Technology Services Board Quarterly Meeting

October 11, 2018

9:00 a.m. – 12:00 p.m.

WA · Office of the Chief Information Officer

AGENDA

TOPIC	LEAD	PURPOSE	TIME
Welcome and opening remarks	Vikki Smith	Intros	9:00
Recognition for Washington	Sue Langen	Announcement	9:10
Project Update - Liquor & Cannabis Board • **Marijuana Traceability** o **Pat Kohler, Executive Sponsor** o **Kendra Hodgson – Business Sponsor** o **Mary Mueller, CIO** o **Jay Barott, Project Manager** o **Julie Boyer, Stellar Associates, QA**	Vikki Smith Rich Tomsinski	Update / Discussion / Feedback	9:20
Zero-Based Budget Review Update	Vikki Smith Sue Langen	Information / Feedback	10:00
BREAK			10:30
Portfolio Management • **Biennial Report – Link to full report**	Cammy Webster	Discussion / Feedback	10:40
Project Oversight Improvements	Sue Langen	Discussion	11:30
Public Comment			11:55

Current TSB Members

Industry Members Butch Leonardson – Leonardson Leadership Services Paul Moulton – Costco	**Legislative Members** Rep. Mark Harmsworth – House R Rep. Zack Hudgins - House D Sen. Patty Kuderer – Senate D Sen. Mark Miloscia - Senate R
Executive Branch (Agency Directors) Vikki Smith – Acting CIO & Chair David Danner - UTC Tracy Guerin – DRS	**Other Government** Jeff Paulsen – Labor Rep

Members present
Members absent

Recognition for Washington

Announcement

Digital State Survey Results

- Washington received an A- grade
  - Conducted every other year
  - Sustains 2016 grade
  - Measures overall use of technology to improve services, increase capacity, streamline operations and achieve key policy goals
  - Washington remains in upper 25% of states
- Top 5 in the nation in two categories
  - #3 in Transportation
  - #5 in Public Safety

NASCIO Awards Finalist - Reboot of TBM Program

- What we did:
  - REBOOT - Technology Business Management (TBM) Program in 2016
    - Adopted standards, templates, streamline process
    - 45 program agencies at 100% reporting compliance
  - Results:
    - Transparency into IT Investments
    - Improved reporting
    - Mature agencies using data to support decision making
- Washington is recognized leader in public sector
- Link to award
  - https://www.nascio.org/Newsroom

Project Update

Discussion

Marijuana Traceability Project

Topics

- Overview of project
- Status
    - Scope
    - Schedule
    - Budget
- Independent Verification and Validation Gartner Report
    - Recommendations
    - LCB Action Items
- QA Report
- January 2018 TSB Follow up
- Q and A

Traceability Project Overview

- The state's first contracted traceability system, BioTrack THC, went live in 2013
  - The system tracked product from seedling to sale
  - System did not meet OCIO standards
  - System was not scalable or configurable
  - Maturing marketplace outgrew the capabilities of former system
- The LCB unsuccessfully attempted to secure a contract extension with BioTrack THC
  - Faced a "burning platform" with an Oct. 31, 2017 contract expiration.
- In 2017 the agency rebid the traceability system, which was awarded to MJ Freeway, who hosts Leaf Data Systems
  - LCB signed a contract in mid-July 2017 to implement a new system that had to be in place by October 31, 2017
  - Typically, development takes 12-18 months for a project of this complexity
- The Leaf system was implemented February 1, 2018, and is scheduled to be fully implemented by Dec. 31, 2018
  - As it operates today, the system has known defects that are being addressed in releases scheduled for November and December.
  - Tickets are tied to all issues identified in Leaf. Those tickets are part of the upcoming scheduled releases.
  - Vendor management has improved significantly. The new contract has incentives for producing releases earlier than scheduled and liquidated damages for missed deadlines.
  - The independent QA consultant noted the across-the-board improvements in its August report by reducing all "high risk" areas to "moderate risk" or "low risk."

Marijuana Traceability Status

Current Scope Status

- Scope remained relatively constant (six CRs approved totaling $15,657)
- Release 1.35.6 successfully implemented August 27, 2018

Budget

- Changes from IT Pool Technology budget increased by $528,467 to $3,063,751

Timeline

- Changes from IT Pool Technology schedule increased by 6.7 months from 08/10/2018 to 02/28/2019
  - Release 1.1 is due on 11/05/2018
  - Release 1.2 is due 12/18/2018
  - Release 1.3 is due 12/31/2018

Gartner Assessment

Independent Verification and Validation

- As required by the Office of the Chief Information Officer, LCB initiated the process to conduct an Independent Validation and Verification (IV&V)

- Gartner was engaged to perform an independent assessment of the Leaf development process and implications in the field
  - Original period of performance May 31, 2018 - June 30, 2018
  - No cost extension period of performance May 31, 2018 – August 31, 2018

- The IV&V was a focused evaluation around **Solution Development & Implementation** which consisted of assessment in six areas:
  - Business Process/Requirements
  - Architecture & Design
  - Interfaces/Integration
  - Development & Configuration
  - Testing
  - Deployment

Gartner Executive Summary

Gartner Identified Areas Going Well…

Dedication

- MJ Freeway stated that they remain dedicated to the State and the project.
- The team is transparent and seems willing to make required changes so the project can move forward in a positive manner.
- The Washington State team has the same dedication to the integrators and licensees as MJ Freeway does to the state.

Improved Communication

- Communications between the State team and the MJ Freeway team has improved since staffing changes occurred.

Defined Roles

- The roles of the State teams are better defined and the different resources appear willing to the support the project moving forward.

Workarounds

- Contingency spreadsheets provided a fair and simple way for reporting by licensees.

Gartner Going Forward Recommendations

After completing the remaining areas of the risk assessment, Gartner recommended WSLCB proceed with two go-forward options...

1. **Consider Cancelling the Project**
   - LCB is preparing contingencies in case the vendor is unable to meet contract terms

2. **Implement Remediation Plan**
   - LCB has drafted and is currently implementing remediation plan (next slides)

Remediation and Response

Software Development

- **Issue:** Commercial Off the Shelf (COTS) systems do not exist in the immature marijuana regulatory market and customization requirements of the system were underestimated.

- **Remediation:** Further define MJ Freeway's services and engineering development to improve quality of the Leaf solution.

What LCB Has Done

- Created configuration and release plans that outline specific build methodologies, quality controls and acceptance criteria.
- Conducted lessons learned
- Published weekly defect and status reports for third-party integrators
- Prioritized backlog
- Subject matter experts (SME) are engaged in elicitation to understand downstream impacts
- Product owners review acceptance criteria and release plans

What LCB Will Do

- Review existing plans to identify gaps and update with detailed expectations
- Continue to enforce controls

Remediation and Response

Testing

- **Issue:** The state went live with a solution that would have failed typical tests

- **Remediation:** Enhance testing processes and follow existing best practices

What LCB Has Done

- Updated test plan defines entrance and exit criteria
- Regression testing for each new release
- Code was rejected if non-cosmetic defects are found
- Triage team reviewed all found defects
- User story acceptance criteria designed by SMEs as exit criteria for release
- Triage process assigns severity and priority to each user story or defect
- All integrators are given 2-5 days to test releases

What LCB Will Do

- Require MJ Freeway to conduct a review of their testing process and implementation improvements
- Publish weekly production release metrics including defects

Remediation and Response

Deployment

- **Issue:** The system was not mature enough for launch on Feb. 1, 2018

- **Remediation:** Create a predictable release plan focused on stability

What LCB Has Done

- Configuration, release and test plans are in place and closely monitored

What LCB Will Do

- Ensure plans for compliance are correct and correct deficiencies
- Develop a risk log for each release and ensure risks are accepted or mitigated for each release
- Executive sponsor will be final approver on all releases

Remediation and Response

Architecture and Design

- **Issue:** A lack of API documentation and best practice information created road blocks for consuming web services and has caused problems for API consumers.

- **Remediation:** Develop and disseminate API supporting documentation for third party consumers

What LCB Has Done

- API documentation is tested for accuracy prior to release and is used as a decision gate
- API documentation is available in the application and on the LCB website
- Compared CA, OR, NV API documentation
- Documented and published security requirements in contract
- Contract contains robust and detailed security requirements that exceed OCIO standards
- Conducted third-parted vulnerability assessment prior to launch

What LCB Will Do

- Enhance gap analysis and testing to ensure security requirements are met

Remediation and Response

Business Process/ Requirements

- **Issue:** Intent for Leaf as a “compliance,” not “inventory management,” system was not fully understood by all stakeholders. Subsequently, adoption of the deployed system was negatively impacted by the perception that external user needs were not accommodated.

- **Remediation:** Ensure internal and external stakeholders have a common understanding

LCB Has Done

- Initiated hiring an Organizational Change Management (OCM) Consultant

LCB Will Do

- Develop and implement and OCM plan to assist internal and external stakeholders

Marijuana Traceability Project

- OCIO IT Dashboard -
- External QA -

QA Assessment Area	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	July 2018	Aug 2018
Overall Project Health and Environment	Mod	High	High	High	High	High	High	Mod
Project Integration Management	Mod	Mod	Mod	Mod	Mod	Mod	Mod	Mod
Scope Management	Mod	Mod	Mod	Mod	Mod	Mod	Mod	Mod
Time Management	Mod	High	High	High	High	High	High	Mod
Cost Management	Mod	Mod	Mod	Mod	Mod	Mod	Mod	Mod
Quality Management	Low	Mod	Mod	Mod	High	High	High	Mod
Human Resources Management	High	High	High	High	High	High	High	Mod
Communications Management	High	High	High	High	High	High	Mod	Mod
Risk Management	Low	Mod	Mod	Mod	Mod	Mod	Low	Low
Procurement Management	Low	Mod	Mod	Mod	Mod	Mod	Mod	Mod
Stakeholder Management	High	High	High	High	High	High	High	Mod

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Follow Up to January TSB Meeting

Commercial Integrations with Leaf

- Initiated integrator certification and decertification program research
- Analyzed other state programs
  - Limited to simple API validation
- Consulted AG
- Consulted OCIO
  - Confirmed that integrators are subject to OCIO 141.10 (security policy)
- Developing workgroup with integrator, research and licensee representation
- Hiring Integrator Program Specialist that will be liaison with integrators and lead effort

Q and A

Zero-Based Budget Review – OCIO Impacts

Discussion

Background

Mandated by Legislature in last biennial budget

Evaluated WaTech service areas , included most OCIO programs (based on funding code)

Six criteria established Ability to Execute and Value Generation

Resulted in rating to discontinue, contain, improve or expand

Key Recommendations

Expand

- Geospatial Governance
- Open Data

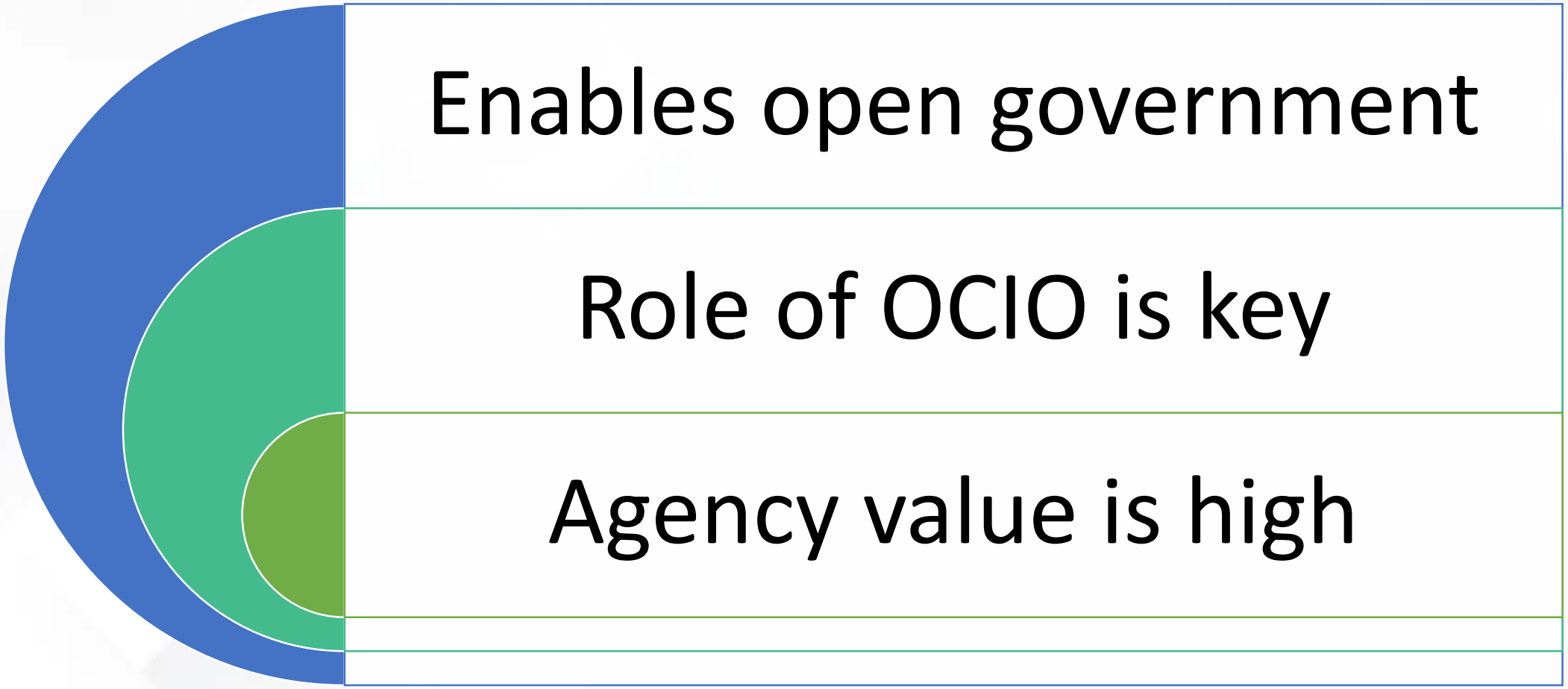
Improve

- Policy & Architecture
- Oversight
- Technology Business Mgmt
- Geospatial Portal & Imagery
- WAMAS
- Security Services

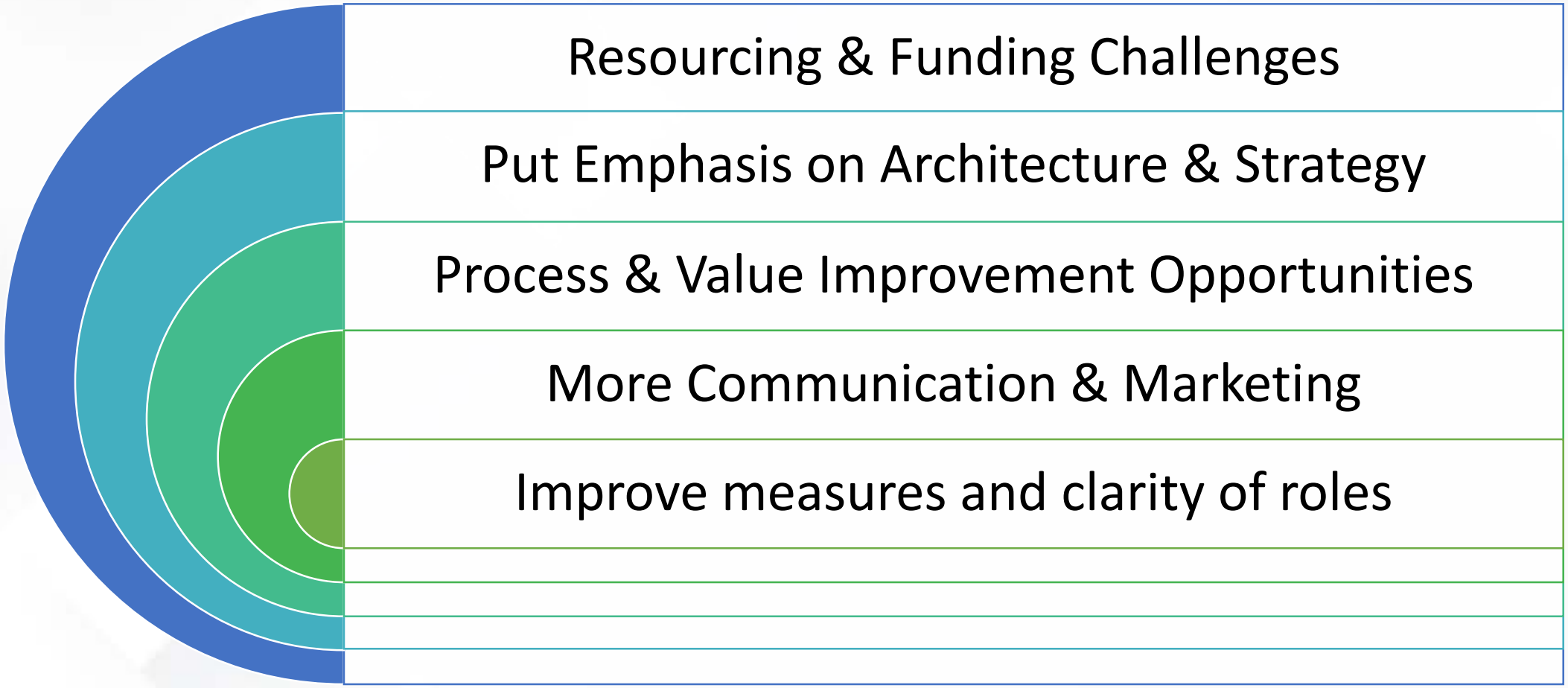
Discontinue

- One Net

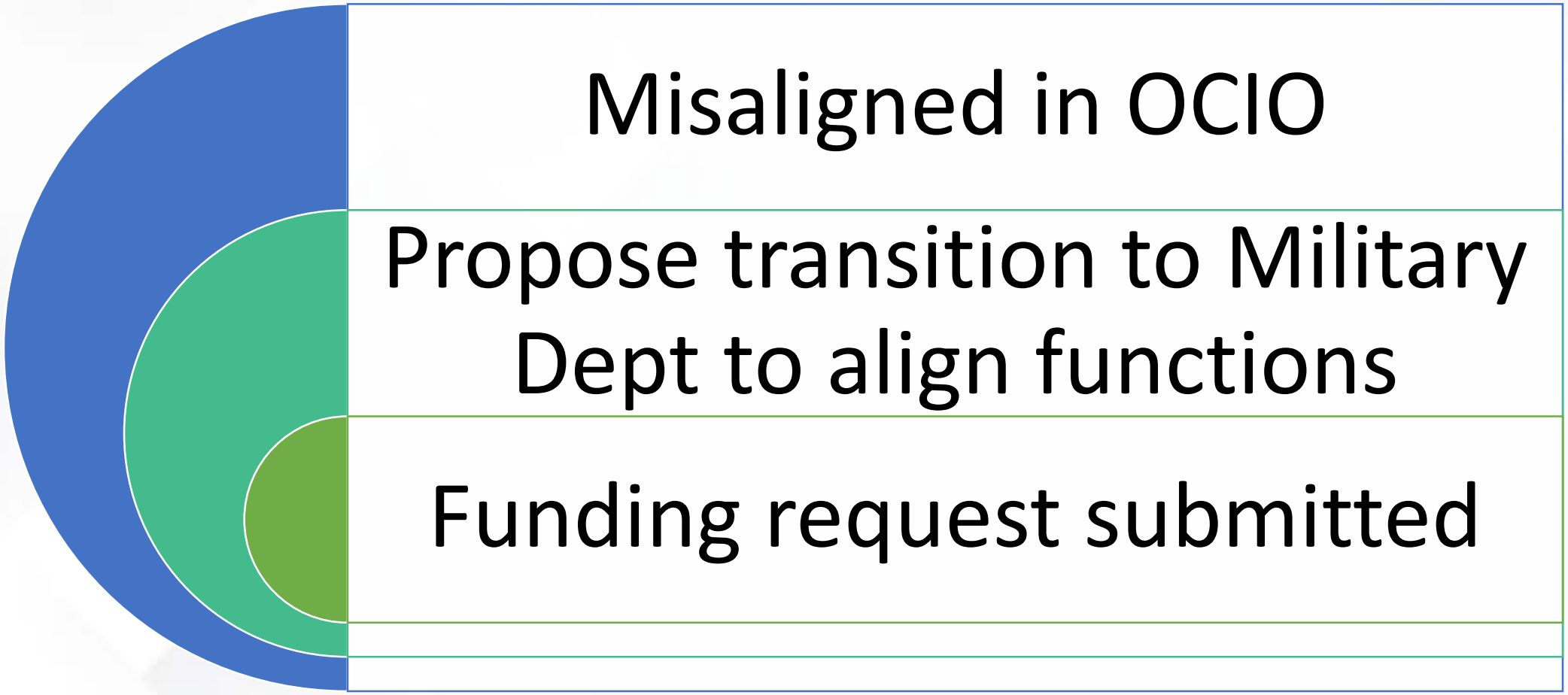
Basis for Expand Recommendations



Basis For Improve Recommendations



Basis for Discontinue Recommendation



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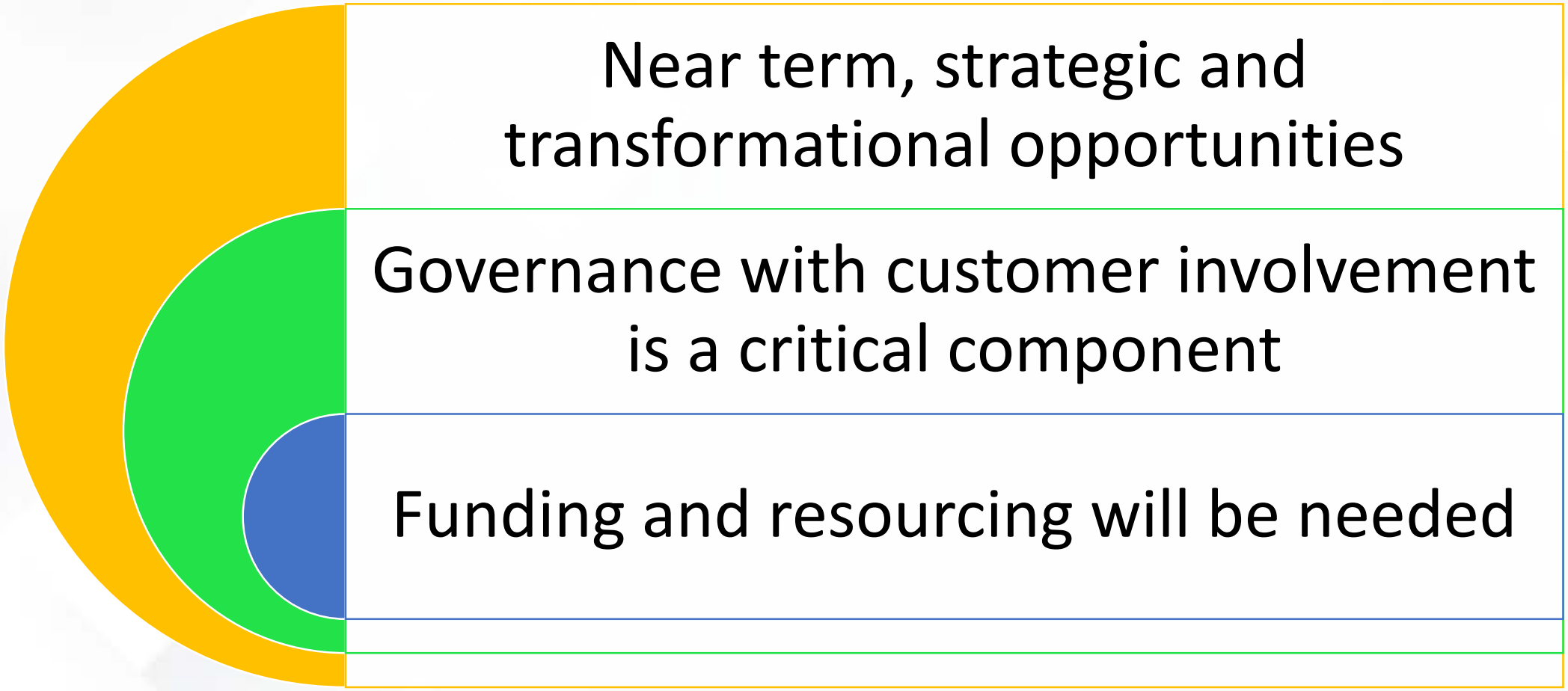
Impacts to WaTech Services



2013-2017 IT Biennial Report

Discussion / Feedback

Background

Guided by RCW 43.105.220

Strategic Information Technology Plan

- Establishes statewide mission, goals and objectives for use of IT
- Goals for electronic access to records, information and services
- Plan in accord with established standards and policies
- Seek advise of the TSB in plan development

Biennial State IT Performance Report

- Based on agencies IT portfolio
- Analysis and evaluation of performance relating to IT
- Assessment of progress towards implementing the strategic plan
- Analysis on success or failure of major IT projects

2013-2017 Report Foundation

Strategic Information Technology Plan

- Used to guide movement forward
- Multiple versions and structures
- Retained emphasis across versions

IT Portfolio

- Cornerstone is Portfolio Management program
- Several component parts
- Less structured data capture methodology

Interesting Findings

Assessment - Implementing Strategic Plan

Supporting access to public information

Enabling citizen two-way access to public records and services

Office of Privacy and Data Protection

- Increased training on managing/protecting citizen data

Office of Cyber Security

- Responding to intensified threats and cyberattacks

Updates to statewide technology policies

- Support for enterprise architecture

Addressing ‘silver tsunami’ – IT job class study

Evaluation of IT Performance

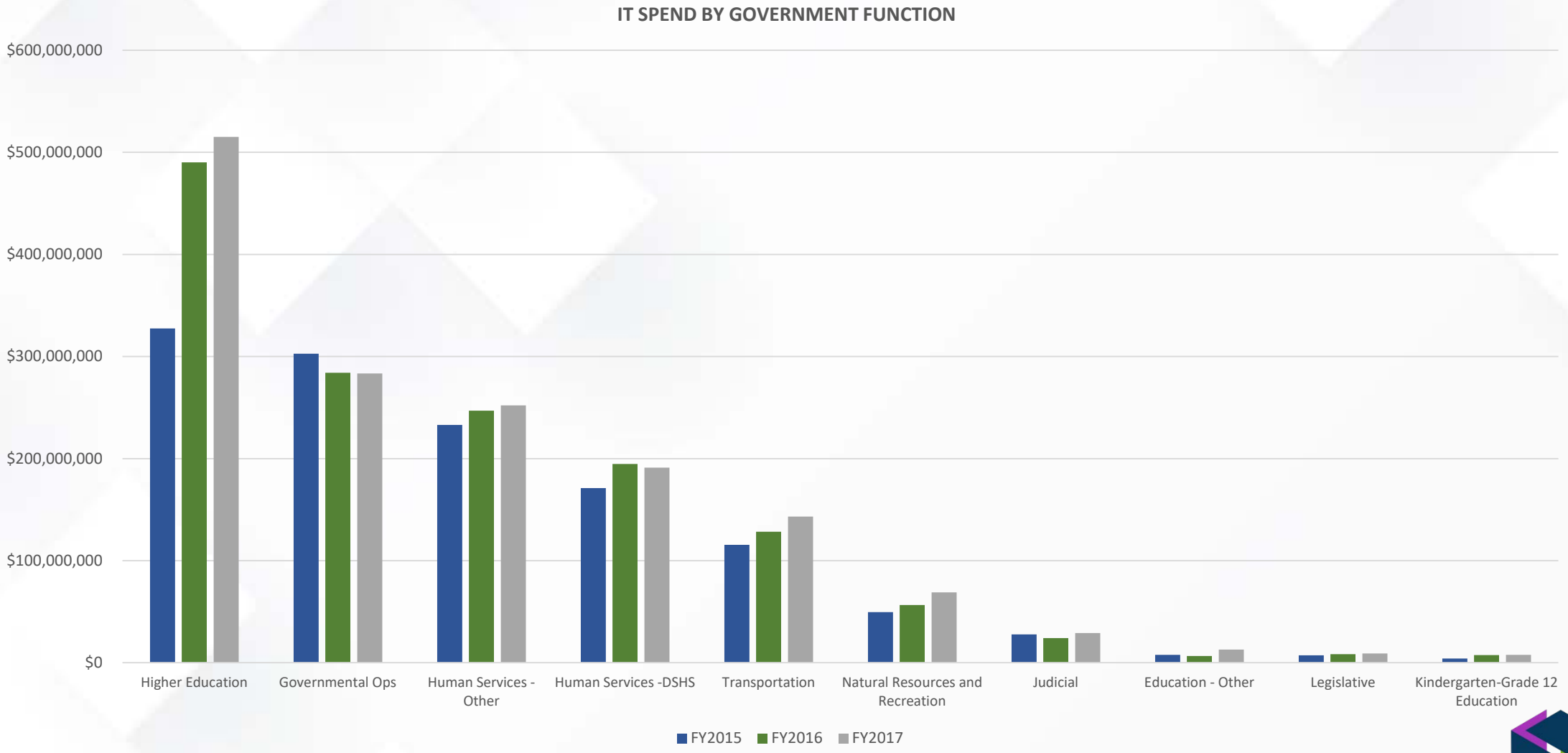
Increased emphasis data center migration	Progress on accessibility	Improved investment transparency
• 19 agencies with active migration • 27 agencies developing migration plans	• 98% of agency have accessibility coordinator	• Ability to benchmark across government and private sectors

IT Investment Profile

2016-2017 STATE IT INVESTMENT				
Cost Pool	**2016**	**2017**	**2016-2017 Total**	**% of Spend**
Internal Labor	$546,125,618	$603,515,416	**$1,149,641,035**	**39%**
External Labor	$199,193,790	$185,706,560	**$384,900,350**	**13%**
Outside Services	$261,370,920	$265,227,419	**$526,598,339**	**18%**
Hardware	$170,892,325	$189,613,823	**$360,506,148**	**12%**
Software	$99,017,739	$116,420,937	**$215,438,675**	**7%**
Other	$71,195,446	$59,418,066	**$130,613,512**	**4%**
Telecom	$59,074,968	$50,507,511	**$109,582,479**	**4%**
Facilities & Power	$40,540,044	$42,293,730	**$82,833,775**	**3%**
Total	**$1,447,410,850**	**$1,512,703,462**	**$2,960,114,312**	**100%**

- *Significant increase attributed higher education*

IT Investment by Government Function



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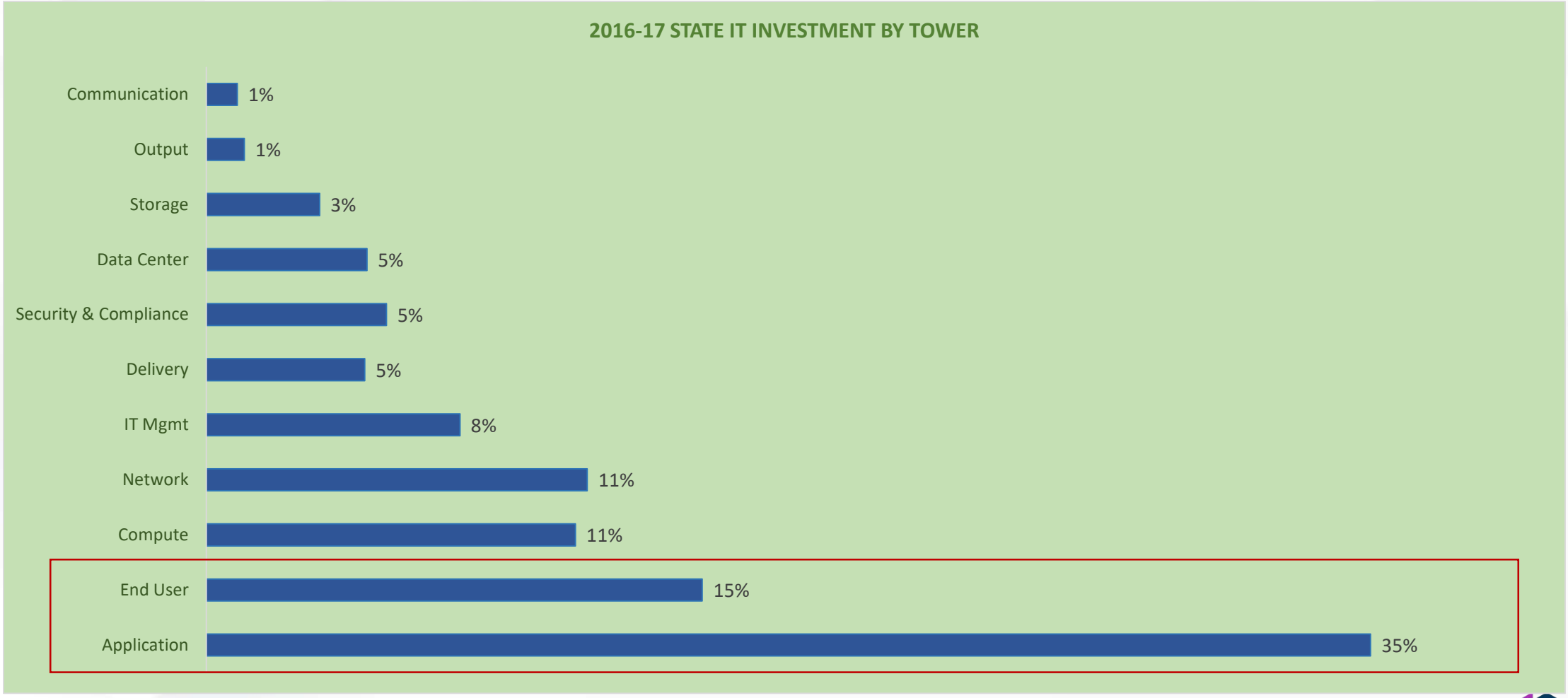
Investment by Technology Tower



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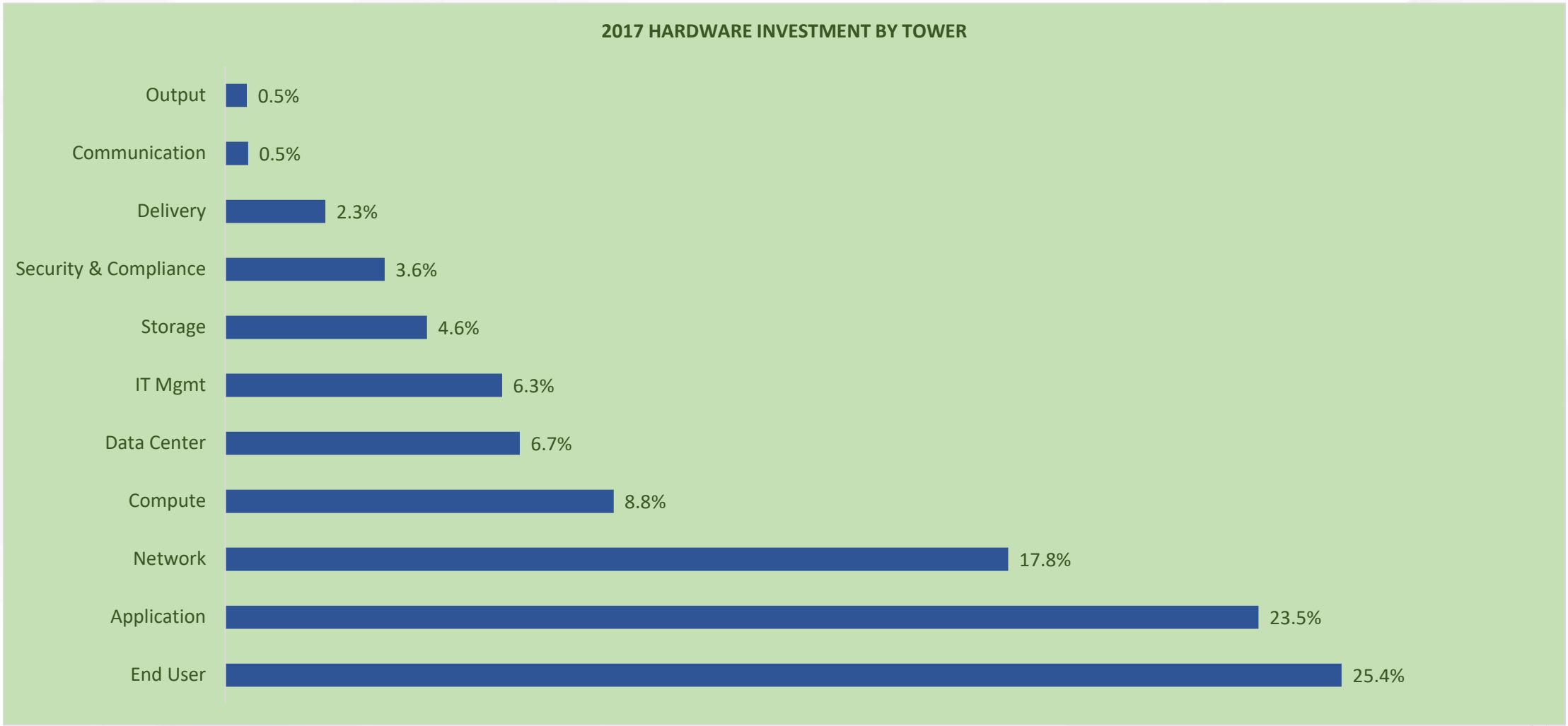
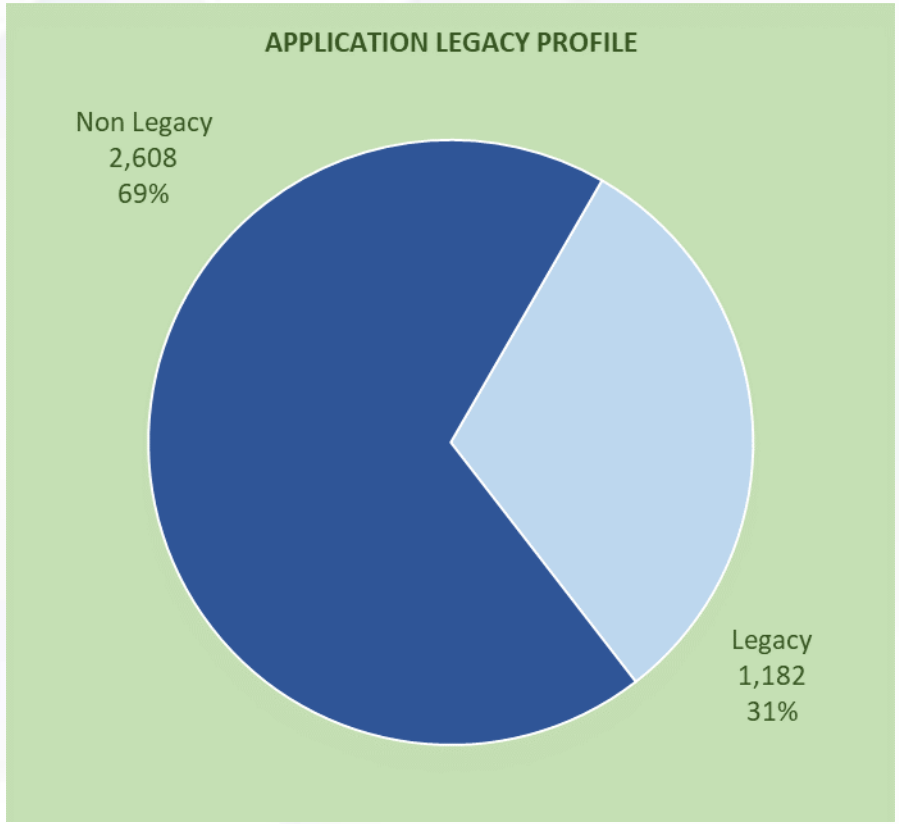
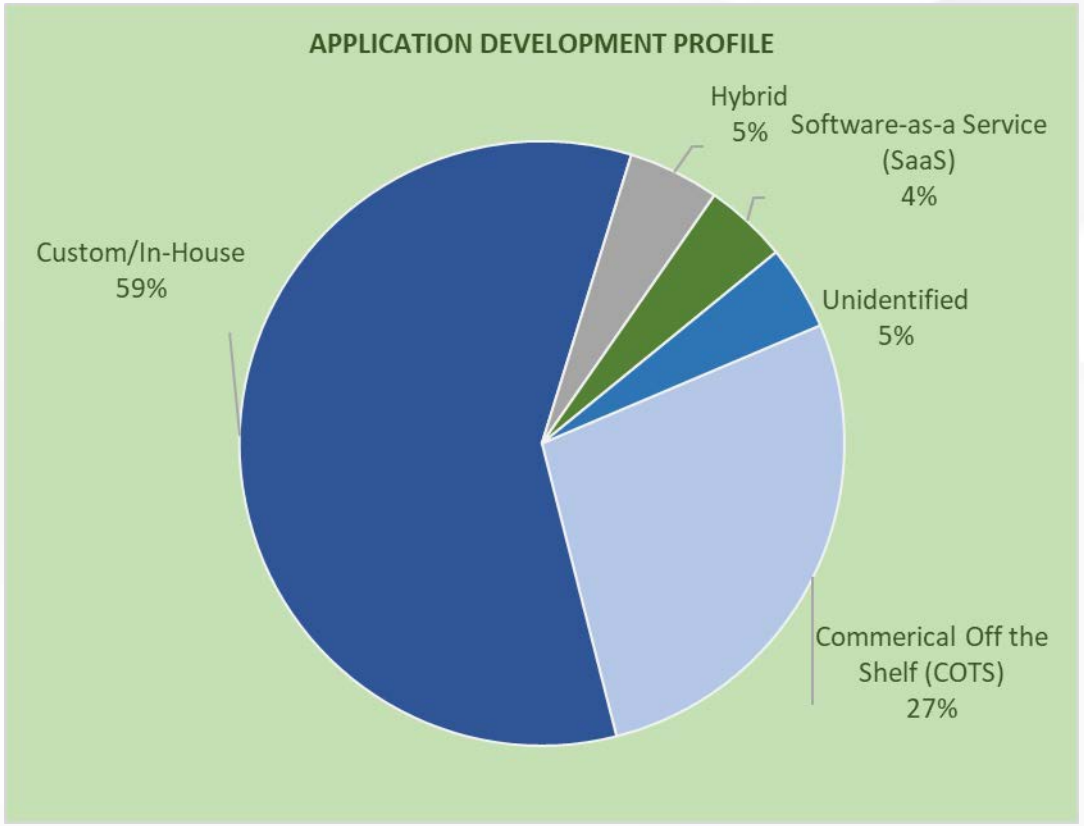
Hardware Profile



Application Profile



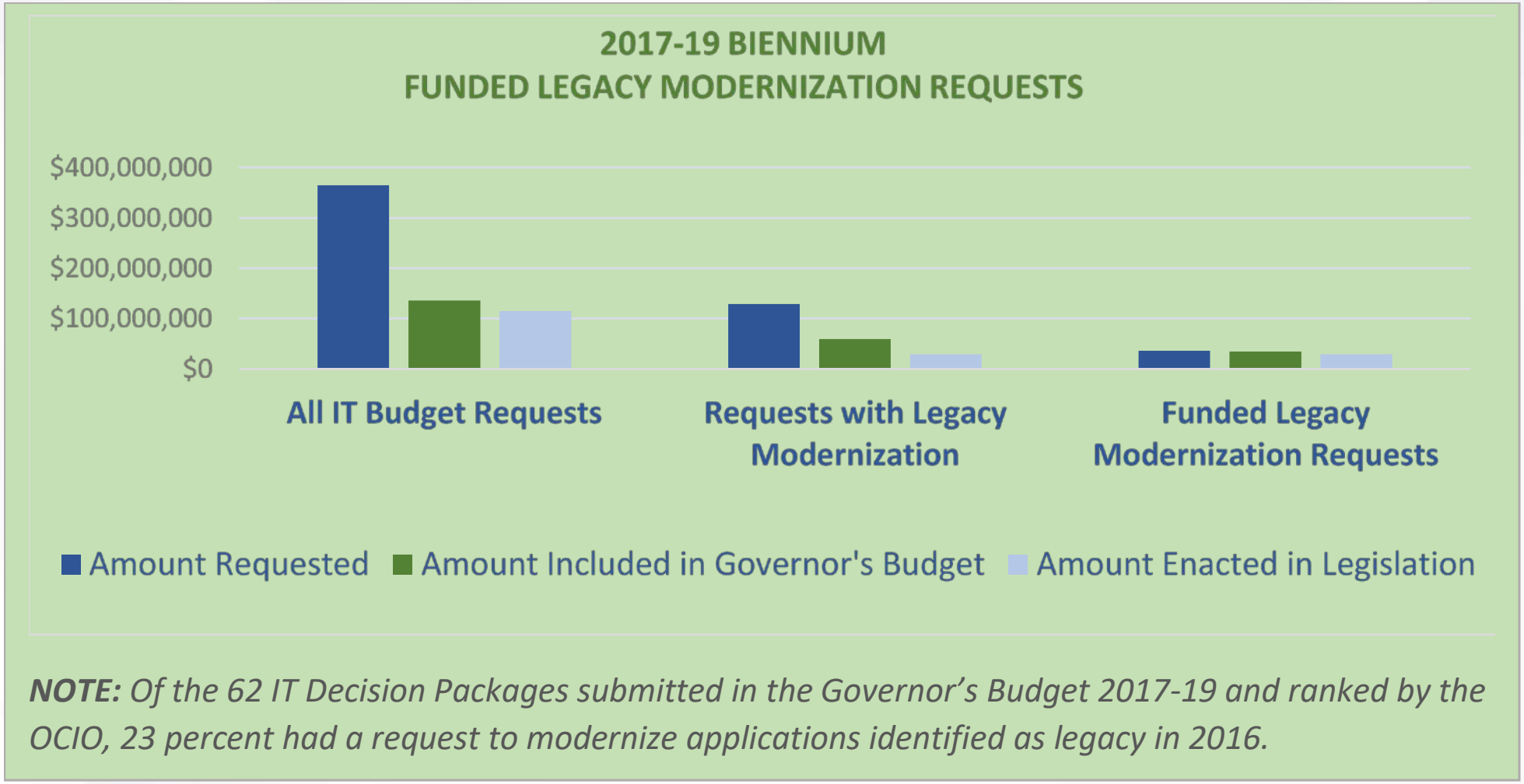


- *65% of "custom developed-legacy" apps are mission critical/business essential*

2014-17 Modernization Projects - Closed

Agency Name	Project Name	Budgeted
Department of Ecology	Attendance Tracking Replacement System (eTime)	$2,211,213
Department of Fish and Wildlife	Washington Internet Licensing Database System (WILD)	$3,800,000
Employment Security Department	Unemployment Tax and Benefit (UTAB) System	$43,662,000
Employment Security Department	CallTech (UI Claims Center Tech Upgrade)	$3,848,849
Department of Labor & Industries	Crime Victims Case Management (CVCMS)	$1,652,254
Department of Labor & Industries	Mobile Inspections	$3,548,000
Department of Labor & Industries	My L&I	$3,920,560
Department of Labor & Industries	Prevailing Wage Program	$1,130,000
Department of Labor & Industries	Self-Insurance Risk Analysis System (SIRAS)	$2,472,000
Department of Licensing	American Association of Motor Vehicle Administrators (AAMVA) modernization	$800,000
Public Disclosure Commission	Customer Service Case Management System	$99,950
Department of Social and Health Services	Critical Incident Tracking System (CITS)	$15,067,016
Washington State Patrol	A Central Computerized Enforcement Service System (ACCESS) Replacement Project	$2,390,296
	TOTAL BUDGETED AMOUNT	**$84,602,138**

Funding Legacy Modernization Requests



NOTE: *Of the 62 IT Decision Packages submitted in the Governor's Budget 2017-19 and ranked by the OCIO, 23 percent had a request to modernize applications identified as legacy in 2016.*

Analysis Major Projects

2014-2017 PROJECT OVERSIGHT

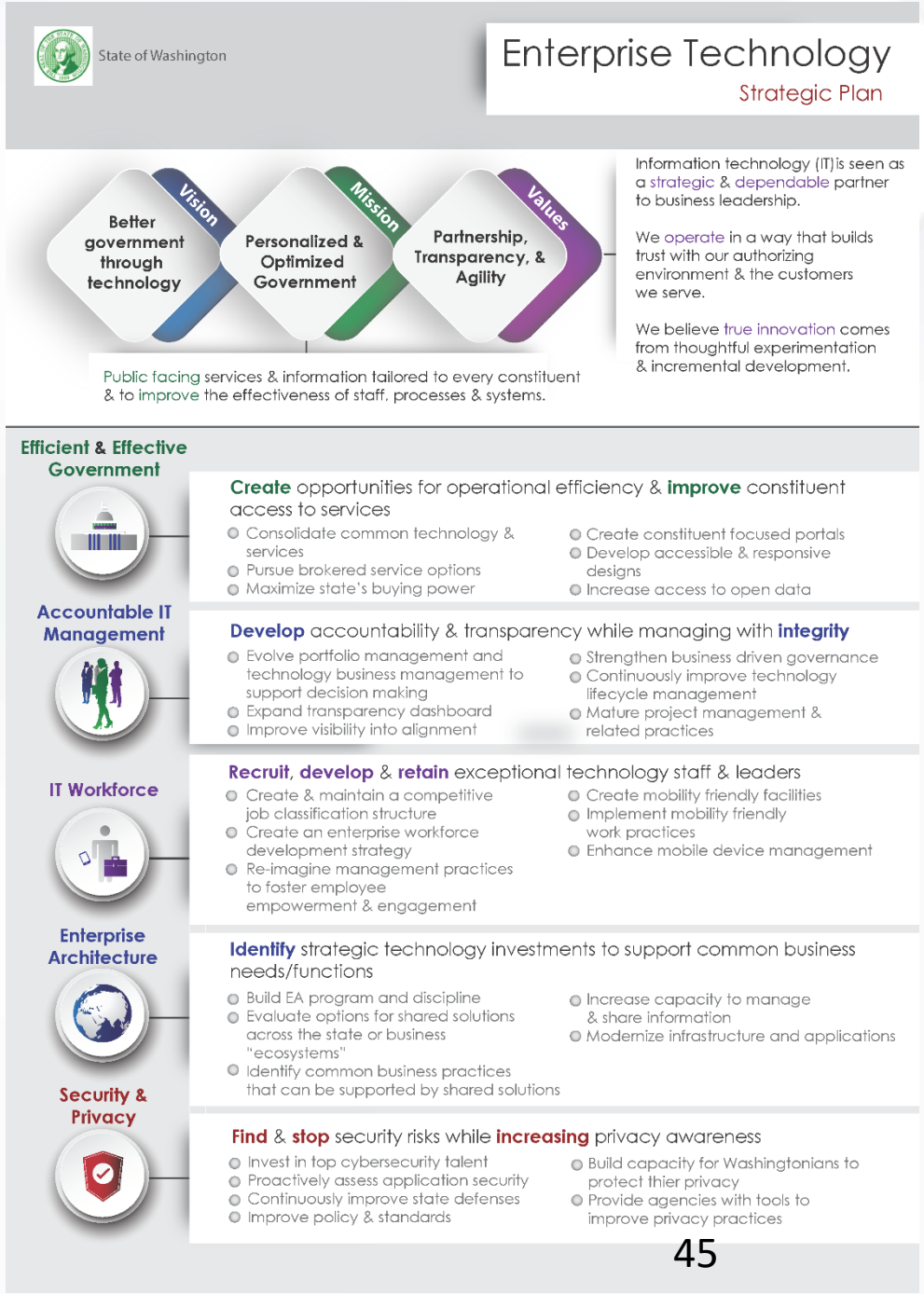
- 143 Projects: $1.09 Billion Budgeted
  - Includes 40 IT Investment Pool Projects
- Project Status as of 2017
  - 75 Closed
  - 56 Still Active
  - 9 Cancelled
  - 3 On hold
- Project Status at Close of Project
  - 75% Green
  - 21% Yellow
  - 4% Red

Improvement Activities

- Using data to informs future process improvements
- Developed new risk/severity assessment tool
- Update to quality assurance standards
- Analyzed critical success factors based on lessons learned

Other Findings

2017-2021
IT Strategic Plan



IT Biennial Report – Recognizing Gaps

Why 2013-15 included with 2015-17

- 2013-15 Biennium Report not prioritized
- Merge of OCIO with CTS was underway
- Competing areas of focus overextended already constrained resources

Reporting gaps discovered

- Inadequate data capture
- Limited analysis
- Missing performance metrics
- Manual business processes

2017-19 Biennial Activities to Close the Gaps

OCIO Commitment

- Renew/update statewide IT Portfolio Management model
- Expand data capture in multiple areas
- Improve business processes to capture agency portfolio data
- Increase focus on Performance Management
- Broaden and strengthen analysis
- Heighten emphasis on timely reporting for 2017-19 Biennium

Activities in Progress

Portfolio Management Model - Components

Governance and Compliance

- Process/structure for decision making
- Prioritization and balancing alignment

Strategy/Strategic Plan

- Enterprise Architecture
- Key performance criteria
- Goals, definitions and categories

Assessment

- Inventories
- Categorize, evaluate and select
- Resource analysis and availability
- Capacity
- Communicate adjustments

Monitoring and Control

- Monitor performance indicators
- Management portfolio risk
- Monitor and report on IT Investments
- Project Oversight

Performance, Results, Outcomes

- Biennial Report
- IT Spend Report
- Track and report Outcomes
- Lessons learned

Performance Reporting Emphasis

- Data Capture and Analysis
  - IT Project Assessment (ITPA)
  - IT Project Dashboard
  - Major IT Project - Lessons Learned
- Zero-Based Budget Report (ZBBR) recommendations
- Expanded IT Investment reporting
- Legacy application trending

Project Oversight Improvements

Discussion

Target Areas

Overall Approval and Oversight Process

- Phasing and Gating
- Evaluate opportunities to engage TSB differently

Role & Value of Quality Assurance

- More QA community engagement
- Revisit policies and standards

Capture, Analysis & Redeployment of Lessons Learned

- Vendor Management
- Organizational Change Mgmt
- Sharing Lessons Learned

Improve Project Planning, Management and Readiness

- Shared definition of core Project Mgmt Plan
- Importance of feasibility studies
- Small agency challenges

Internal Processes & Communications

- Evaluate processes for consistency and efficiency as opportunities arise
- Improve communications
- Improve performance tracking

Incorporate Architecture

- Increase consultations with projects

Discussion

What are best ways to engage TSB?

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Public Comment