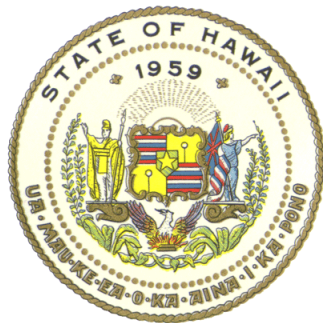


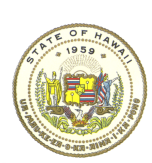
# Transforming Government

*Through Business and Information Technology  
(IT)/Information Resource Management (IRM)*

**Sanjeev “Sonny” Bhagowalia**  
**Chief Information Officer**  
**May 31, 2012**



State of Hawai'i  
**IMT**



# Transformation Roadmap

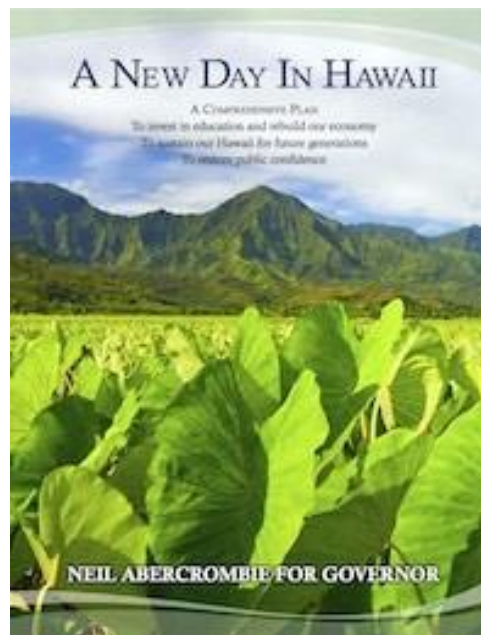
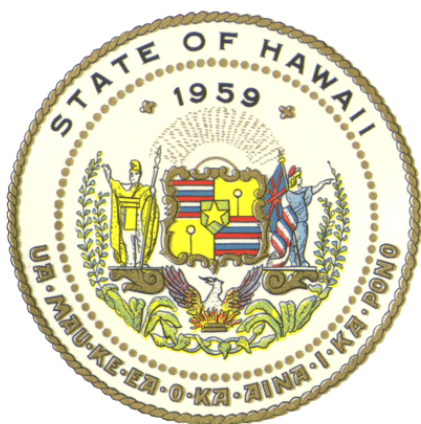


- Where we are
- Where we want to be
- How we are going to get there
- What you can do to help

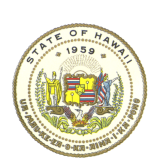
*A Journey of a thousand Miles begins with a single step – Lao Tzu, Chinese Philosopher (640 BC-531 BC).*



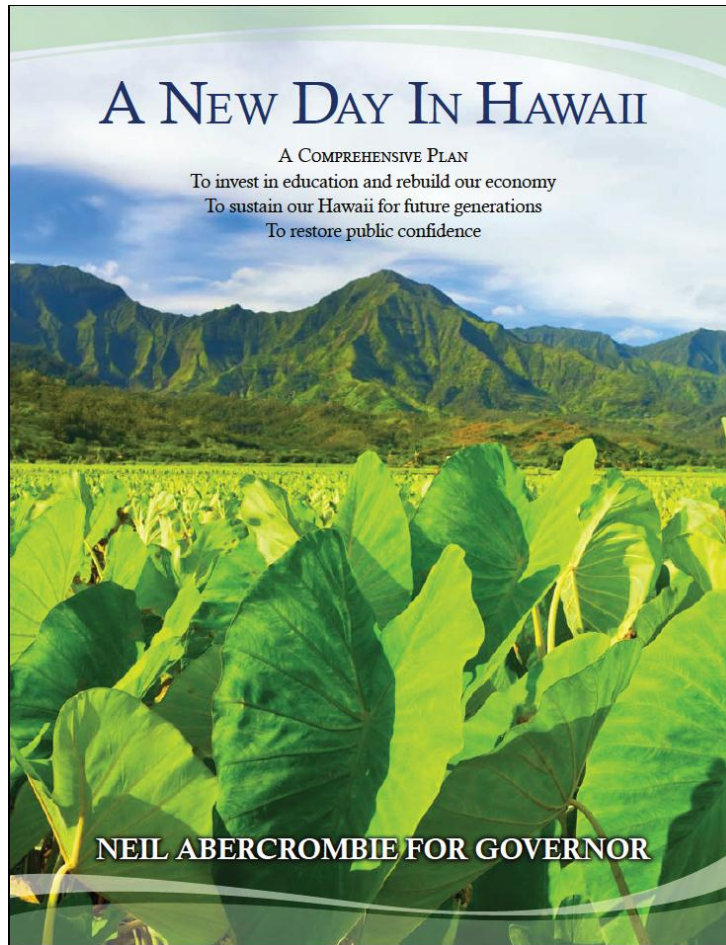
# A New Day in Hawaii



- \$ 11 B State Budget
- 1.4 M Citizens/Residents
- 41, 000 State Employees
- 18 Departments – 36 Lines of Business
- Grow a Sustainable Economy
- Invest in People
- Transform Government



# The New Day Vision



- **GROWING A SUSTAINABLE ECONOMY**

- New Day Work Projects
- Renewable Energy
- Food Security
- Innovation Economy
- Improvements on Public Lands
- Environmental Stewardship
- Culture, Arts, Creative Industries

- **INVESTING IN PEOPLE**

- Early Childhood
- Education and Workforce Development
- Healthcare Transformation
- Safety Net, Homelessness, Public Safety
- Housing

- **TRANSFORMING GOVERNMENT**

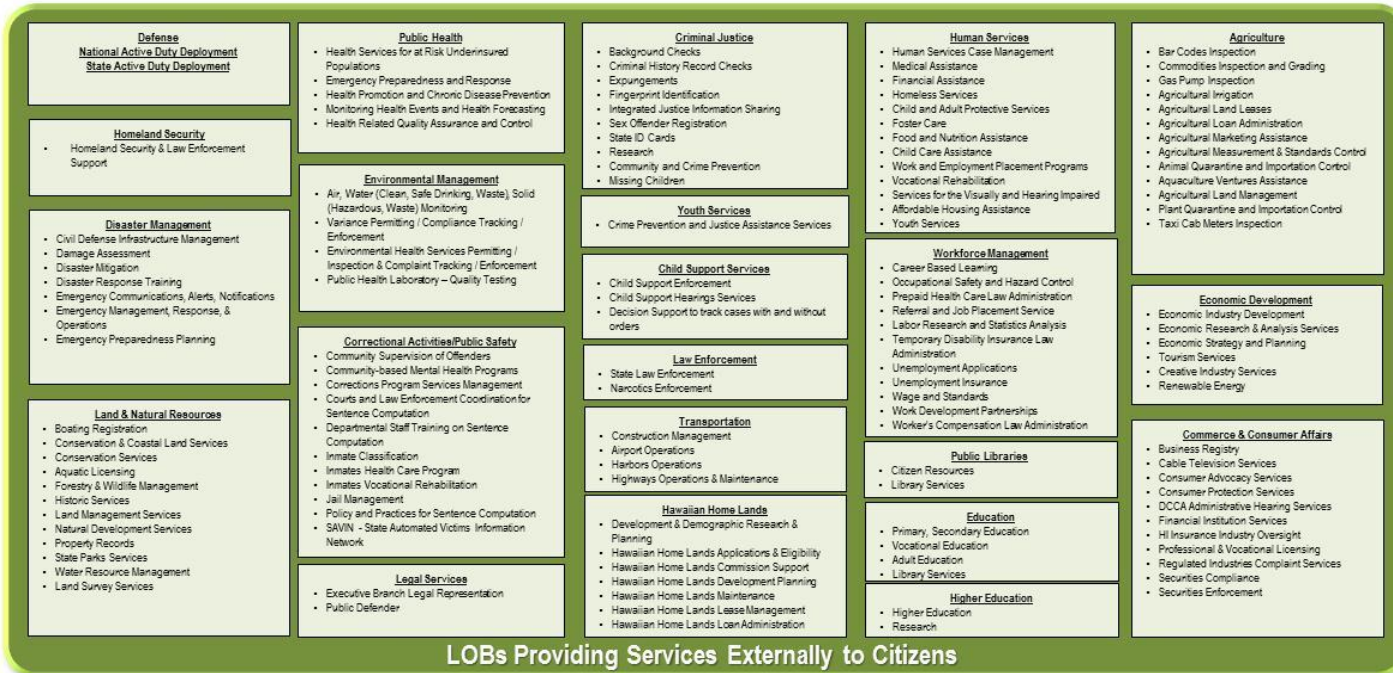
- Information Technology
- Fiscal Management
- Operations Management
- Customer Service
- Civil Defense and Security



# State of Hawaii's Lines of Business

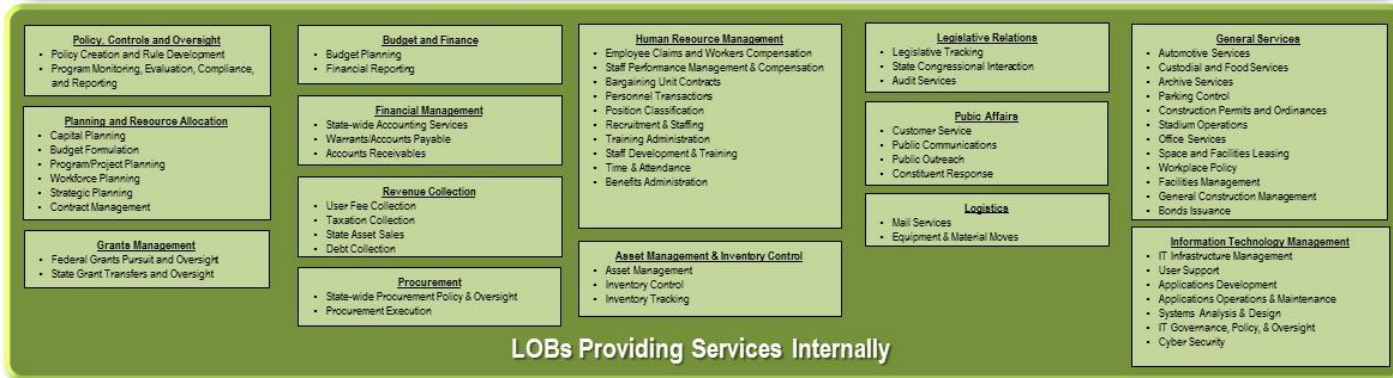


20



LOBs Providing Services Externally to Citizens

14



LOBs Providing Services Internally

34+2=36 LOBs and 204 Business Functions/Services



# The Value Chain



Are we investing the right resources to perform our activities?

Resources are needed to operate a program

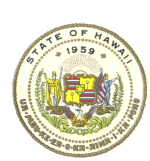
Are the activities we're performing creating the right outputs?

If you have access to resources, **then** you can use them to perform your planned activities

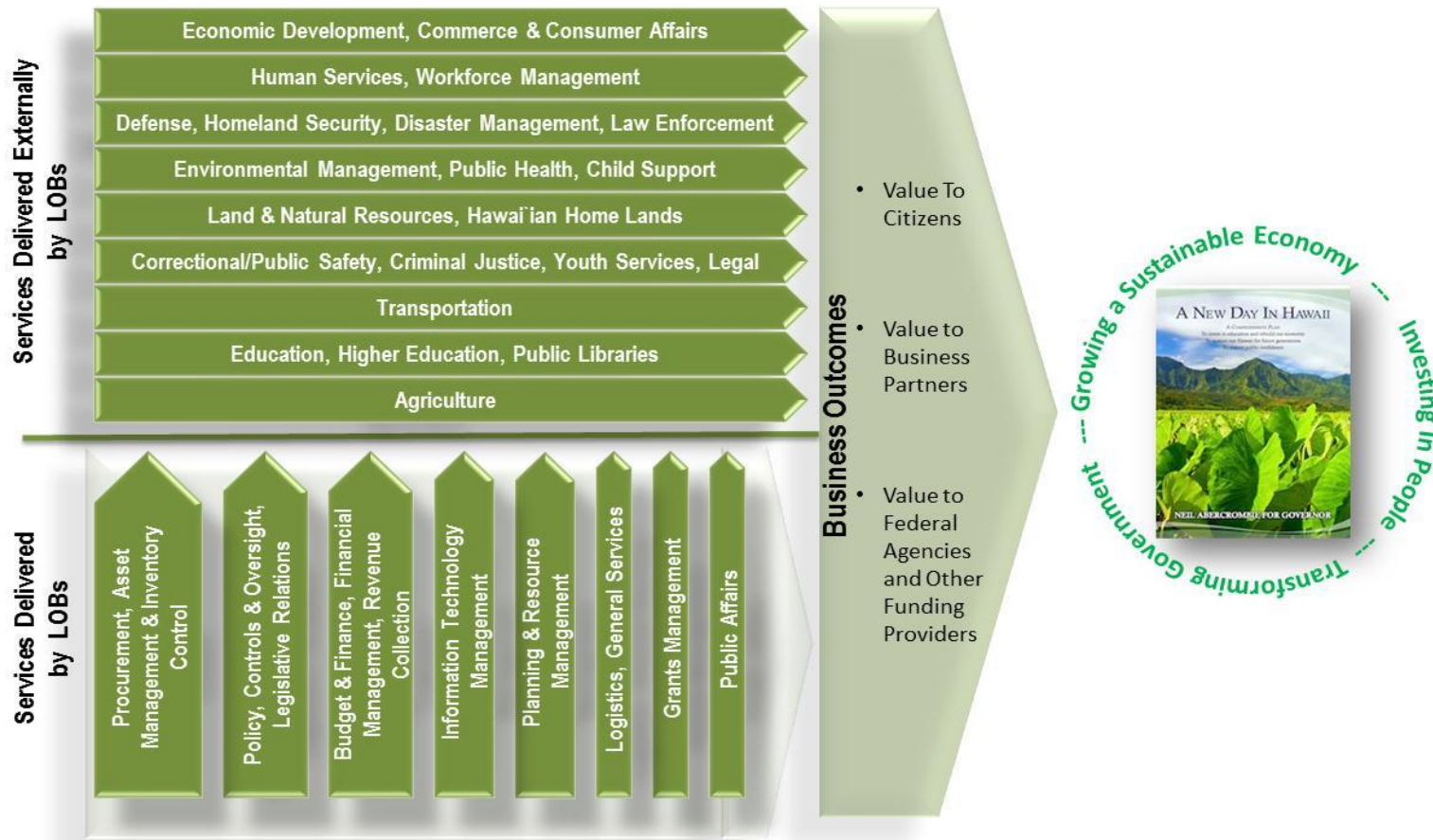
Are the outputs we're generating delivering the outcomes we desire?

If you accomplish your planned activities, **then** you will deliver the amount of product or service that you intended

If you deliver the amount of product or service that you intended, **then** your stakeholders will benefit



# Value Chain for State of Hawaii



We will be thinking not in terms of organization (Departments) but in *Lines of Business*, areas where we deliver value to the people of Hawaii



# Notional Map of LoBs to Departments



		Line of Business within the State of Hawai'i																																										
		LOB Services Provided Externally																LOB Services Provided Internally																										
		Defense	Public Health	Criminal Justice	Human Services	Agriculture	Homeland Security	Disaster Management	Correctional Activities/Public Safety	Education	Higher Education	Public Libraries	Youth Services	Child Support Services	Workforce Management	Environmental Management	Law Enforcement	Economic Development	Hawaiian Homelands	Land & Natural Resources	Transportation	Commerce and Consumer Affairs	Legal Services	Policy, Controls, and Oversight	Planning and Resource Allocation	Grants Management	Revenue Collection	Budget and Finance	Financial Management	Procurement	Asset Management	Human Resources Management	Legislative Relations	Public Affairs	Information Technology	General Services	Logistics							
Departments within the Executive Branch	AG			Lead				Secondary Mission						Lead			Secondary Mission			Secondary Mission			Lead			Stakeholder		Secondary Mission	Secondary Mission	Secondary Mission			Secondary Mission		Secondary Mission									
	B&F																							Secondary Mission	Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission							Secondary Mission	Secondary Mission	Secondary Mission					
	DAGS																							Secondary Mission	Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission												
	DBEDT																							Secondary Mission	Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission				
	DCCA																							Secondary Mission	Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission				
	DHHL					Secondary Mission															Secondary Mission				Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission				
	DHRD		Secondary Mission																						Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission			
	DHS				Lead									Lead											Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission			
	DLIR				Secondary Mission										Secondary Mission	Secondary Mission									Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission			
	DLNR																Lead			Secondary Mission					Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission			
	DOD	Lead						Lead	Secondary Mission					Secondary Mission											Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission			
	DOE		Secondary Mission								Lead		Secondary Mission												Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission		
	DOH		Lead									Secondary Mission	Secondary Mission												Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission		
	DOT							Secondary Mission																	Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	
	DOTAX				Secondary Mission																				Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	
	HDOA		Secondary Mission			Lead																			Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	
	OIMT/ICSD								Secondary Mission																Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	
	PSD	Secondary Mission		Secondary Mission					Lead									Lead							Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	
UH									Secondary Mission	Secondary Mission														Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	
Gov/LtGov																								Stakeholder	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	Secondary Mission	

This is still under construction – but the notional approach is provided for discussion

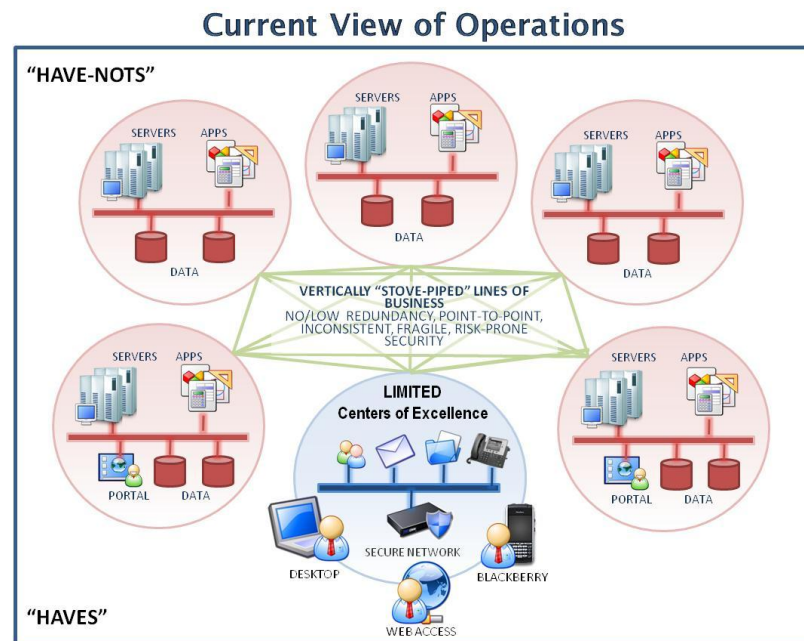




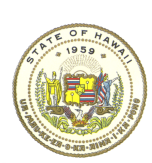
# Baseline Report Findings



- 18 Departments
- \$157.5 million IT/IRM budget
- 746 IT/IRM staff
- Over 700 applications
- More than 200 lines of business
- High duplication of effort
- Wide funding disparities
- Some focused areas of excellence



*Many disconnected silos of effort*

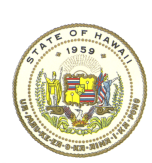


# Widespread Symptoms of IT/IRM Management Challenges



- Inefficient manual interfaces
- Minimal enterprise integration and sharing
- Narrowly-focused federally funded solutions
- Limited use of IT/IRM to enable mission service delivery
- Aging legacy systems conditions (20+ years old)
- Proliferation of any and every type of IT/IRM product and service
- Little business process coordination or information sharing across departments (and programs)

***A clear need for transformation!***

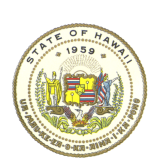


# Symptoms Driven by Three Root Causes



- 1) No coordinating authority for managing information resources and technology across the State
- 2) Lack of cross-cutting business process re-engineering (BPR)
- 3) Deep cuts in resources and budget reductions in the State over the past decade

***Major issues exist – but all are solvable!***



# 20 Key Recommendations

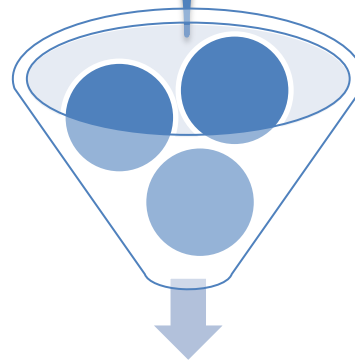


Business Reference Model  
 Manual Interfaces  
 Risk Assessments  
 Performance Measures  
 Funding for IT  
 Agency Model

Data Sharing and Collaboration  
 Bargaining Unit Leadership  
 Service Management Model  
 Application Integration  
 Platforms and Technologies

Organizational Change  
 ICSD  
 Applications Portfolio  
 Data Architecture  
 IT Costs  
 IT Skills

# 20



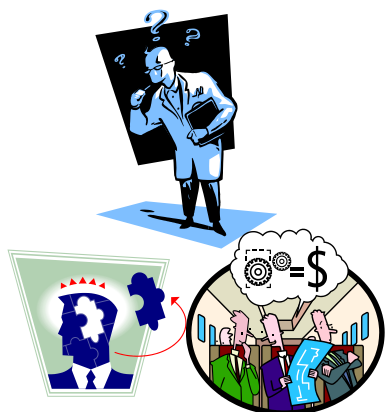
All recommendations are important but must be sequenced according to resources and readiness

# 4

Enterprise Focus  
 Governance Strategies  
 Business Process Re-Engineering  
 Technical Foundation

***We must start implementing 4 foundational recommendations now!***

1



*Create  
Enterprise  
Focus for  
Projects*

2



*Establish  
Enterprise  
Governance*

3

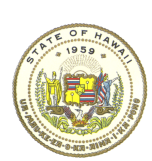


*Re-engineer  
Business  
Processes*

4



*Strengthen  
Technical  
Infrastructure*

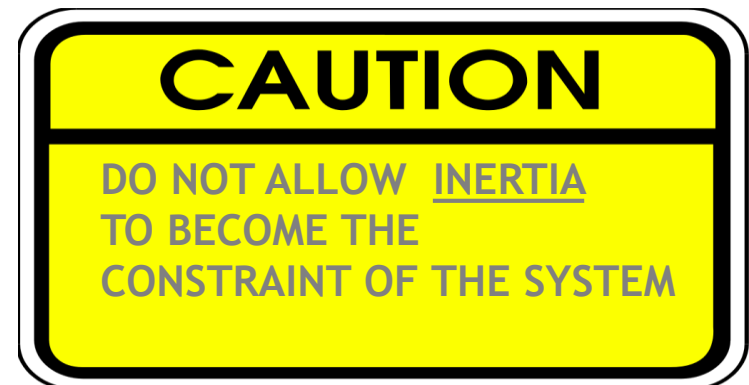


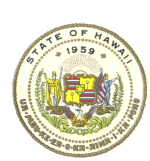
# The 5-Step TOC Process



1. *Identify* the constraint(s)
2. Decide how to *Squeeze* the most out of the constraint(s)
3. *Subordinate* everything else to the above decisions
4. *Elevate* the constraint
5. *Go back* to Step 1

<http://www.myviablevision.com>



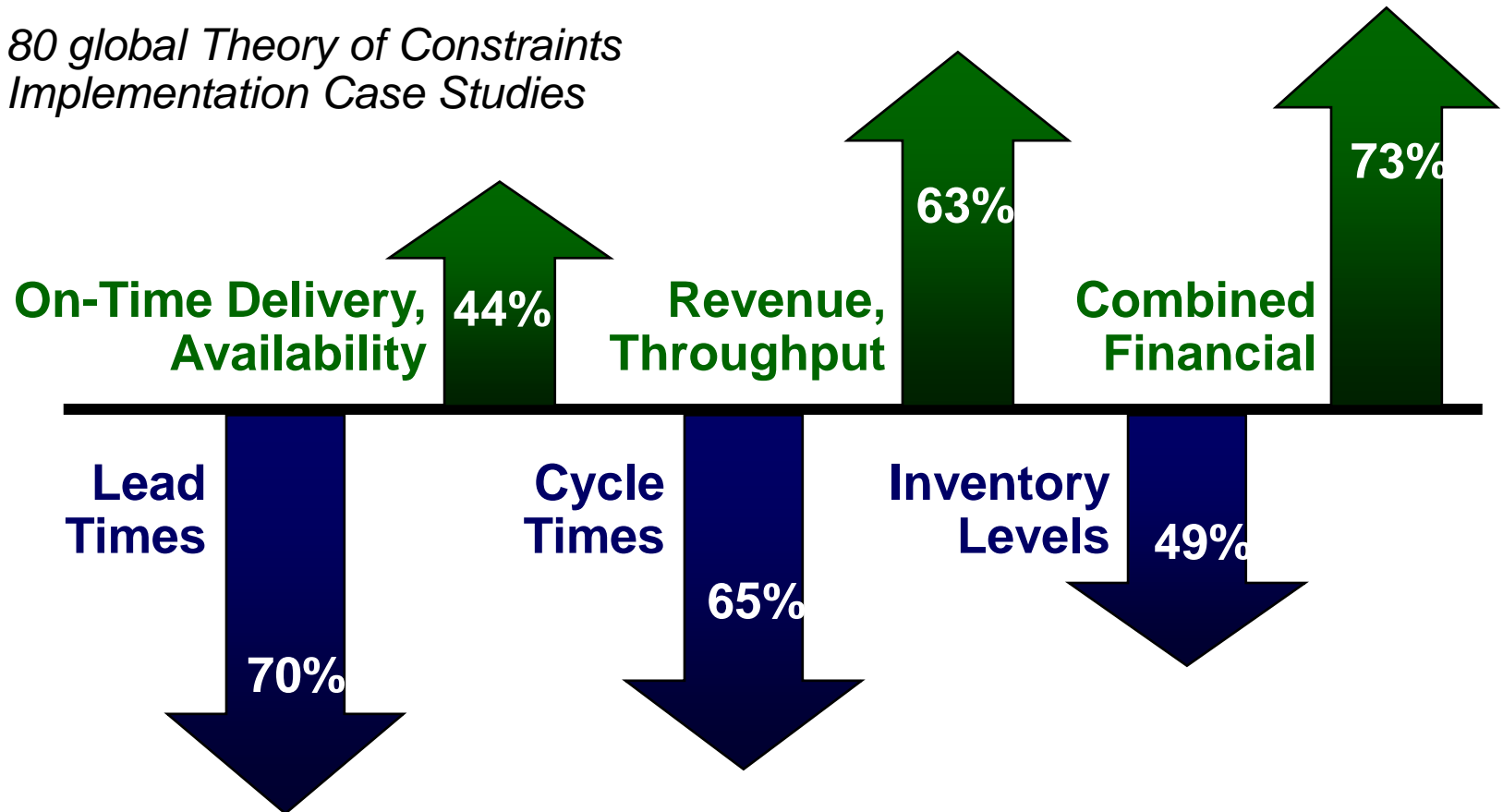


# Theory of Constraints (TOC) and BPR



<http://www.myviablevision.com>

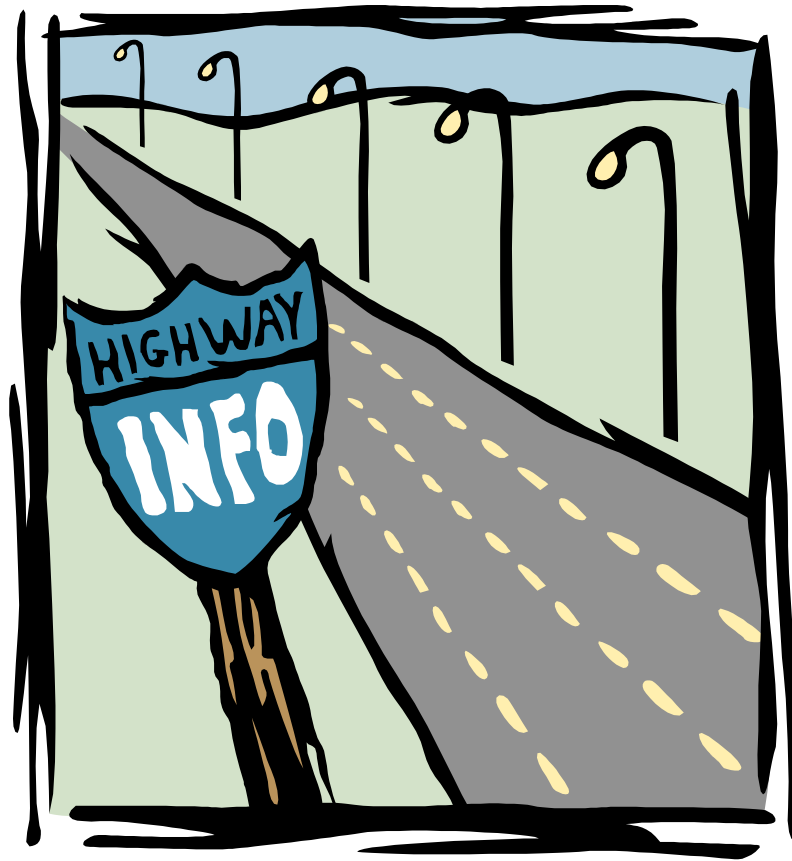
*80 global Theory of Constraints  
Implementation Case Studies*



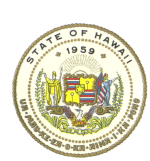
Source: The World of Theory of Constraints, Vicky Mabin & Steven Balderstone, St. Lucie Press



# The Way Forward







# A Vision for a Better Future



## Mission

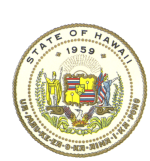
***To assist agencies in the effective, efficient and convenient delivery of programs and services to the public through business transformation and information technology modernization.***



## Vision

***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;***
- ***information technology and information capabilities align and support business needs, strategies, and outcomes;***
- ***innovation and continuous improvement are fostered.***



The transformation will benefit:

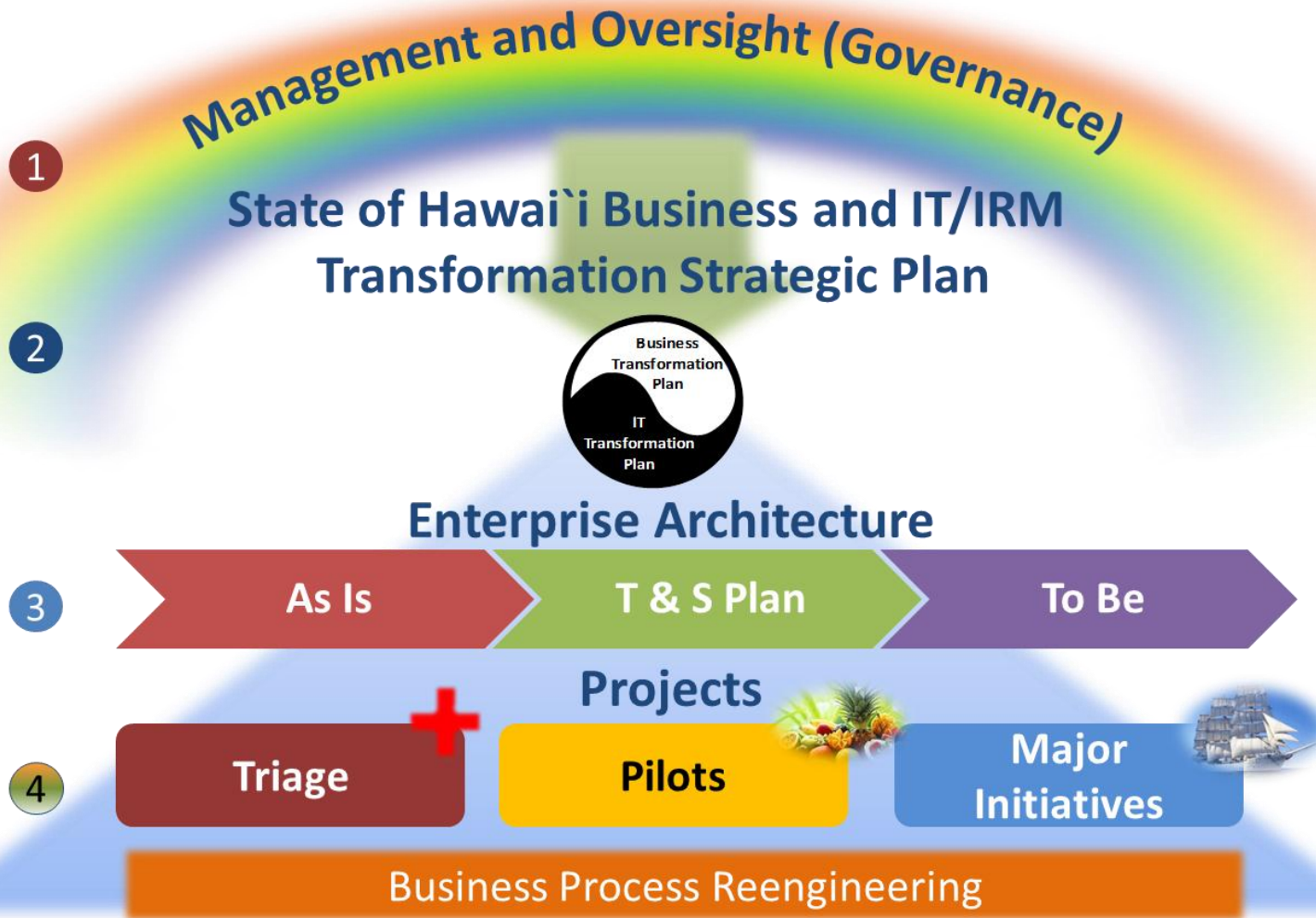
- **State citizens** through improved delivery of services and programs (e.g. going “online” instead of “waiting in line”); a more transparent and responsive government; and increased access to information and data.
- **State employees** with streamlined workflow processes allowing more focus on serving customers and access to a wider range of new technologies to support departmental mission, programs and services.
- **State government** through efficiently aligned services; reduced costs and unnecessary redundancies; increased reliability and security; and improved outcomes and accountability.



# State Strategic Plan



Transformation Framework



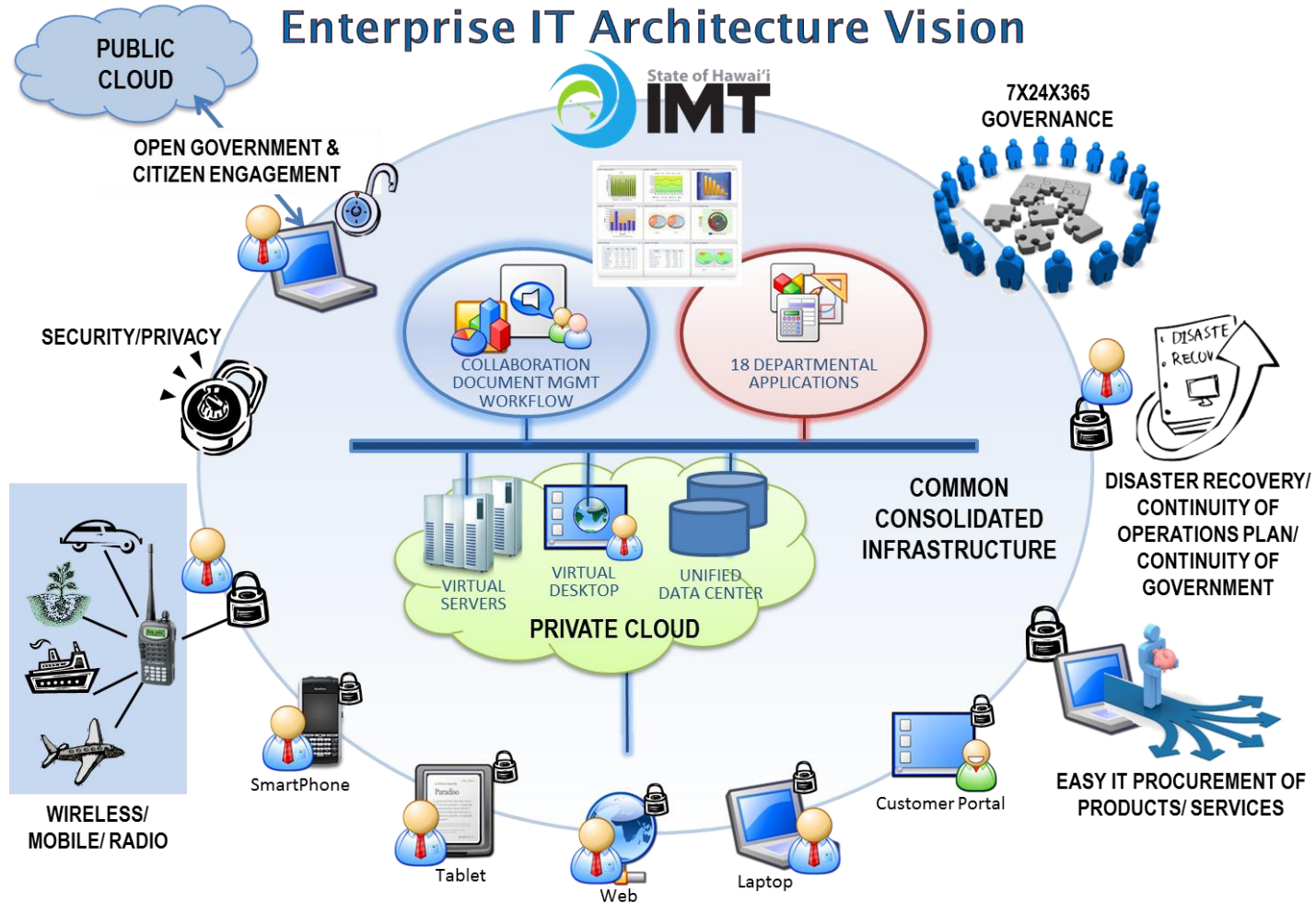
*You will see incremental improvements and delivery*



# Vision



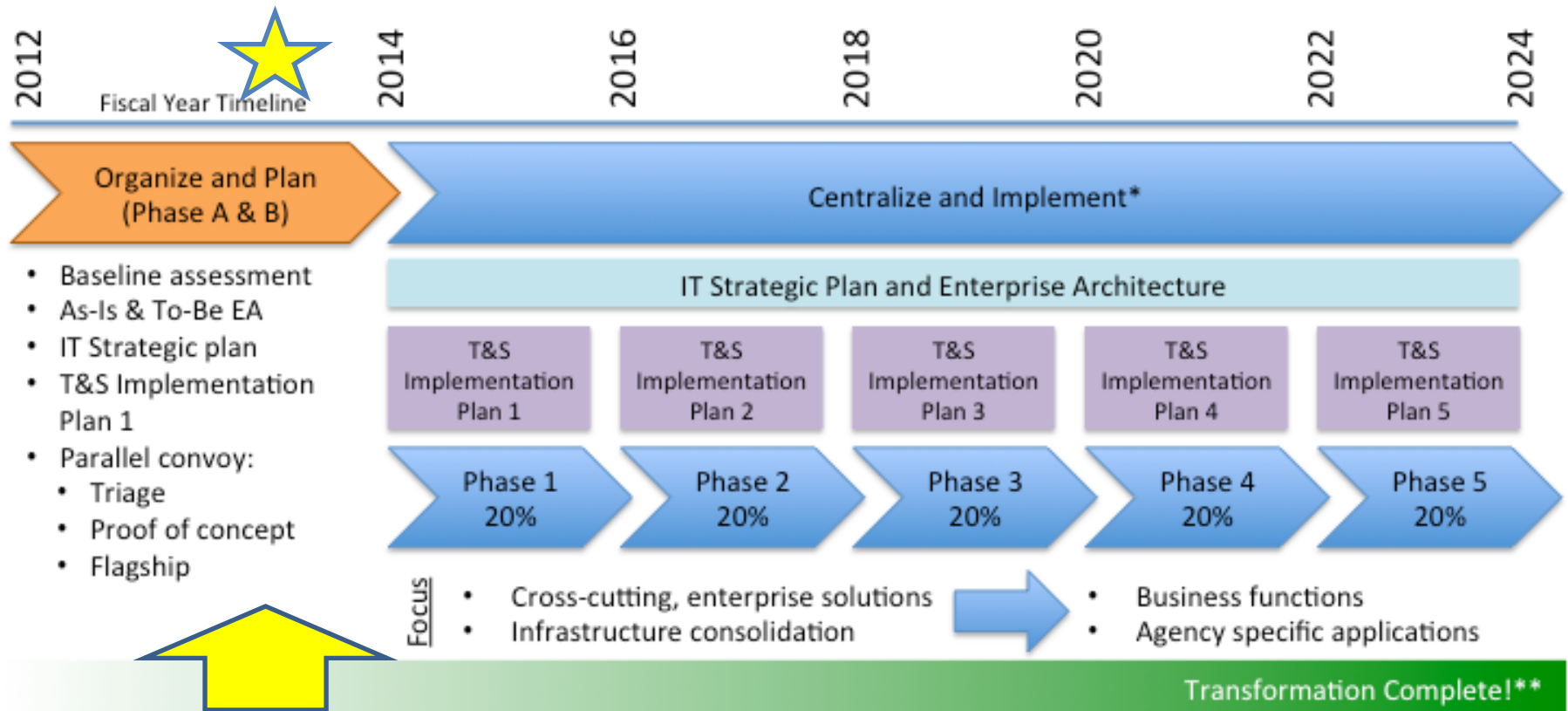
## Preliminary Future Enterprise IT Architecture Vision



*Access to the right information – anywhere, any time, any mission, securely and reliably*



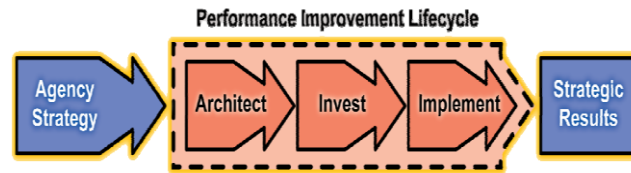
# The Transformation Plan



\*Successful implementation of Centralize and Implement Phases dependent on funding

\*\*State will pursue continuous improvement and innovation during and after the transformation

***Multi-year, multi-phased plan with delivery along the way***



**Stove-Piped,  
Sub-optimized,  
IRM and IT  
Environment  
(Today)**



**Geo-enabled,  
Integrated,  
Mobile,  
Transparent, Web-  
Accessible, Open,  
Standards-based,  
Agile,  
Reliable,  
Available, Secure  
Enterprise  
Information and IT  
Environment  
(Goal)**

**We are at a Crossroad in History –  
Let's Choose the Pathway to Success!**



INNOVATION  
SUCCESS  
EVALUATION  
DEVELOPMENT  
GROWTH  
SOLUTION  
PROGRESS  
MARKETING

# Mahalo!

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