consideration of impact on stakeholders and identification of realistic task durations. The ability to correctly identify all affected personnel and organizations was key to defining the appropriate timeline. The goal is an effective implementation without a negative interruption to people, processes, and technology. A three-phased approach was designed (see Figure 4 below).

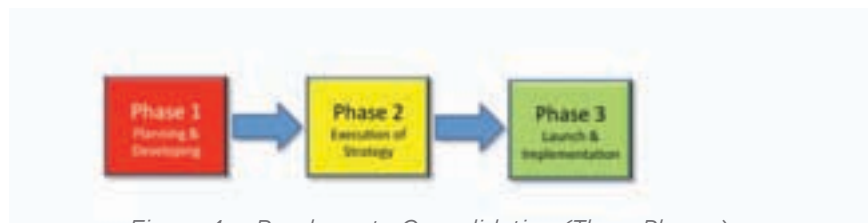


Figure 4 - Roadmap to Consolidation (Three Phases)

**Phase 1**—Planning and Developing; setting the groundwork:

- Assembling a key team of IT resources
- Identifying requirements
- Planning and strategizing courses of action
- Defining the technology framework
- Verifying strategies
- Obtaining approvals and sign-offs

**Phase 2**—Execution of Strategy; laying the foundation:

- Key positions filled
- Unification of efforts for existing and new IT resources
- Efforts cornerstoned and staged from ICSD
- Required legislation launched
- Teams assembled to work on key initiatives with the Department of Human Resources Development (DHRD), DNF, and the unions
- Funding procured
- Budget established

- Technology framework launched
- Program Management established
- Customer service structure in place
- Staffing finalized
- Detailed close-out steps and processes identified and are as complete as possible

**Phase 3**—Launch and Implementation; finalizing the structure:

- Approval of legislation
- Completion of close-out steps and processes
- Establishment of new, consolidated DoIT

These phases and their schedule have been defined to create the most effective path toward establishing a consolidated, progressive IT Department, the State of Hawai'i DoIT. The complete journey of the initiative and the timeframes of the key steps that have, and will, be taken are shown in Figure 5 below.

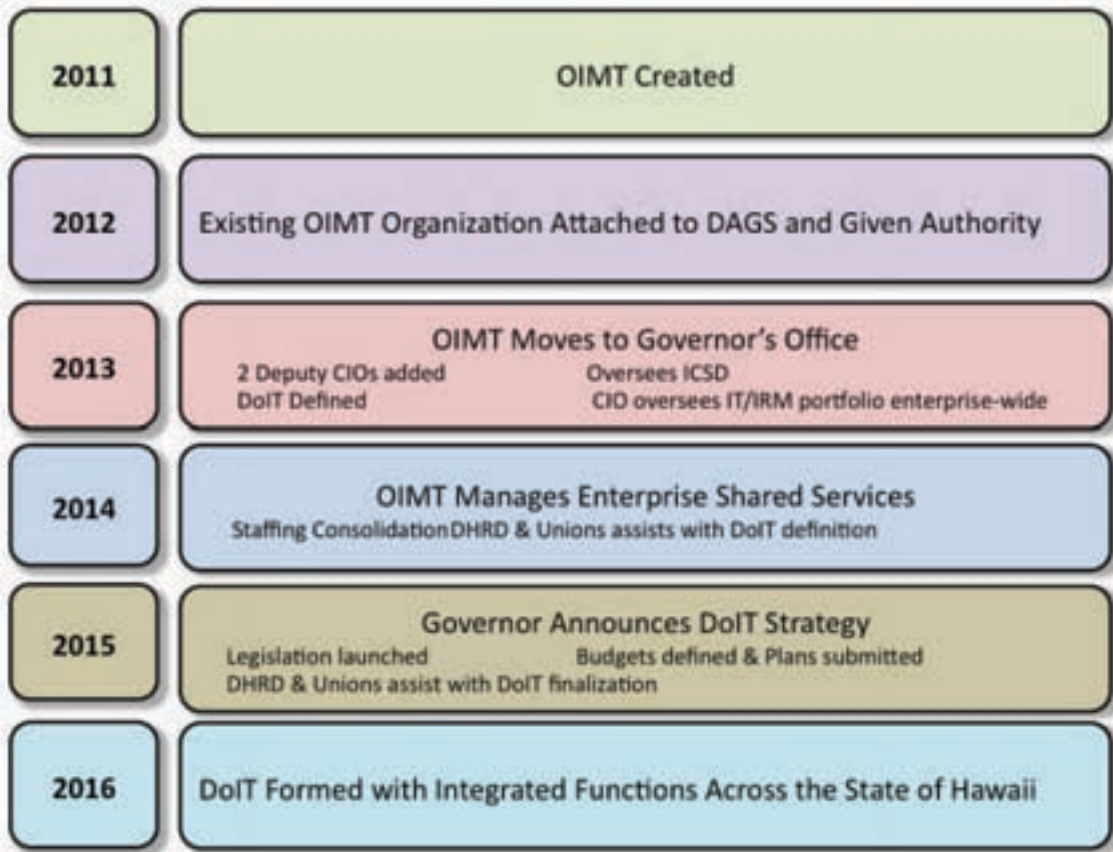


Figure 5: Timeframe for Consolidation and Centralization Steps

The details for execution of this vision of consolidated IT and centralized IRM are described on the following pages.



## **5.0 ORGANIZATIONAL OVERVIEW**



# 5.0 ORGANIZATIONAL OVERVIEW

In this section, the organizational approach and strategy for defining the new DoIT organization is established. Two key areas are addressed:

- Functional design
- Roles, responsibility, accountability, and authority

This overview will be the blueprint for the next phases of this initiative, and the best roll-out methods for achieving the guiding principles surrounding human resource capital management

will be used to direct the details of the implementation. The organizational design must align with the three interconnected and focused goals: people, process, and technology.

## 5.1 FUNCTIONAL DESIGN

The first building block of the IT Human Capital Management Strategic Plan is to establish the functional design that would best meet the culture, environment, and goals of the State. The consolidation of IT departments of several states were referenced and analyzed in order to follow best practices and incorporate lessons learned. Several models were proposed and modified in the course of this exercise, always keeping the guiding principles in mind during the decision process. The results of these deliberations are illustrated in Figure 6.

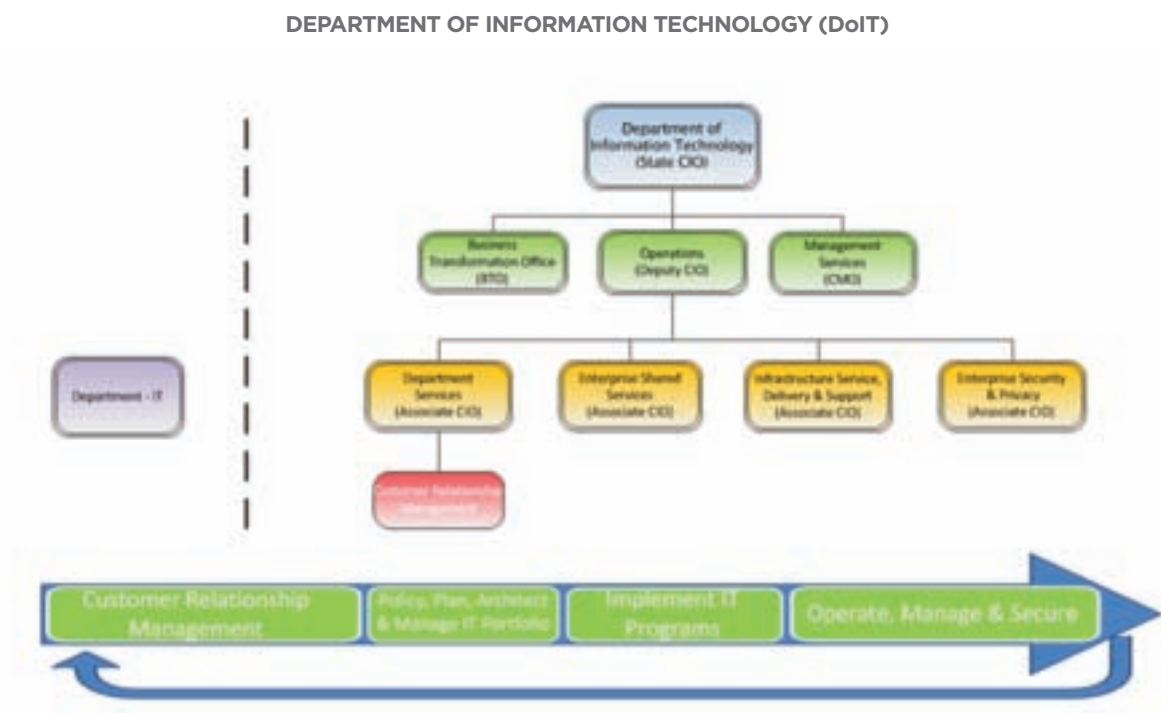


Figure 6: State of Hawai'i IT Reorganization Functional Design and Technology Life Cycle

The functional design was created based on the Life Cycle Development Phases; it also emphasizes customer service. The philosophy of support and delivery resulted in maintaining LOB IT resources within the departments, but designing a customer relationship function with the IT Department to support the departmental resources in their daily responsibilities and support the departments in their overall IT requirements and enterprise system needs.

Three key leadership areas within the new department address:

- Business transformation
- Operations
- Management services

Department/Office	Description
<b>Department IT</b>	<ul style="list-style-type: none"> <li>• Supports and develops mission-unique applications will remain within the departments.</li> <li>• Includes planning, life cycle strategies, business analysis, documentation, training responsibilities, and any other unique technical support that may be required</li> </ul>
<b>Department of Information Technology (State CIO)</b>	<p>The DoIT, led by the CIO, is responsible for overseeing the IT/IRM plans that will govern IT for the State of Hawai'i. The CIO will oversee information technology governance via the Executive Leadership Council, CIO Council, and the IT Steering Committee.</p>
<b>Business Transformation Office (BTO)</b>	<p>The BTO, led by the Business Transformation Officer, will lead and advance departments in business operations and technological processes.</p> <p>Business and Process Analysis: The mapping and analysis of existing business processes to identify opportunities for improvement either through functional reengineering, application of automated tools, or software solutions.</p>

<i>Enterprise Architecture (EA)</i>	<ul style="list-style-type: none"> <li>• Develop and maintain an EA roadmap for the State of Hawai'i.</li> <li>• Develop and implement processes to review and ensure that projects and initiatives are aligned to and comply with the enterprise architecture requirements.</li> </ul> <p>Open Data Standards: The support and facilitation of the interoperability and data exchange among different software, products and services.</p> <p>Systems Integration: Develop, implement, and support the software that is used to connect and enable communication between software systems and components.</p>
<i>Enterprise Program Management Office (PMO)</i>	<p>Design, implement, and measure performance of Program Management Methodology, Tools and Reporting.</p> <p>IT Policy, Procedures, and Standards: Define and implement the rules and framework to be followed enterprise-wide (COBIT, ITIL, SDLC, and PMP).</p> <p>IT Performance Management Framework: Design, implement and publish performance reporting (Dashboards and Metrics)</p>
<i>Program Management Office (PMO)</i>	<ul style="list-style-type: none"> <li>• Develop and implement Project Management processes and manage compliance to them</li> <li>• Monitor the project portfolio to maximize performance and track interdependencies (Development, Modernization, and Enhancement Projects [DME])</li> </ul> <p>Business Process Improvement: The mapping and analysis of existing business processes to identify opportunities for improvement either through functional reengineering, application of automated tools, or software solutions.</p>
<i>Portfolio Management</i>	<p>This group will be responsible for:</p> <ul style="list-style-type: none"> <li>• IT budget and capital planning</li> <li>• IT procurement/acquisitions services</li> <li>• IT asset management</li> <li>• IT/IRM tactical planning</li> <li>• Call for IT/IRM projects (project implementation selection)</li> <li>• EA planning and execution</li> </ul>

Department/Office	Description
<b>Management Services (CMO)</b>	The Management Services Office, led by the Chief Management Officer, will establish, monitor, and enforce guidelines for compliance, change management, business services, budget, and acquisitions. This office is also responsible for management of communications, IT personnel, and DoIT administration.
<i>Compliance Management</i>	The definition, implementation, and enforcement of processes to ensure compliance to established operational guidelines, requirements and/or legislative stipulations.
<i>Organizational Change Management</i>	<ul style="list-style-type: none"> <li>• Defines and executes change control processes to govern projects, initiatives, and implementations for the purpose of change management, effective change roll out, and to minimize disruption to IT services or business processes</li> <li>• Processes define the identification of change factors, analysis, prioritization, authorization, implementation plan design, risk identification, testing, documentation, and roll out—all in a managed and structured delivery</li> </ul>
<i>Business Services Office</i>	Responsible for DoIT's fiscal and budget management, DoIT acquisition; and Business Continuity (development and implementation of processes to protect the IT environment, ensure delivery of established IT service level agreements, and protect business continuity).
<i>Personnel and Administration</i>	<ul style="list-style-type: none"> <li>• Execute departmental administration responsibilities</li> <li>• Develop and implement personnel/IT training (user, applications, IT, professional development)</li> </ul>
<i>Communications/Legislative Relations</i>	Responsible for legislative relations, communications and outreach, public information/Freedom of Information Act (FOIA), and grant writing.
<b>Operations (Deputy CIO)</b>	<p>The Operations Office, led by the Deputy CIO, will be responsible for the development, implementation and management of the operational areas in the IT Department. These include:</p> <ul style="list-style-type: none"> <li>• Department Services</li> <li>• Enterprise Shared Services</li> <li>• Infrastructure Service, Delivery, and Support</li> <li>• Enterprise Security and Privacy</li> </ul>
<b>Department Services (Associate CIO)</b>	The Department Services Office, led by an Associate CIO, will manage the IT relationship with all of the State's departments. The office is also responsible for the overall management of the DoIT portfolio.
<i>Customer Relationship Management</i>	The DoIT's LOB representatives will be designated to support the departments' IT and enterprise application requirements and needs. They will work to define the customer view and identify what IT can do to meet and improve business performance. Service Level Agreements (SLAs) will be established, monitored, and managed to assure customer satisfaction. DoIT LOB representatives will share information and communicate to ensure that cross-jurisdictional requirements between departments' LOBs are communicated and addressed appropriately.

Department/Office	Description
<b>Enterprise Shared Services (Associate CIO)</b>	The Enterprise Shared Services Office, led by an Associate CIO, will manage enterprise applications and the development and implementation of applications for the rest of the State’s departments.
<i>Enterprise Applications</i>	<ul style="list-style-type: none"> <li>• Research, development, testing, implementation, evaluation, and management of enterprise applications (e.g., ERP, geographic information system [GIS], Collaboration, and others) and the solutions resulting from management of the Technology Refresh Plan (e.g., upgrades, migrations, new technology)</li> <li>• Electronic records management and execution of business intelligence and analytics</li> </ul>
<i>Departmental Application Support</i>	Department application development and implementation.
<b>Infrastructure Service, Delivery and Support (Associate CIO)</b>	The Infrastructure Service, Delivery and Support Office, led by an Associate CIO, will manage and support the technologies of the State of Hawai‘i.
<i>Server and System Management</i>	Storage Management, System Administration, Database Administration, Departmental Application Support, Enterprise Application Support
<i>End User Computing Management</i>	Support of laptops, desktops, mobile and smart phones.
<i>Data Center Management</i>	Facilities Management, data backups, and disaster recovery
<i>Service Management</i>	Service/Help Desk, user administration, network operations center
<i>Telecommunications Management</i>	Networking (e.g., telecommunications, ISP, TIC), voice and video, land mobile radio, wireless
<b>Enterprise Security and Privacy (Associate CIO)</b>	The Enterprise Security and Privacy Office, led by the Associate CIO, will define, develop, implement, manage, and monitor the policies and procedures surrounding technological security for the State of Hawai‘i, as well as establish, monitor, and enforce guidelines.
<i>Security Operations</i>	Security policy and procedures, security standards, infrastructure security, applications security, security compliance
<i>Cyber Security Controls</i>	e-Discovery (electronic format information requested for litigation), continuous monitoring, cyber security operations center, information assurance (security and accessibility)
<i>Identity and Access Management</i>	Develop, implement, and enforce identity and credential access management following industry best practices.

## 5.2 ROLES, RESPONSIBILITY, ACCOUNTABILITY, AND AUTHORITY

### 5.2.1 DOIT CHECKS AND BALANCES

Checks and balances must be considered in any organizational design, but this is even more important for the DoIT. DoIT is responsible for the health and advancement of the data, key business systems, and support technology that are required to keep the State of Hawai'i departments running and progressing. A description of the governance and structure that will be put in place is described below and illustrated in Figure 7.

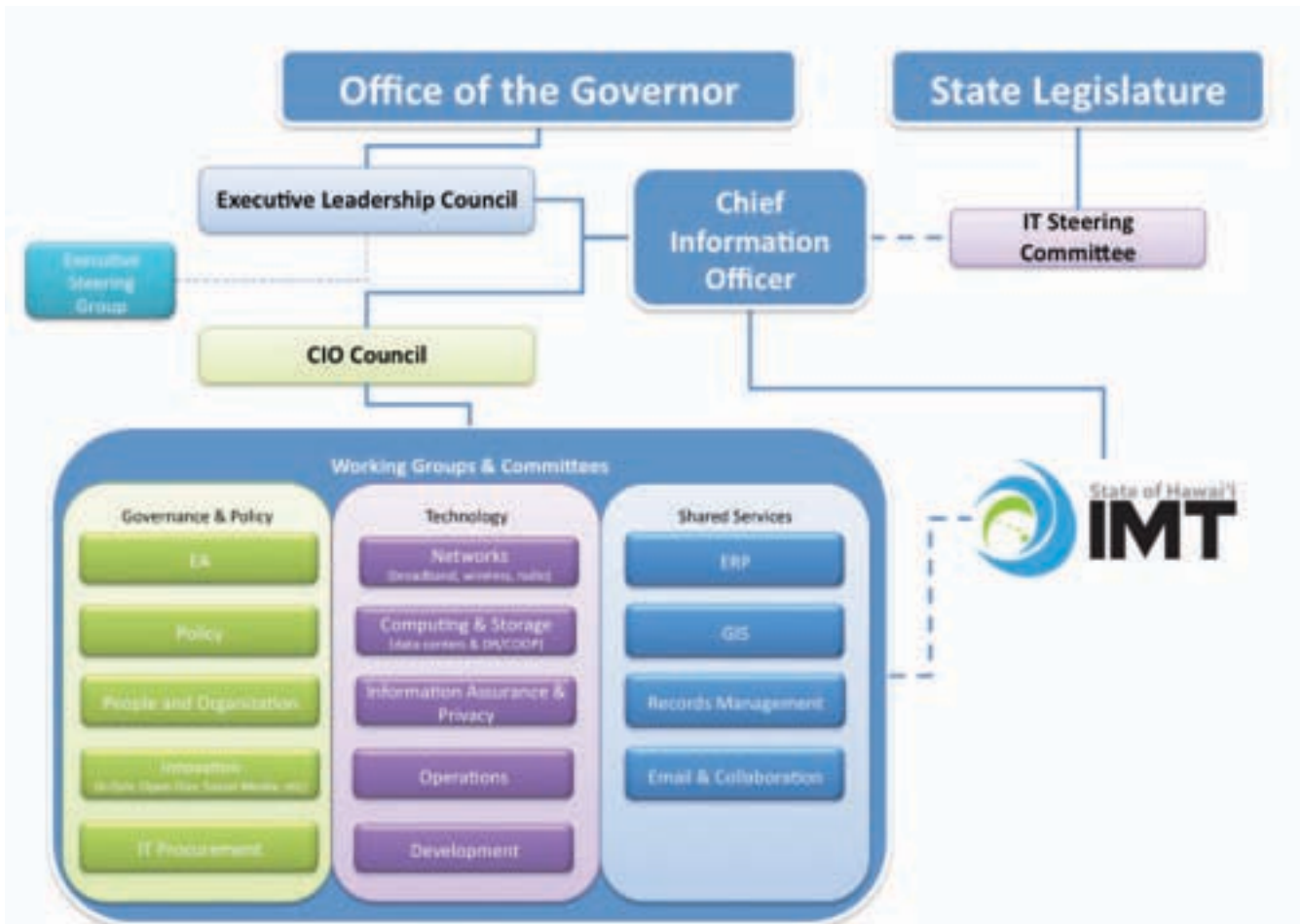


Figure 7: DoIT Structure

Role	Responsibility
IT Steering Committee	Assist the CIO in developing the State’s IT standards and policies
Executive Leadership Council	Implement a governance process to review and rank project requests and IT investments to determine which are best suited to meet the State of Hawai‘i’s needs. Oversight of the short-term and long-term business plans and budgets of all departments in State of Hawai‘i government.
CIO Council	Composed of Department CIOs that are responsible for the selection, control, and evaluation of IT investments. They will advise the CIO on critical IT matters, assess IT initiatives in the budget review process, and conduct post-implementation reviews of completed projects to benefit from lessons learned.
Chief Information Officer (CIO)	<ul style="list-style-type: none"> <li>• Oversees all IT functions</li> <li>• Develops and executes short- and long-term IT strategic plans</li> <li>• Develops and executes short- and long-term IRM strategic plans</li> <li>• Prepares annual IT budget</li> <li>• Participates in the Executive Leadership Council (ELC)</li> <li>• Leads the CIO Council (CIOC)</li> <li>• Chairs the IT Steering Committee</li> </ul>
Deputy CIO	<ul style="list-style-type: none"> <li>• Establishes and enforces the Enterprise PMO methodology and tools, and reports and manages the PMO</li> <li>• Manages the selection, control, and evaluation of IT investments</li> <li>• Develops, maintains, and facilitates implementation of a sound and integrated IT architecture</li> <li>• Assesses, improves and implements IRM processes</li> <li>• Ensures that projects and initiatives are managed in an efficient and cost-effective manner</li> <li>• Ensure the integrity, availability, and confidentiality of DoIT systems and their data</li> <li>• Assesses technical personnel and ensures that a robust workforce of well-qualified IT professionals is maintained</li> </ul>
Business Transformation Officer	<ul style="list-style-type: none"> <li>• Responsible for business process improvement and reengineering</li> <li>• Establishes and enforces Enterprise PMO methodology, tools, and reporting</li> <li>• Ensures compliance to EA policies</li> <li>• Establishes and enforces IT policy, procedures, and standards including COBIT (framework for IT management governance), ITIL (aligns IT services with business needs), the System Development Life Cycle [SDLC] processes, and the Project Management Plan [PMP])</li> <li>• Defines and produces dashboards and metrics to measure the performance of DoIT</li> <li>• Ensures the efficient integration of enterprise systems</li> </ul>
Chief Management Officer	<ul style="list-style-type: none"> <li>• Oversees administration of the DoIT</li> <li>• Establishes, oversees, and ensures compliance with processes and standards that verify and validate that requirements and specifications are met for services and systems</li> <li>• Defines and manages Business Continuity policies</li> <li>• Defines and monitors organizational Change Management</li> </ul>



## **6.0 ORGANIZATIONAL CHANGE MANAGEMENT**

# 6.0 ORGANIZATIONAL CHANGE MANAGEMENT

The consolidation of IT resources will bring into play several very important endeavors related to the driving component of this initiative—people. Considerations include:

- Organizational change management—promoting reassurance and inclusion
- Reclassification—implementing freedom and fluidity of process
- Professional development—arming for success
- Recruitment strategy—search for missing pieces



These areas address people and process, two of the three keys to IT excellence shown in the diagram.

This widely accepted paradigm stresses that each of these areas must be addressed when targeting organizational improvement. While the strategies and direction of technological improvements is a big part of this initiative, the targeted first steps surround the functional organization of IT staff, the processes surrounding their advancement, and the opportunities that will be made available to them.

## 6.1 OVERCOMING CHALLENGES WITH ACTIVE CHANGE MANAGEMENT

The majority of challenges that are faced are not related to technology or process. Rather, the most important and critical challenges are based on the human impact of change. The transformation will have very tangible effects for many people. To ensure that the uncertain and uncomfortable nature of change does not derail the project, a rigorous change management approach will be developed (illustrated in Figure 8 below). Adopting a proactive approach to helping people transition allows for quicker identification of roadblocks, fosters widespread support, and builds the momentum needed to drive the realization of the vision.

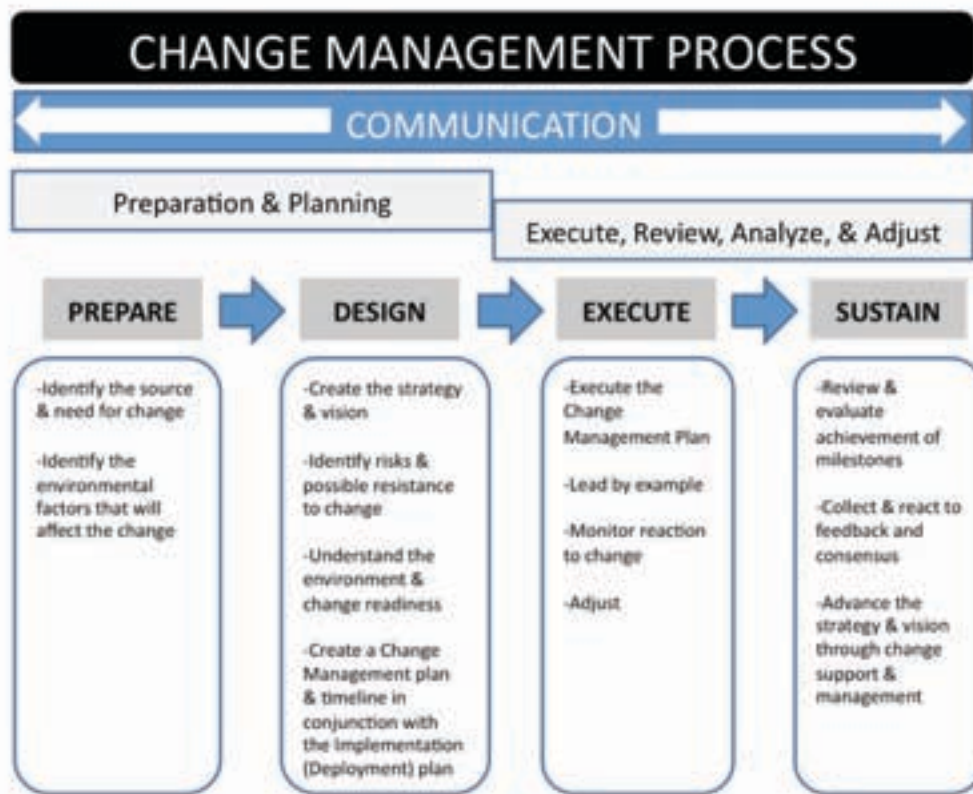


Figure 8: Active Change Management



## 6.1.1 ORGANIZATIONAL CHANGE MANAGEMENT

Organizational Change Management (OCM) encompasses all activities aimed at helping an organization successfully accept and adopt new technologies, strategies, and ways to serve its customers. Effective change management enables the transformation of strategy, processes, technology, and people to enhance performance and ensure continuous improvement in an ever-changing environment. A comprehensive and structured approach to organizational change management is critical to the success of any project that will bring about significant change.

### 6.1.1.1 THE CYCLE OF CHANGE

Change is never-ending. It is unavoidable, continuous, and challenging. However, each generation of change has a clear beginning and end, much like the beginning and end of a technology generation. The diagram in Figure 9 simplifies the complexities of change by dividing a change generation into four phases.

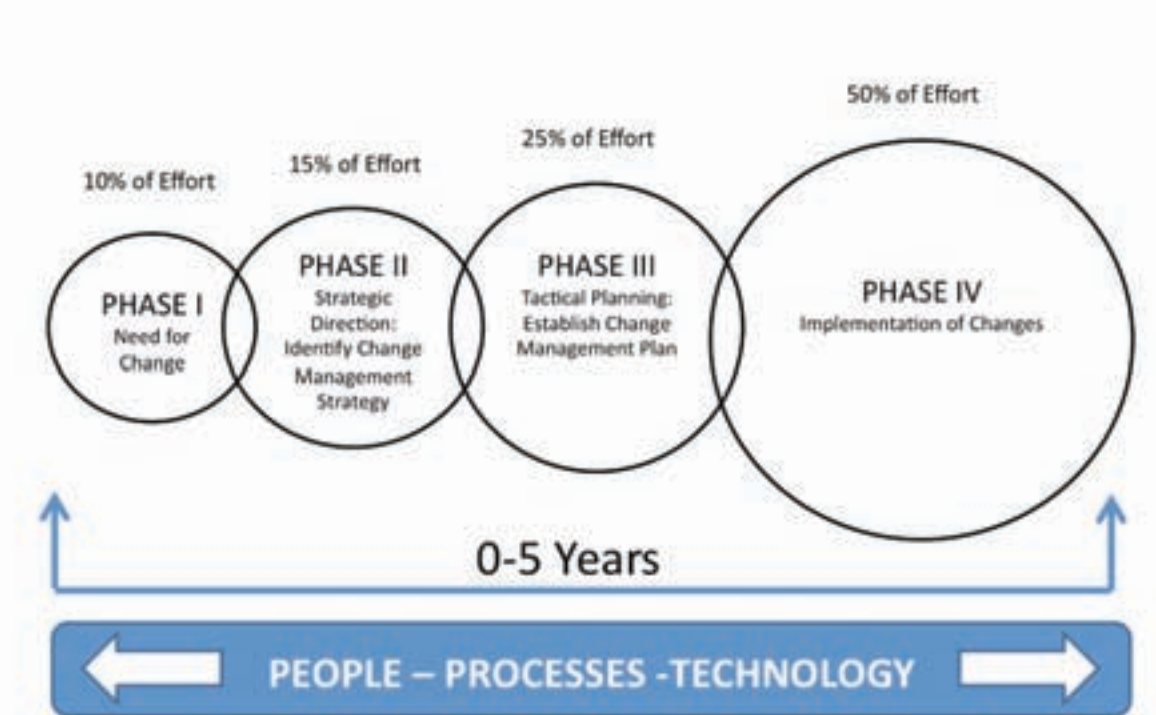


Figure 9: The Cycle of Change

**Phase I: Need For Change.** Change begins when a vision for how things could be better is identified. While Phase I is about 10% of the effort of a change initiative, relationships formed during this phase are crucial to the ultimate success of the project. In Phase I, the goal is changing the underlying belief systems that determine current performance and block performance improvements. In this phase, the emphasis is working to convince others that change is necessary.

**Phase II: Strategic Direction: Strategy for Change.** Once everyone believes that change is necessary, they usually ask, “How will we make the change?” The answer is that the organization needs an enterprise-wide strategy for change, and each organizational segment needs a subordinate strategy that is tailored to its unique operations and congruous with the enterprise strategy. Developing an enterprise-wide strategy for change with supporting agency/program strategies is about 15% of the duration of a typical change management cycle.

**Phase III: Tactical Planning—Coordinating the Change Management Plan with the Implementation (Deployment) Plan.** This phase involves coordinating the steps that will be taken as the definition of the Change Management Plan moves forward, and how that plan will be coordinated with the Implementation (Deployment) Plan that is being defined during this phase. Defining the details will be expected to take 25% of the change management cycle.

**Phase IV: Implementation of Change.** The bulk of the time and expense, about 50%, of a change management initiative lies in implementation. Most significant organizational changes will impact business processes, technologies, and the workforce simultaneously. From vision to implementation, the change cycle for this initiative will have the same duration as the expected implementation cycle, a full-scale implementation of five years.

## 6.1.1.2 THE CHANGE MANAGEMENT PROCESS

John Kotter's book entitled *Leading Change* divides the process of change into the eight stages illustrated in Figure 10.



Figure 10: Eight Stages of Change Management

These stages have been adapted to meet the State of Hawai'i's culture and the goals of the initiative. As the figure shows, the process of change begins when the need for change is identified, and the change is completed when it becomes a habit that is "anchored in the culture." Successive stages of the change process cannot begin until the status of the preceding stage is at least yellow.

The importance of proceeding through the steps in order cannot be understated. Many organizations feel the need to show results, to get past the planning stages and into action. However, unless the case for change has been thoroughly made and an enterprise-wide sense of urgency exists, Kotter stresses that the action will tend to be confined to the small group of true believers. The rest of the organization will resist the change, either due to complacency, perceived self-interest, or cynicism. Rushing ahead without laying the proper foundation for success is a sure-fire plan for failure.

Enterprise change adds a new dimension to the eight stages of change. Specifically, it is typical for the organizational element who originally established the sense of urgency for change to be a few stages ahead of other organizational elements with respect to the change process.

### Stage 1: Establish a Sense of Urgency

Proposed actions:

1. Identify and communicate the value of the change, as well as the consequences of avoiding the change. This has been done via the *Auditors Report* and the SAIC report. Press releases and industry communications have been issued.

2. Increase the visibility of the initiative. This has been done via:
  - Website postings: intranet and internet
  - Press releases
  - Industry communications
3. Constant communications. Information will continue to be issued as the initiative progresses to encourage understanding and involvement and give the State of Hawai'i as a whole a reason to care about it. Performance metrics will be instituted, publicly published, and delivered to the leadership to make the extensive inefficiencies of the current situation more real and the solution more tangible.

### Stage 2 - Create the Guiding Principles and Leadership

Potential actions:

1. Determine the best strategy to establish trust in the initiative leadership and goals. The initiatives, goals, and guiding principles have been established based on the input and guidance of all areas of the State of Hawai'i and outside contributors. These have been published, followed, and maintained:
  - People first
  - Collaborative, open, and transparent processes
  - Effective and efficient strategies, implementation and management based on proven best practices and industry standards
2. Define a common goal. What should be accomplished needs to be established. The critical aspect is that everyone agrees on the goal. Even if no consensus arises as to the process or the method, at least the various organizations are not working at cross purposes. The common goal must also be defined as specifically as possible.

The common goal has been established through two previous, but cut short, initiatives and the consensus that this initiative must succeed and must address the problems that have been commonly recognized.

3. Take visible actions and make sacrifices. The end result of change will always involve the termination of certain investments against the wishes of their supporters. Sacrifices will have to be made in terms of money and control. In order to create unity across the various departments and agencies, it must be established early on that all the sacrifices will not be either in vain nor administered unfairly. To establish trust and win consensus, every stakeholder needs to show that they are willing to bear some of the cost themselves. By voluntarily and publicly ceding some degree of self interest in pursuit of the greater good, the leaders will demonstrate to each other and to their own people that they are serious about the changes, and are willing to do what is necessary to make them real.

### Stage 3 – Develop a Vision and Strategy

Potential actions:

1. Develop vision to be compelling picture of future performance. Start at the end and work backward. What does the goal look like? What is it we hope to achieve? Again, the goal needs to be as specific as possible and can evolve over time. The key is that the processes established are just that—processes that are the means by which we move the organization from the as-is state to the to-be state; they are not the goal in and of themselves. Whatever the decision is, it should be ambitious, but also realistic and achievable, and it then must be a constant refrain from the leadership of how the State of Hawai'i intends to do business from this point forward. This action has been fulfilled via this report.
2. To foster broad debate, distribute the draft vision statement widely. While the leadership makes the decisions and sets the policy, there are many smart people throughout State government who can contribute greatly to defining the future state. A static and unchanging goal is almost no better than no goal at all. Once the initial vision has been established, it must be publicized, and feedback should be welcomed. Changes in circumstances, technology, and mission priorities will necessitate occasional re-visioning. By incorporating feedback into the new vision, not only will the stakeholders feel a greater sense of ownership in the process, but the objectives of the process will be stronger. This action has been fulfilled via this report.
3. Devise strategy that can be applied throughout the organization. One leadership tenet that holds especially true in this case is “Tell your people what to do, not how to do it.” Even when the goals of all the different organizations and stakeholders within the State of Hawai'i are aligned, the processes by which those goals are achieved can vary greatly. Personnel, culture, mission, and resources all play into the best way to accomplish a goal, and no one-size-fits-all approach will be successful everywhere. As long as the desired results are clear and consistent, the ways and means employed to achieve those ends should be flexible.

This action has been fulfilled via the strict adherence to the guiding principles of this initiative as the strategies of this report have been identified.

4. Rework the vision and strategy to be clear, concise, and compelling. Finally, the output of this phase is a document. The vision (where we are going) and strategy (how we are getting there) should be written down and distributed. Agreeing on a common vision means little if it cannot be published and referenced. Ultimately, the guiding principles and leadership will have developed a statement that clearly, concisely, and convincingly spells out what needs to be accomplished, and the plan for achieving those goals.

This action has been fulfilled via this report. It is recognized that the process will continue to evolve as it moves forward.

### Stage 4 – Communicate the Change Vision

Once the vision is established, there are a number of ways to communicate it.

Potential actions:

1. Publish the vision/strategy prominently on the organizational website.
2. Take the vision/strategy on road shows throughout the organization. Nothing makes an impression quite like a personal appearance. Site visits to the stakeholders' home bases by leadership is an important part of the communication strategy. Not only does a personal visit demonstrate the importance of the topic to the leadership, it is much more likely to be listened to than a passive web posting. Finally, proclaiming the vision in person allows the leadership to answer questions and address concerns in the field immediately, helping to foster understanding and buy-in.
3. Explain inconsistencies between vision and current actions. Few plans are ever executed without complications. However, when unique circumstances or emergent priority shifts cause the execution to deviate from the plan, there is a high potential for people to become disillusioned with the plan itself. If our leaders are not following their own guidance, why should we? It is critical that inconsistencies be explained in order to preserve morale and commitment to the goal.
4. Address nay-sayers and their reservations. In any organization, and with any change, there are bound to be those who resist. Sometimes these people can be persuaded to get on board for the big win, but other times they are not looking to be a part of the solution. Regardless of the cause for their resistance, their concerns need to be treated as valid, as indeed they often are. It is sometimes the case that the most recalcitrant obstructionist has a valid point that the true believers had not thought of. To encourage fence-sitters to believe and trust leadership rather than fall in league with the malcontents, even those few who refuse to adapt must be treated fairly and their concerns addressed.

## Stage 5 – Empower broad-based action

Once the vision has been established and communicated, it is time to let the people do their job. It is now leadership's role to facilitate, rather than direct, their actions. Certain steps can be taken to enable the process and reinforce the behaviors that contribute to the goals of the organization.

Potential actions:

1. Remove obstacles perceived by many to impede progress. No strategy, no matter how well planned, can anticipate all potential roadblocks. Also, certain obstacles can appear which had not existed before. It is important that once the momentum for change has been painstakingly built, it is maintained. It is here that leadership must actively find ways to remove or alleviate the obstacles and burdens that impede progress toward the goal or risk losing the support of the people who are needed execute the plan.
2. Align HR practices (e.g., hiring and promoting) with the vision. When people change their normal way of doing business, they expect to see some benefit. Likewise, when they see others who have not adapted, yet suffer no repercussions, they begin to doubt the organization's commitment to its stated goals. Awards and promotions, or the lack thereof, can provide both the carrot and the stick to help drive the behavior that engenders success.
3. Align processes and training programs with the vision. No major change will be taken seriously if it is not reflected in the day-to-day experience of those involved. We cannot expect our goal to be successful if those it affects are left to figure it out for themselves, or if they can routinely ignore it. Anyone involved in the IT consolidation initiative should be trained and involved in the changes.
4. Address supervisors who resist the required changes. There are few things more frustrating than trying to follow a higher-level policy when one's immediate supervisor does not support it. In order for our goal to become engrained in the culture, it must be as firmly established as security clearances and dress codes. Resisters are entitled to their own opinion, but their actions must be in alignment with the organization.

## Stage 6 – Create short-term wins

Success breeds more success. Short-term wins not only move us closer to the desired goal, they are also useful as a motivating tool. Identify and publicly proclaim these wins to show that the process is working, and more successes will follow.

Potential actions:

1. Identify and plan specific short-term wins (i.e., six months). Some successes will come naturally, others unexpectedly. However, there are some interim goals that can be planned

in advance, striven toward, and achieved. Setting short-term goals makes problems more achievable, and achieving those goals gives participants a sense of accomplishment that makes the next goal more attainable.

Examples of early wins and demonstration of competence were identified in the *State of Hawai'i Business and IT-IRM Transformation Strategic Plan (Version 2)* and proposed through a series of smaller projects executed during the planning phase. These projects fell into four categories:

- Triage projects are required immediately to fix unrecoverable, high-impact failures in critical systems that are currently at a high probability of failing.
  - Pilot projects are required near-term involving high-impact, low-cost enhancements to the existing system that radically improve employee productivity, are synergistic with long-term EA, and can demonstrate future vision now.
  - BPR projects are focused on defining, measuring and reengineering business processes for more efficiency and automating with IT/IRM as required.
  - Major initiatives are large IT/IRM projects that are flagship initiatives for the State, represent key administration priorities (either already underway or launching prior to July 2013 implementation), and need management/governance according to the strategic plan.
2. Assign managers responsibility to achieve short-term wins. While short-term wins may be natural or even unexpected, they are rarely accidental. They are the result of a determined effort by a finite set of people. Identify the managers whose roles put them in a position where they are capable of achieving success, then make it clear that success is expected. The likelihood of success is much greater when it becomes personal: "my job" instead of "everybody's job."
  3. Publicize, celebrate, and reward short-term wins. Even for those not directly involved in the win, seeing that success is recognized and rewarded provides motivation for their own effort. For those who are directly involved, public recognition makes the hard work and sacrifice worth it, and will encourage continued success.
  4. Provide evidence that sacrifices are linked directly to the wins. As discussed earlier, change can upset the status quo in terms of money and control, and sacrifices of one, the other, or both will be required by everyone. Show a direct link between the money that was taken away from such-and-such system and given to IT procurement, or training, or whatever the departments need to underline the importance of the effort and the benefit being derived from it.

## Stage 7 - Consolidate gains and produce more change

After a certain level of success has been achieved, keeping the momentum going is the next challenge before complacency sets in. The success must be expanded, the bar raised higher, and the impetus that produced the original achievement maintained.

Potential actions:

1. Involve a larger number of organizational segments in change. Very often, it is only specific segments of the organization that have led the way in establishing change. Once a track record has been established and lessons have been learned, the next logical step is to reach back to the lagging segments and bring them into the fold. They will have seen that the sacrifices of the trailblazers have been rewarded and that their initial reluctance was unfounded. The specter of uncertainty will also be greatly diminished by this point, and their original objections or concerns will have been largely addressed.
2. Continue to generate and publicize short-term wins frequently. Final success rarely comes in one fell swoop, but rather in many small victories. In order to maintain the sense of urgency and keep interest high, the practice of recognizing these victories is even more important than before so that attention remains focused on the goal. Continue to make a point of celebrating success.
3. Delegate management roles to low organizational levels. What was once a new initiative, requiring high levels of direct involvement of the upper echelons of leadership, is now becoming standard practice. The big problems have largely been solved, and all that remains is execution. The top levels can afford to shift some (but not all) of their attention to new problems, and allow the routine decisions to be made at lower and lower levels. This is in itself a success; the new process is now routine. It also serves as yet another means to provide a sense of ownership and accountability, both of which will yield even more success going forward.
4. Eliminate unnecessary process interdependencies. Lean engineering principles tell us that any process can be improved and streamlined almost indefinitely. Certain process steps that were necessary early in the change process will be able to be eliminated, bottlenecks relieved, and redundancies reduced. Continually refining the process also demonstrates that what matters is the result of the process, not the process itself. Furthermore, by removing unnecessary or now-irrelevant interdependencies between process steps or organizations, the process becomes more flexible, can be applied more widely, and requires fewer resources.

## Stage 8 - Anchor new approaches in the culture

Now that we have achieved the goals we set out to accomplish, we must not allow the organization to forget what was accomplished and revert to the status quo. The changes we initiated so long ago are now a part of the normal course of business. To ensure that we do not backslide, there are some steps we can take.

Potential actions:

1. Graft new practices onto valuable aspects of the old culture. Although we instituted major transformational change, there are many aspects of the old culture that should be maintained. Where it is possible and appropriate, it is time to fold the new processes into the old so that our transformational effort becomes an almost invisible part of everyday life.
2. Evolve ineffective, old cultures. Organizations must continually evolve to adapt to new circumstances. While valuable parts of the pre-existing culture should be preserved and adapted, the parts that no longer serve the mission need to be eliminated.
3. Interview new hires from perspective of the vision and strategy. Does this potential hire agree with the goals of the organization, and will he or she act in a way that promotes the success of the organization? By ensuring a good cultural fit at the outset, and communicating the priorities and goals of the organization up front, leadership can help to ensure that the hard-won culture shift becomes permanent.
3. Incorporate vision and strategy into succession planning. Personnel changes in leadership positions are a fact of life in the State of Hawai'i, and most change initiatives are intended to outlast their original sponsor. Often, the "new sheriff in town" has his or her own priorities and goals to achieve that may or may not agree with those of the predecessor. In many respects, this is a welcome change and serves to re-invigorate a stagnant culture. However, not everything can change, and the years of work that went into establishing the new paradigm should not be discarded lightly. The outgoing leader should take steps to ensure that the new one agrees with the most important goals and will continue to support them alongside the new initiatives that will surely follow. This also means that the vision and strategy must be defined with the future in mind, and cannot be a narrow or personal definition suited only to the current powers that be.

### 6.1.1.3 CURRENT STATUS OF THE EIGHT STAGES

The table below outlines the current status of the eight stages of the Change Management process.

Stage	Stage Title	Status	Assessment
1	Establish a sense of urgency	Green	The current level of urgency driving the initiative is supported and participated in by all levels of the State of Hawai'i. Specifically, the Legislature, department leaders, OIMT members, the CIO, and representatives from multiple departments on the People and Organization Working Group are all engaged.
2	Create the guiding principles and leadership	Green	The Leadership Team, the People and Organization Working Group, a core OIMT staff, and the CIO have been assembled, established, and engaged.
3	Develop a Vision and Strategy	Green	This report represents the development of the vision and strategy of this initiative.
4	Communicate the change vision	Green	Besides the issuance of this report, its strategies and goals will be also communicated via other means.
5	Empower broad-based action	Green	Detailed steps and participants will be defined in the next stage (the Tactical Planning stage) of the initiative's three stages of Strategic Direction Towards Implementation (Strategic Direction – Tactical Planning – Implementation).
6	Create short-term wins	Green	Part of the Tactical Solution planning will incorporate short-term wins.
7	Consolidate gains and produce more change	Green	This will be a natural progression of the implementation and change management plans.
8	Anchor new approaches in the culture	Green	Going forward, this will be a process of implementation and management.



## **7.0 HUMAN RESOURCE CONSIDERATIONS**

# 7.0 HUMAN RESOURCE CONSIDERATIONS

The strategies outlined for human resource considerations were developed based on the valuable work done in two previous IT reorganization efforts undertaken in 2000 and 2004. This work is highlighted and utilized as the foundation of the strategy in the “Reclassification Considerations” section. The sections that follow on “Recruitment Strategy” and “Professional Development” are based on this foundation.

## 7.1 RECLASSIFICATION CONSIDERATIONS

When defining the functional design of the new DoIT, care was taken to make sure that it would incorporate:

- Best practices
- A vision for growth and advancement
- An efficient, agile, and responsive IT environment
- All of the parameters established via the To-Be requirements studies

It was determined that a best-of-the-best structure was the goal, and the focus would be on functionality and not on the current organization or positions. Based on the extensive work done in previous reorganization efforts, reclassification requirements were identified as a key component necessary to create a nimble IT organization that can be attractive to a talented and committed workforce.

An important first step was leveraging the previous efforts for reclassification of IT positions. The first was undertaken in 2000, and a second was launched in 2004. In both of these initiatives, the goal was to identify the proper strategy that would lead to retention of existing employees as well as successful new employee recruitment. The issues identified and strategies for resolution have changed little since these first efforts; unfortunately, they did not have the administration support, fiscal climate, or political environment to enable them to move forward. It is the work, results, and recommendations of these prior initiatives that will be the foundation that this initiative will build on.

### 7.1.1 WHY THIS EFFORT IS DIFFERENT

In the face of the historic attempts at IT reorganization, it must be pointed out why this initiative is different and how it has been designed for success:

From the SAIC report:

- Strong gubernatorial and Legislative support and critical prioritization with the passage of Act 200 and Act 84 (HRS 27-43)

- Identification and hiring of the State’s first CIO
- Establishment of OIMT
- Department and IT leaderships’ overwhelming recognition of the need to enhance IT solutions to conduct the business of the State and service the citizens more effectively and efficiently
- Creation of an *IT Strategic Plan*
- Establishment of an IT Steering Committee to support the CIO and IT governance activities
- Mandated annual briefings to the Legislature regarding the status of IT and progress against the *IT Strategic Plan*

These actions provide evidence that the State is now ready to take the next steps in addressing IT needs and opportunities with both commitment and focus.

### 7.1.2 CURRENT RECLASSIFICATION STRATEGY DEFINITION

The strategy for the current reorganization is to leverage the work delivered from the second IT reclassification initiative (incorporating the best of the first initiative) and the lessons learned from a very successful broadbanding effort at the University of Hawai’i. The University had encountered the same issues that the State of Hawai’i IT has continued to face.

The initiative will include close cooperation between the developing Department of Technology, the DHRD, and the Hawai’i Government Employees Association (HGGEA) to finalize a flexible and attractive IT recruiting, hiring, and retention strategy. A summary of this strategy and approach is below.

### 7.1.3 CHALLENGES/PROBLEMS

Multiple departments and stakeholders identified several IT staffing challenges through surveys and discussions conducted by the reclassification initiatives that preceded this effort:

- Difficult to recruit and retain good employees with the desired competencies
- Pay not competitive with private sector
- Good performance is not recognized or rewarded
- Certifications are not recognized, rewarded, or encouraged
- Classification challenges:
  - Takes too long (classification specs become outdated because work in the occupation changes frequently)
  - Inflexible and restrictive traditional position classifications
  - Inability to add value for IT expertise that requires a broad spectrum of responsibilities; in particular, for those statewide systems that have cross-jurisdictional responsibilities and requirements



- Constant updating of or the need to update class specifications as means to address overall compensation (total reward program)
- IT positions are only one of several classes of positions in their professional series, and other professional classes must be considered.
- Restrictions in granting higher pay levels
- Funding challenges
- Challenges in the State of Hawai'i environment, including human resource turnaround time for IT recruitment announcements and screening
- Ability to reward professional growth and exceptional employee performance attracts individuals who are motivated:
  - Promotes employee excellence
  - Saves money and provides an incentive to complete projects that result in savings for the State
  - Creates efficiencies and encourages the performance of additional responsibilities
  - Promotes excellence in employee performance and boosts morale
- Tangible demonstration of the Administration's philosophy to:
  - Motivate State workers to perform at a high level
  - Reward and recognize them for their ideas and contributions to the organization

## 7.1.4 RECOMMENDATIONS

The following recommendations outline the strategy proposed for a successful reclassification effort:

- Modernize the IT classification system:
  - Simplify the classification tiers, including broadband.
  - Update classification and job descriptions.
- Design a successful recruiting process:
  - Incorporate the Professional Recruiting Office (PRO). PRO is a pilot project created by DHRD to complete the entire recruitment process, from application to hire, in a few days.
  - Launch a creative marketing campaign.
  - Recruit by resume:
    - Investigate using the NEOGOV system.
    - Take care to identify the necessary supplemental questions needed to determine if minimum requirements are met. Resumes are often too brief and lacking in specific job information to make a fair and consistent determination of eligibility/ineligibility. The lack of complete information in a resume can lead to disparate treatment and inefficient hiring decisions.
  - Re-engineer and simplify the screening and selection process.
  - Introduce waivers from minimum qualifications.
    - Federal and State law guidelines must be followed.
  - Hire and recruit above minimum wage levels.
    - The current flexible hiring rate pilot project for certain IT positions should be expanded.
  - Pay for performance based on compensable factors.
  - Encourage obtainment of recognized certifications and reward them.
- Implement a funding strategy.

## 7.1.5 BENEFITS

- Improves recruitment and selection
- Simplifies and expedites classification

- Empowers managers and provides them with a tool to manage operations

- Employees have opportunities for career track options:
  - Enables flexibility to move from band to band (vertical mobility) and across bands (lateral mobility)

## 7.2 RECRUITMENT STRATEGY

### 7.2.1 APPROACH

Recruiting qualified IT employees can be a challenge for many reasons:

- Skilled resources are in high demand.
- Candidates without ties to the State of Hawai'i may not consider it a long-term destination.
- It can be difficult to validate a candidate's credentials in such a fast-paced field.
- Commitment to guiding principles and cultural fit can rule out candidates.

An effective approach to recruitment can help the State of Hawai'i successfully compete for limited technical employee resources. To maximize its competitive advantage, the State must choose the recruiting method that produces the best pool of candidates quickly and cost effectively for each position to be filled.

With a typical hiring cycle taking several weeks to complete, all efforts must be made to recruit in an expedited manner. Not counting the prep work going into position advertisement, once an open position is published, it can take six to eight weeks to notify and screen applicants, and a week or more to conduct interviews and make a decision regarding a job offer. After the decision is made, the selected candidate should be expected to give a two-week notice to his or her previous employer, and the first week of employment is often consumed with on-boarding activities such as new hire orientation, benefits overviews, training, and getting acclimated to the new position. This process can leave vital positions vacant for months.

## 7.2.2 RECRUITMENT PLAN STRATEGIES

- Identify the roles and/or positions to be filled.
- To accurately determine recruitment needs, clearly define all requirements for job openings:
  - To discourage all but the best applicants from applying, include specific employee requirements in the position's description.
- Assign salary and organizational placement to the positions based on industry research and internal guidelines:
  - Establish a starting salary within the predetermined range.
  - The cost of the position must consider professional growth, certification maintenance, the impact of future raises, and compensation.
- Determine sources of funds for the cost of the recruitment process and the cost of supporting the new position:
  - This must be addressed before the recruitment process begins.
  - Budget definition will drive the recruitment plan decisions.
- Determine key position requirements and avoid candidates that do not fulfill them.
- Identify recruitment sources:
  - Hiring from within
  - DHRD recruitment
  - Employee referral program
  - Professional organizations
  - Alumni associations
  - Graduate placement programs
  - Armed forces (dependents)
  - Media (e.g., newspaper, radio, television)
  - Trade magazines
  - Websites
  - Internet job sites
  - Social media outlets
- Select the appropriate recruitment sources for each position:
  - Considerations include the cost of the recruitment channel, convenience, speed, workforce demographics and trends, appropriateness for position, and the target audience.
  - Identify the target population/audience for the position.
  - Avoid under-recruitment (no viable candidate pool is generated) or over-recruitment (flood of applications).
- Determine and launch recruitment efforts.
- Establish guidelines for testing and validation of credentials:
  - Interviews will include the Technical Lead.
  - To verify the candidate can troubleshoot, diagnose, and repair as needed, conduct a hands-on test.
  - Verify past work experience.
- Determine how candidates and resumes will be reviewed and establish timelines for each of the following:
  - Who will the resume/application be submitted to?
  - Who will review the application?
  - Who will verify the credentials of the candidate?
- Who will interview the candidate?
- How will interviews be conducted:
  - In person and/or by phone
  - Provide candidates an opportunity to learn more about the position, the environment and the culture (avoid acceptance without knowing about aspects that might affect long-term job satisfaction, or refusal without knowing about some of the job's attractive attributes).
  - Interview new hires from perspective of the vision and strategy:
    - Does this potential hire agree with the goals of the organization, and will he or she act in a way that promotes the success of the organization?
    - By ensuring a good cultural fit at the outset, and communicating the priorities and goals of the organization up front, leadership can help to ensure that the hard-won culture shift becomes permanent.
  - Who will create and deliver job offers to selected candidates?
- Preserve recruitment lessons learned—remain competitive as an employer:
  - Continually evaluate the process of attracting, obtaining, and retaining talented IT employees.
  - Factors to consider when defining recruitment goals and the strategies:
    - Evaluate current and future workforce needs.
    - Understand the Department's strengths and weaknesses.
    - Establish strategies for achieving and maintaining diversity in the workplace.
    - Gather and analyze feedback from new and transitioning employees.

## 7.2.3 ESTABLISH A RECRUITING CULTURE

It is important for hiring managers to remember the human aspect of this process. Although defining roles and screening applicants can be a tedious task, mistreating potential employees can be a detriment to the reputation of the State as an employer. Before any job openings are posted or any resumes are considered, the following must be determined and adhered to:

- Determine the candidate submission deadline:
  - In fairness, applications submitted beyond the deadline will not be considered for the job opening unless no other candidates meet the qualifications of the posting.
  - Applications submitted after the deadline may be kept on file for future openings.
- Determine the interview deadline:
  - Interviews for qualified candidates must be scheduled quickly.
  - It is poor business practice to cancel or reschedule interviews, and doing so can be detrimental to the reputation of the State as an employer.
- Determine the final selection deadline:
  - Hiring managers must adhere to the final selection deadline.
  - Prolonging a vacancy can cause undue burden on existing employees and allow job seekers time to be recruited by another source, causing the State to miss opportunities to hire the most qualified candidates.

- Final decision and employment offer:
  - The individuals who are designated to make the final decision in the hiring process must be available to authorize the employment offer by the established deadline.
- Determine the start date (and end date [if contract employee]):
  - The employment offer must include a start date and any prerequisites required of the future employee.
  - An end date must be included for all contract employees.

Establishing communication expectations to and from potential employees can ease some of the frustration of the screening and hiring process. It can also help promote confidence in the hiring process for both the applicant and hiring department.

## 7.3 PROFESSIONAL DEVELOPMENT

### 7.3.1 OVERVIEW AND APPROACH

During the reorganization it will be expected that multiple employees will be found to have redundant skillsets, while other areas of expertise are left unfilled. A skillset void can also be created by moving an employee off a particular team or by changing the employee's role within the organization. The voids can be addressed by either hiring a new employee or training an existing one. There are three key reasons why training is the preferred solution:

- It is less expensive to train good employees than find new ones.
- Employees will benefit from training both personally and professionally.
- Effective training of existing staff is essential to developing and retaining a qualified workforce.

To maintain productivity and employee morale, all skillset voids will be addressed quickly. Combining the appropriate technical resources into one centralized department will bring together a wealth of knowledge and experience. This should be leveraged as a source of training and sharing of knowledge between IT staff. Intradepartmental training is a great opportunity for existing employees to gain new skills at little cost to the State.

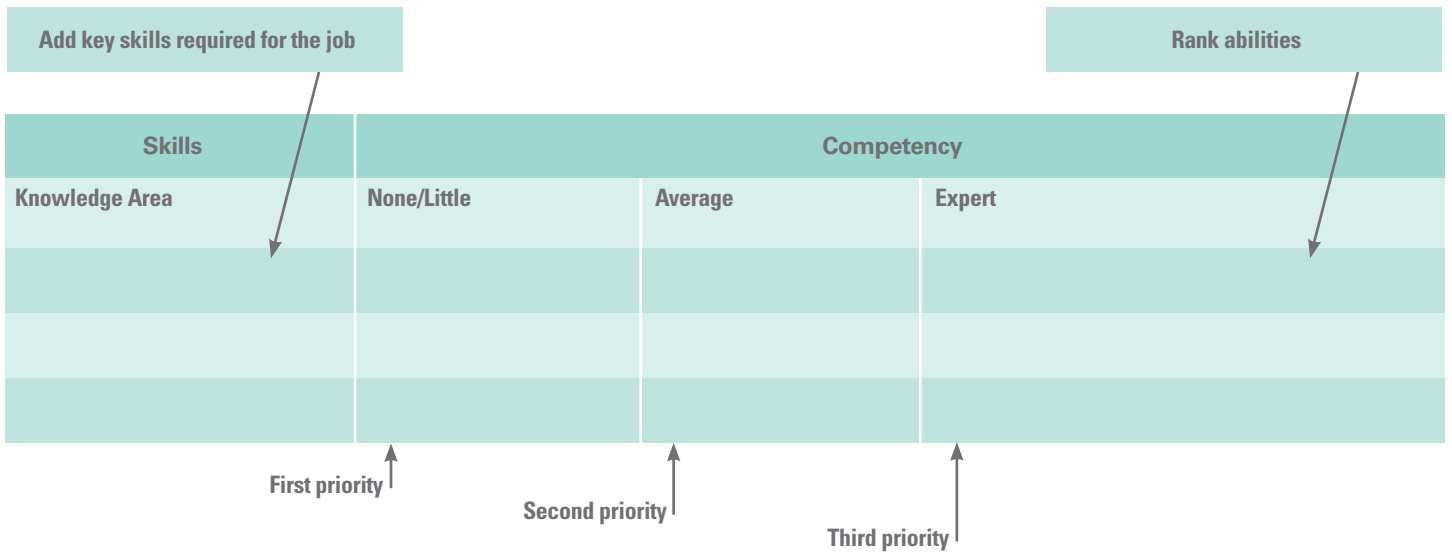
When outside training resources must be utilized, there are several to choose from: online training, software-based training, classroom, and private companies.

### 7.3.2 TRAINING PLAN STRATEGIES:

- Identify required skillsets—existing and future:
  - Identify and document competencies/skills required for each job description.
  - Maintain a current inventory of skills.
  - Address overall career development issues as well as skill-specific training issues.
- Perform a skillset gap analysis—existing and missing:
  - Day-to-day: support, development, and management
  - Strategic growth: identify implementation timelines and allocation commitments in such areas as technology innovation.
- Conduct a training needs analysis:
  - Align IT training needs with business goals.
  - Use self-directed tools, such as individual development plans, to give employees responsibility in assessing their development needs.
  - Ensure that management training is included (e.g., leadership and project management).
  - Identify and prioritize cross-training and begin to incorporate it. (Identify the most critical specialties and niche areas of expertise; having a single person that is trained or qualified for a needed skill is a risk).
- Select training sources:
  - Consider cost, availability, duration, success rates, and compatibility with the resources to be trained
  - Intradepartmental training opportunities (resources within the department train other department resources)
  - Internet
  - Classroom
- Create a training timeline:
  - Involve critical stakeholders, such as top management, business unit managers, subject matter experts, human capital staff, and end users in planning IT training.
  - Prioritize training.
- Launch training:
  - Use a single portal to give staff and managers access to training and career development information.

### 7.3.3 TRAINING NEEDS ANALYSIS

As shown below, identification of training needs will be done by assessing current skillsets to determine gaps and any single points of failure, and also to establish the order in which training should be conducted.





## **8.0 IMPLEMENTATION STRATEGY**

# 8.0 IMPLEMENTATION STRATEGY

The *Implementation Plan* was developed based on:

- Legislative and legal requirements and their lead times
- Departmental processes and lead times
- State of Hawai'i culture
- As-Is and To-Be functional designs
- Incorporation of short-term wins
- Lessons learned from reorganizations conducted in other states

Based on the acceptance of the strategies outlined in this document, the implementation steps would be defined in the timeframes in Figure 11.

Implementation Strategies and Timeframes				
	0 to 6 months	6 months to 1 year	2 to 3 years	3 to 5 years
<b>Immediate:</b> Create the Department of Information Technology				
<b>Short Term:</b> Establish & Implement DoIT Organization, People, Processes & Technologies				
<b>Medium Term:</b> Create & Implement the Model				
<b>Long Term:</b> Maturing the Model				

Figure 11: Implementation Strategies and Timeframes

## 8.1 IMMEDIATE STRATEGIES AND TIMEFRAMES (THE FIRST SIX MONTHS)

Begin the consolidation process:

- Submit the *IT Strategic Plan*.
- Develop a recruitment strategy to address how existing IT professionals at departments will be transitioned to DoIT in terms of the LOB concept and reporting structure.
- Continue Governance via the ELC, CIOC, and IT Steering Committee.
- Establish Organizational Change Management.

## 8.2 SHORT-TERM STRATEGIES AND TIMEFRAMES (SIX MONTHS—ONE YEAR)

Define strategies and tactical plans for establishing and implementing the consolidated organization, people, processes, and technologies:

- Begin the tactical planning process:
  - Business Transformation Office (BTO)
  - Operations
  - Management Services
  - Department Services
  - Enterprise Shared Services
  - Infrastructure Service, Delivery, and Support
  - Enterprise Security and Privacy

- Create a Program Management Office (PMO) and Development, Modernization, and Enhancement (DME) projects.
- Begin to implement enterprise solutions:
  - Enterprise Resource Planning (ERP)
  - email consolidation ✓Quick Win
  - Tax modernization
  - Help Desk
  - Expand use of ICSD Internet Board ✓Quick Win
- Begin to implement infrastructure solutions:
- Data center (e.g., NOC, CSOC, Help Desk)
  - Adaptive computing environment
  - Networking ✓Quick Win
  - Mobile, wireless, and radio
  - Shared services applications (rapid application prototyping)
  - GIS
- Establish fiscal/budget management.
- Develop enterprise architecture (EA).
- Establish business transformation initiatives (two or three):
  - Contract vehicle, agency business transformation, and tracking
- Create portfolio management:
  - Establish IT/IRM tactical planning.
  - Implement a call for IT/IRM projects.
- Create a security policy and procedures.
- Create an IT policy, procedures, and standards (COBIT, ITIL, SDLC, and PMP).
- Create an IT performance management framework (dashboards and metrics).
- Implement Compliance Management.
- Establish Disaster Recovery.
- Create Enterprise Program Management (office, methodology, tools, and reporting).
- Establish electronic records management.
- Consolidate network resources (facilities, budget, and people).
- Data center:
  - Establishment of Data Center 2
  - Consolidation of Data Center 2 resources (NOC, CSOC, and Help Desk; and facilities, budget, and people)
- Adaptive computing environment:
  - Implement next generation solution
  - Consolidation of adaptive environment resources (facilities, budget, and people)
- Network:
  - Implement next generation solution
  - Consolidation of network resources (facilities, budget, and people)
- Mobile, wireless, and radio:
  - Implement next generation solution
  - Consolidation of mobile, wireless, and radio resources (facilities, budget, and people)
- Shared Services applications:
  - Departmental legacy application retirement/consolidation/modernization (150)
  - Implement next generation solution
  - Consolidation of Shared Services applications resources (facilities, budget, and people)
- GIS:
  - Implement next generation solution
  - Consolidation of GIS resources (facilities, budget, and people)
- Establish business transformation initiatives (six)

## 8.3 MEDIUM-TERM STRATEGIES AND TIMEFRAMES (TWO-THREE YEARS)

Create and implement the model:

- Hire key executives:
  - Business Transformation Office (BTO)
  - Operations (Deputy CIO)
  - Management Services (CMO)
  - Department Services
  - Enterprise Shared Services
  - Infrastructure Service, Delivery, and Support
  - Enterprise Security and Privacy
- Before ICSD can be folded into OIMT/DoIT, revise the statute to authorize OIMT/DoIT to employ civil service employees.
- Create a Customer Relationship Model (CRM):
  - Service Level Agreements (SLAs)

## 8.4 LONG-TERM STRATEGIES AND TIMEFRAMES (THREE-FIVE YEARS)

Maturing the model:

- Create the department (Legislative statute).
- Integrate ICSD and all of the new, consolidated initiatives into DoIT.
- Create open data standards.
- Applications:
  - Support application development.
  - Incorporate department legacy application retirement/consolidation/modernization (300).
- Establish identity and credential access management.
- Implement research, development, testing and evaluation.
- Establish business transformation initiatives (12).
- Data Center:
  - Establishment of Data Centers 3-5
  - Consolidation of Data Centers 3-5 resources (NOC, CSOC, Help Desk; facilities, budget, and people)
- Adaptive computing environment:
  - Implement next generation solution
- Network:
  - Implement next generation solution
- Mobile, wireless, and radio:
  - Implement next generation solution
- Shared Services applications:
  - Implement next generation solution
- GIS:
  - Implement next generation solution





**9.0 FUNDING CONSIDERATIONS**

**10.0 CONCLUSION**

# 9.0 FUNDING CONSIDERATIONS

The initiative cannot be implemented without appropriate funding. The funding and budget plans must be designed in an open, collaborative manner that will manage expectations and also allow for the correct timeframes needed to generate and fulfill each funding strategy.

Key funding considerations for the new IT Department:

- Personnel/staffing:
  - Executive management positions
  - Supporting roles
- Professional development/training
- Program initiatives
- Organizational Management program
- Technology and Infrastructure
- Administrative expenditures:
  - Facilities/office space
  - Miscellaneous
- Collective bargaining

# 10.0 CONCLUSION

The State of Hawai'i IT Human Capital Management Strategic Plan was developed through the efforts and input of current and past State of Hawai'i stakeholders. Concern was expressed at all levels that, despite the dollars allocated to IT and IT-related activities, the State was not maximizing its use of technology and was not benefitting from IT in terms of productivity improvements, cost savings, effectiveness, or efficiencies to the extent that other state governments, private industry, and the Federal government experience. The inefficiencies and potential risks affecting the business missions of the State of Hawai'i clearly identified the criticality of moving forward and establishing a focused, progressive, effective, and agile DoIT.

This Plan has outlined the key areas for reorganizational success and the direction that the next phases will take to further define and implement them. An effective technology platform will launch rewards in all areas of State of Hawai'i business that will result in the ultimate goal: better service for the citizens and businesses of the State of Hawai'i.