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WaTech Exec Committee 7-25

Strategy Review

Agenda

Top Level Strategy Review

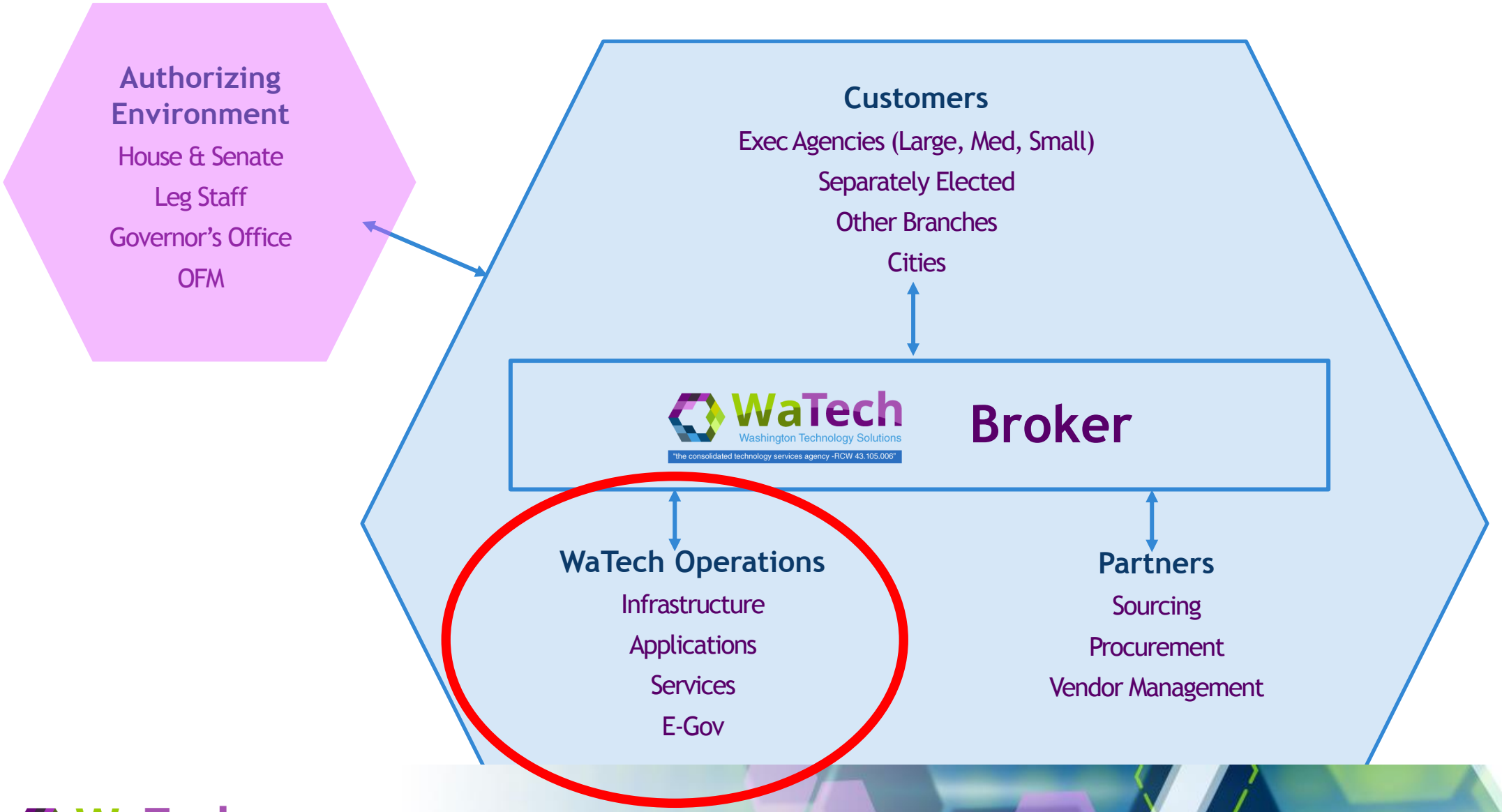
- Network Update
- Office 365 Update

Financial Update

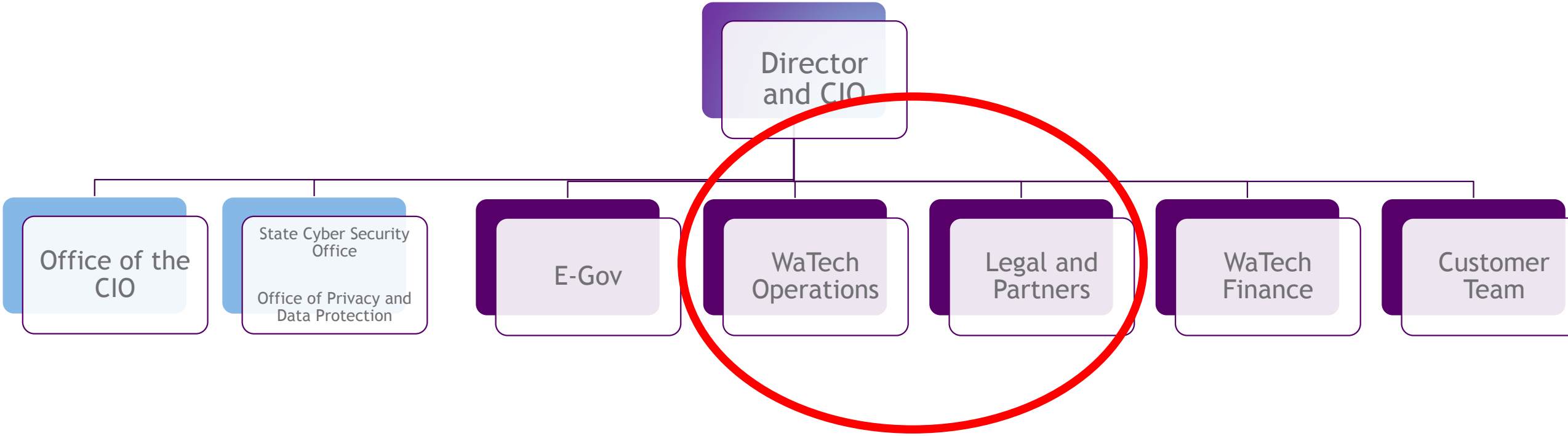
Customer Survey Results

Legislative Agenda Topics

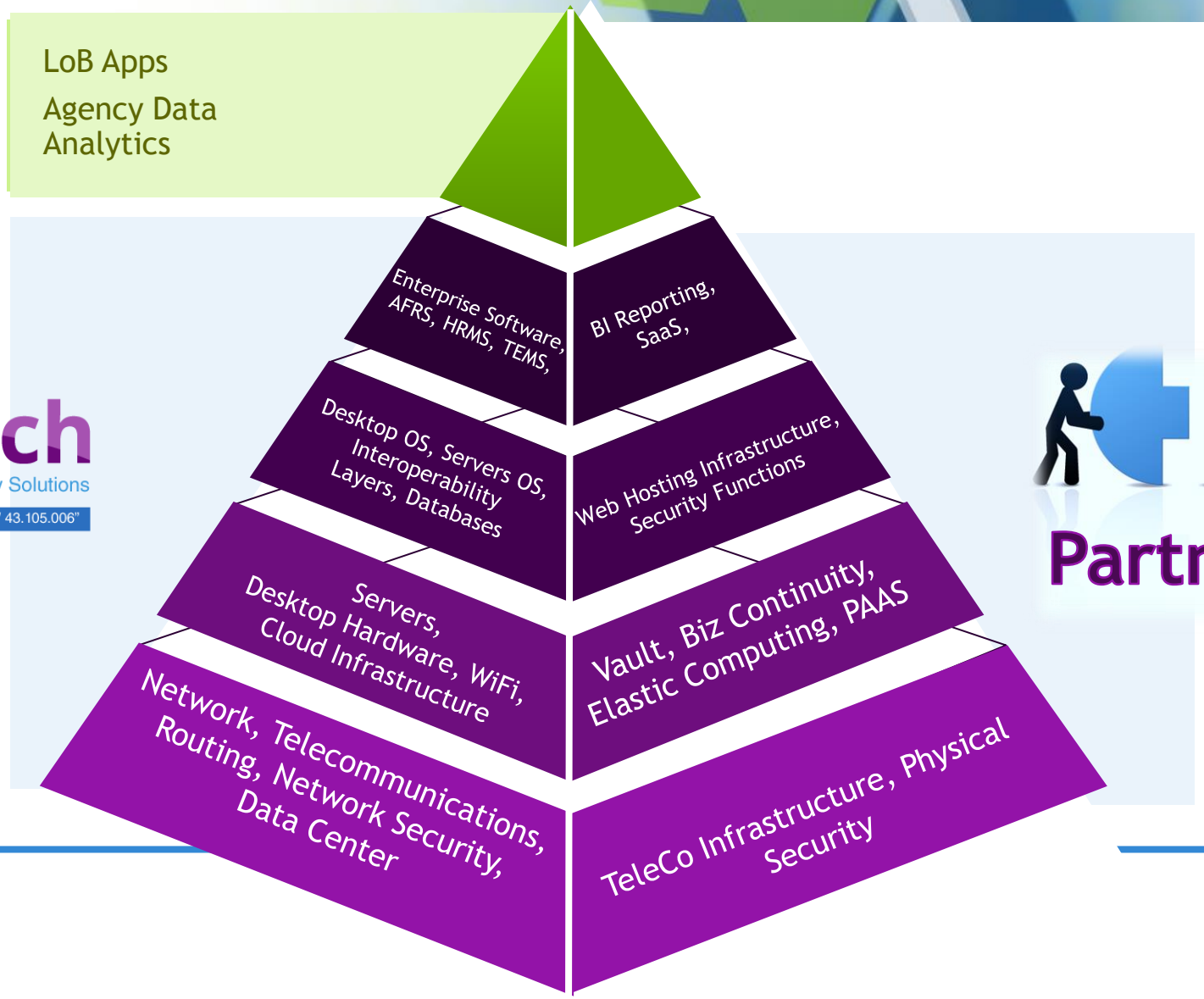
Relationship Map



WaTech "Org" Chart



Layers of IT



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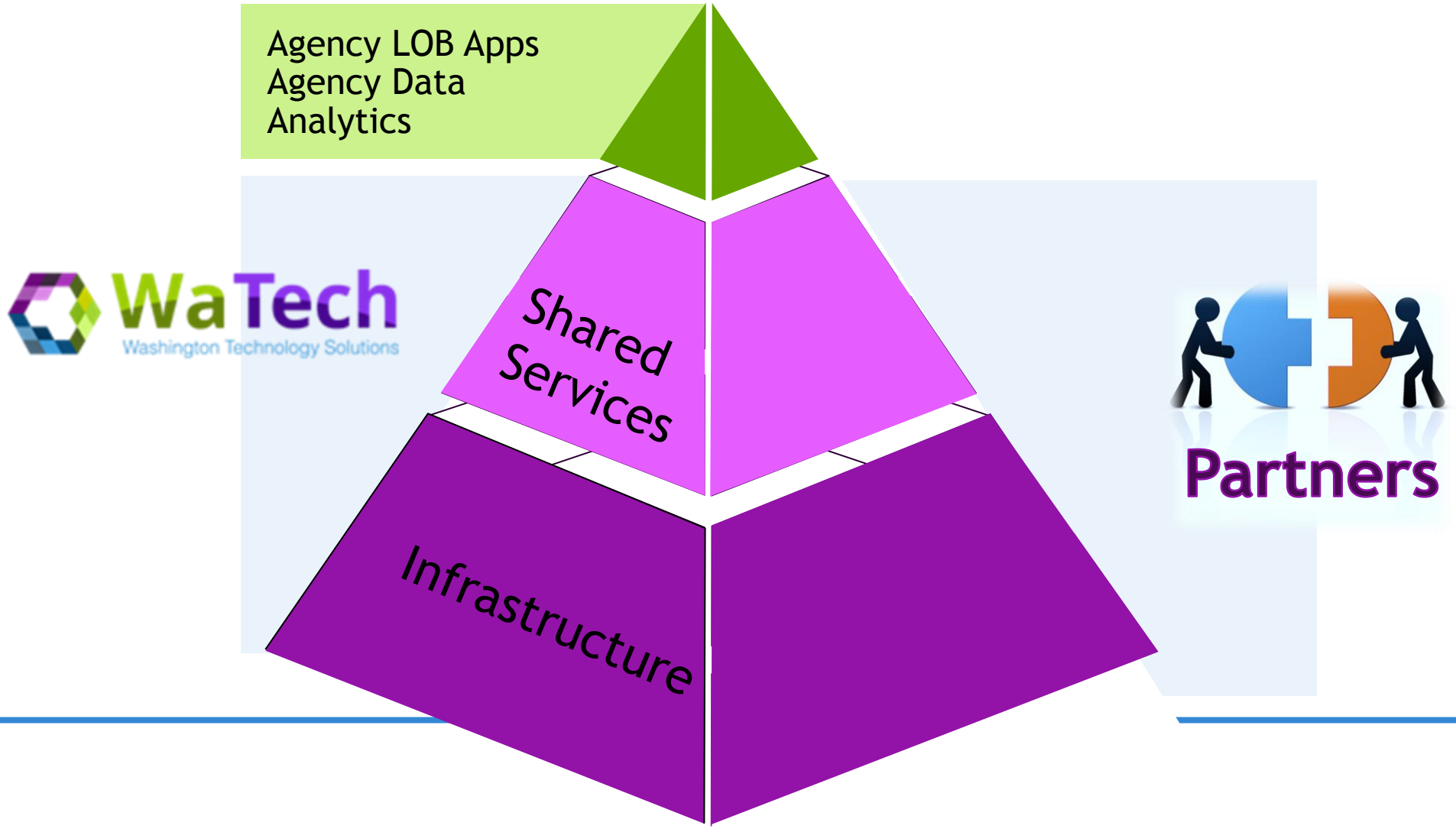
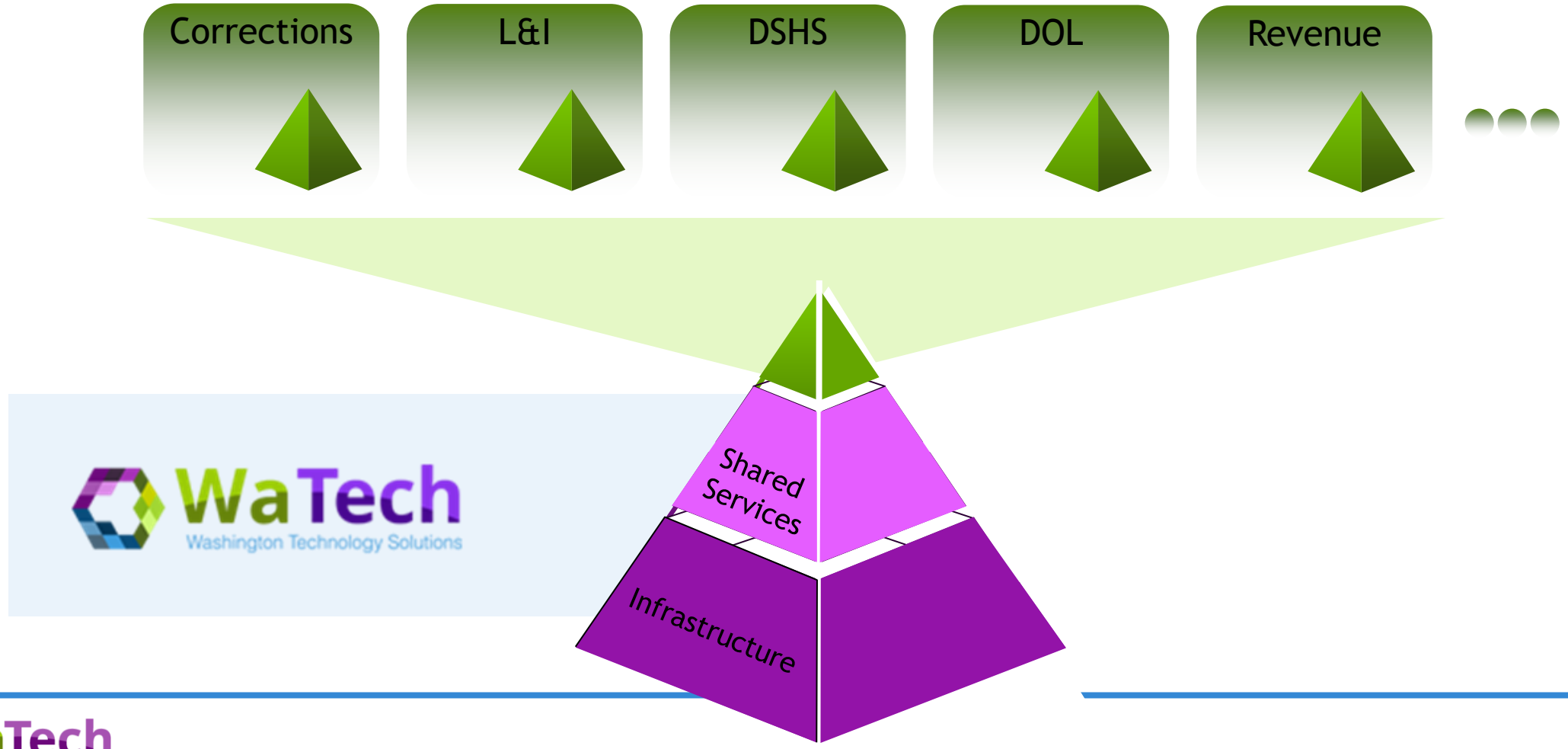
Partners

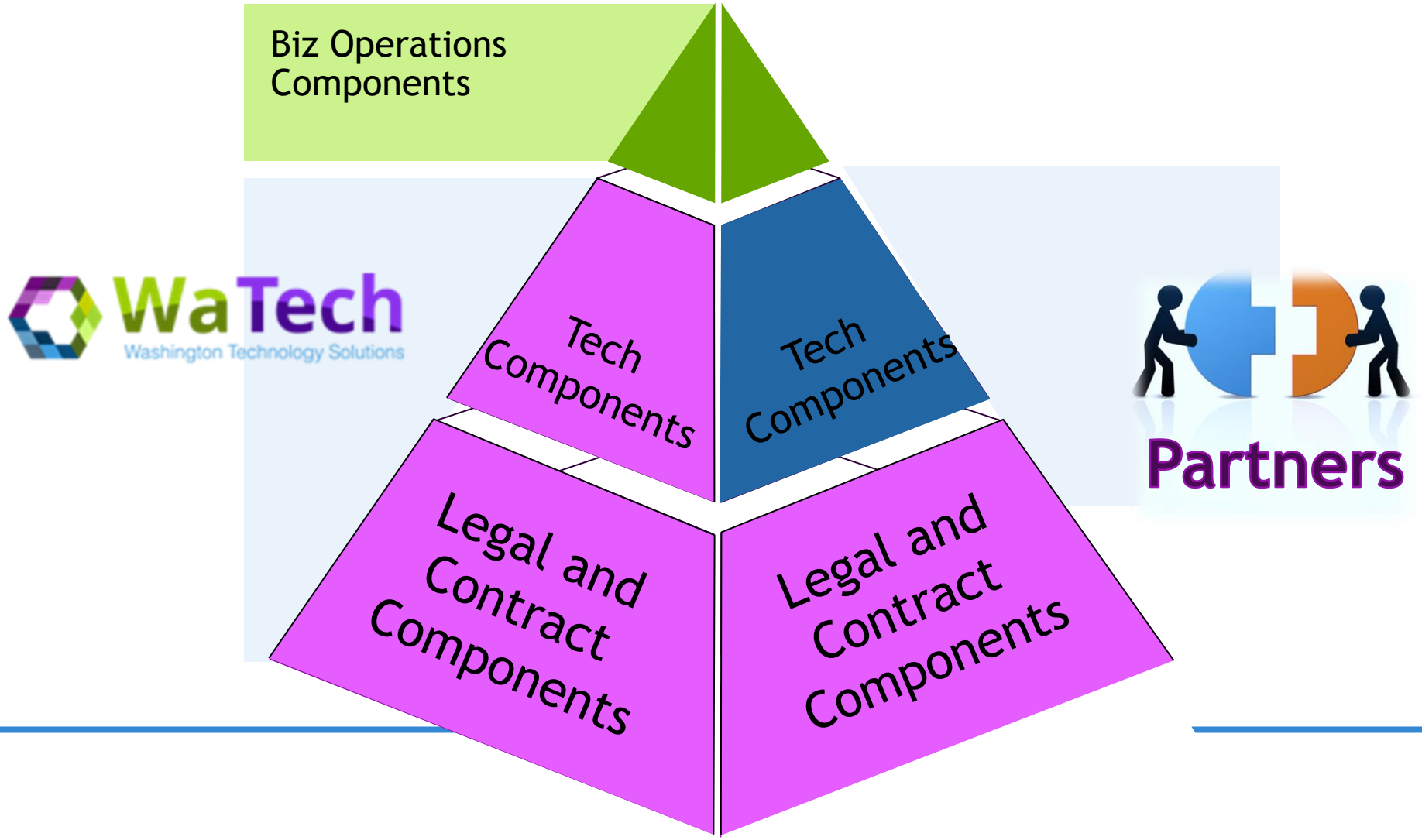
Agency WaTech Demark



Enterprise View

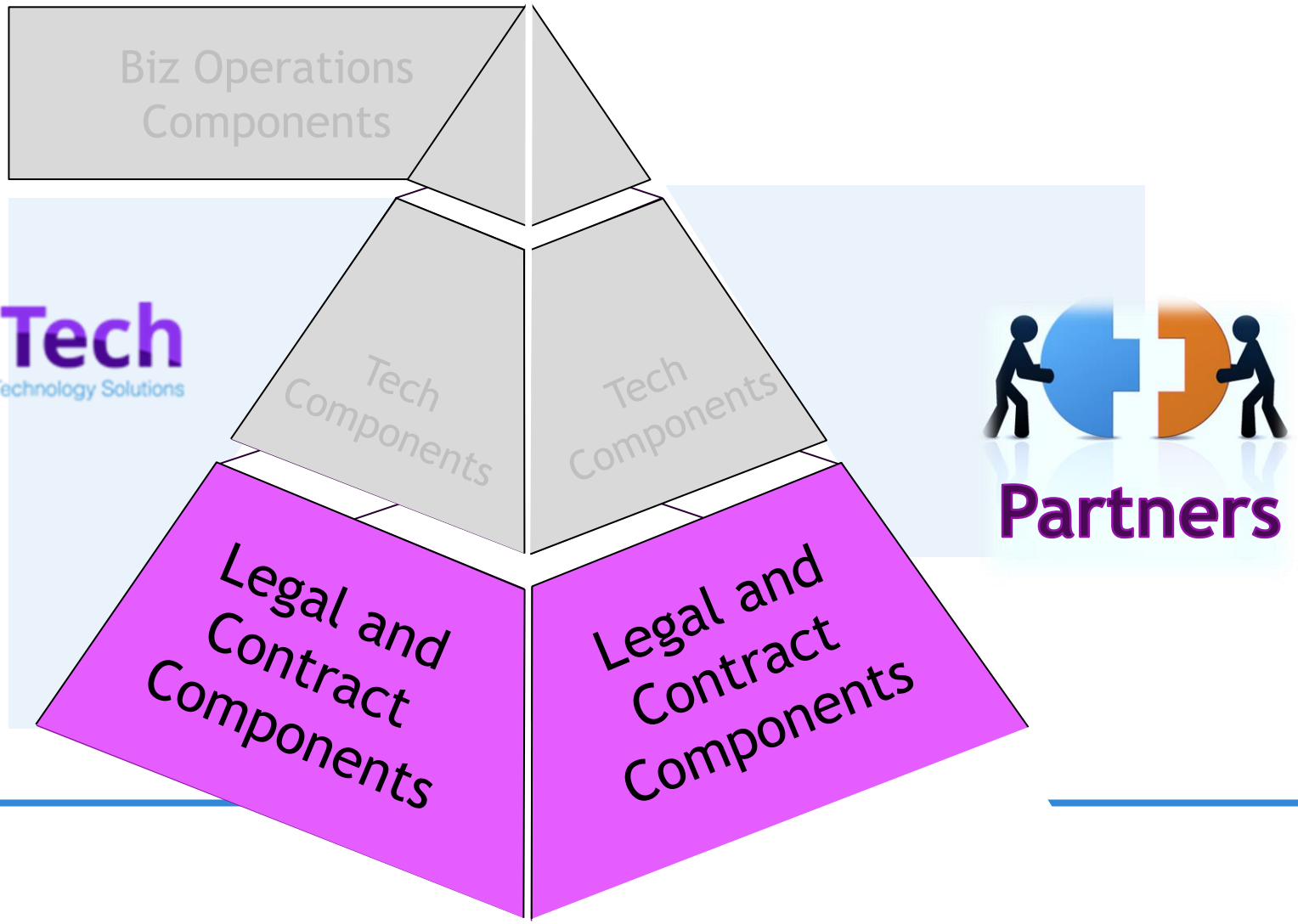


Broker Model

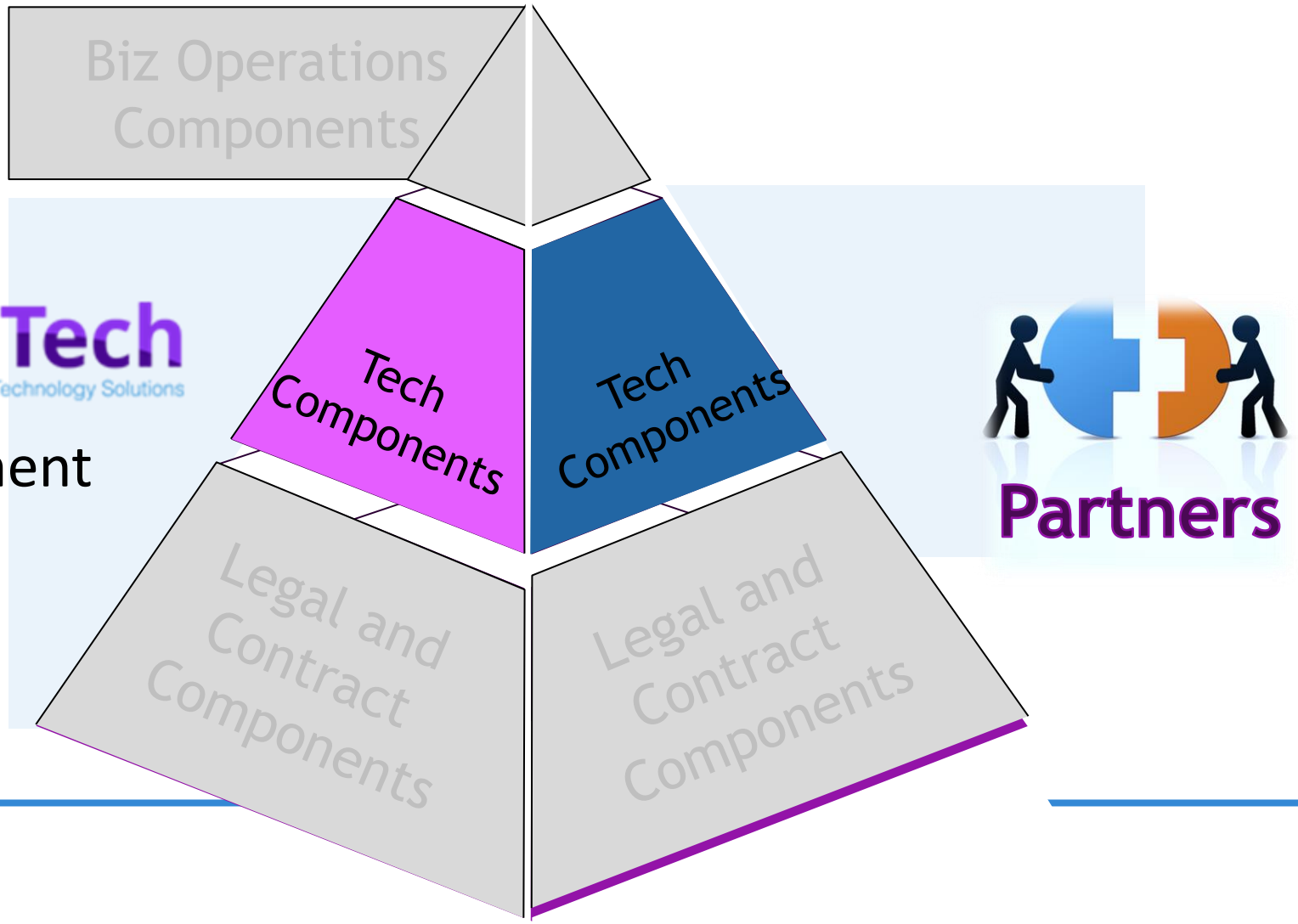


Broker Model - Legal

- Procurement
- Contracting
- Contract Management
- License management and optimization
- Partner relationship management

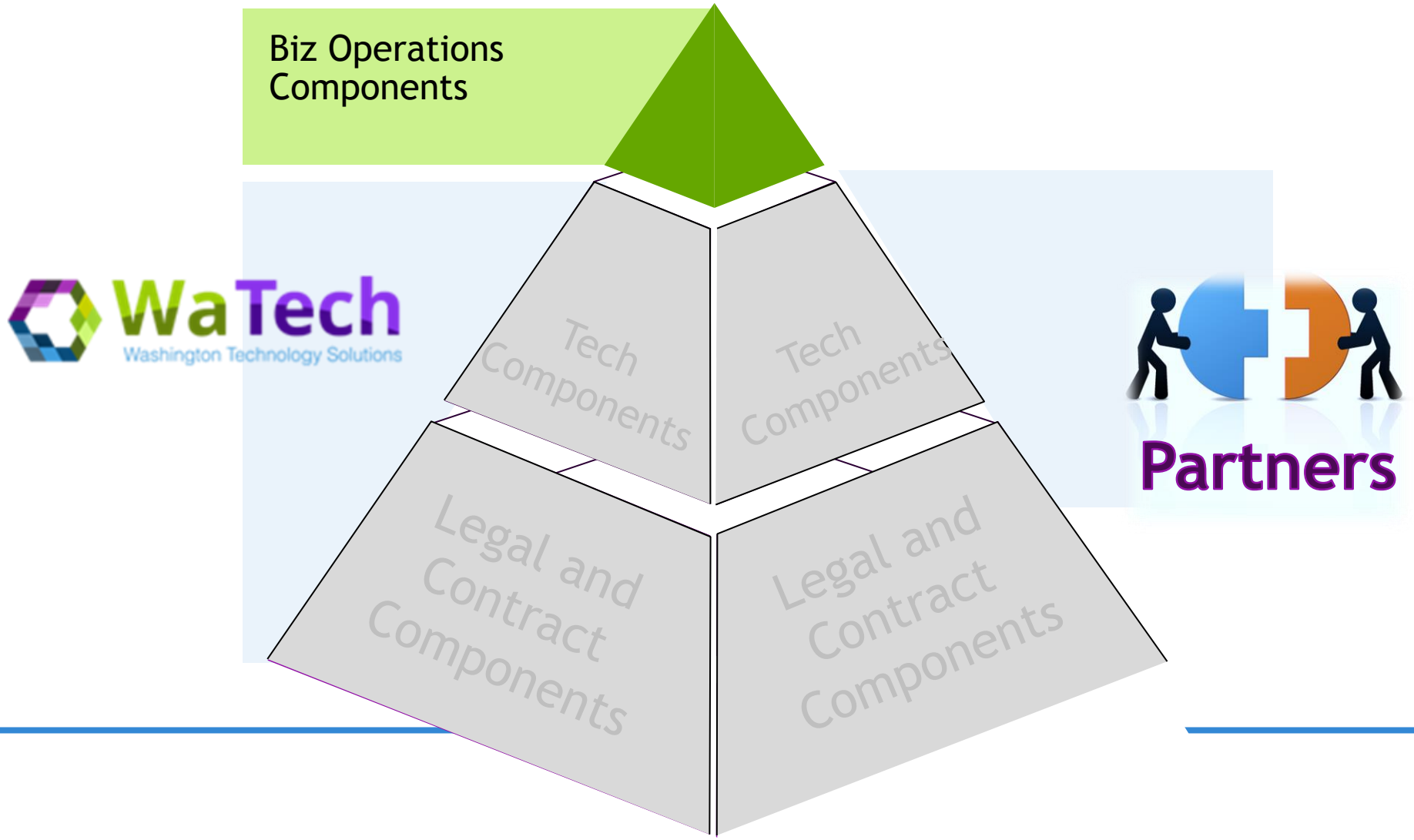


Broker Model - Technology



- Technology Development
- Implementation
- Technical Operations

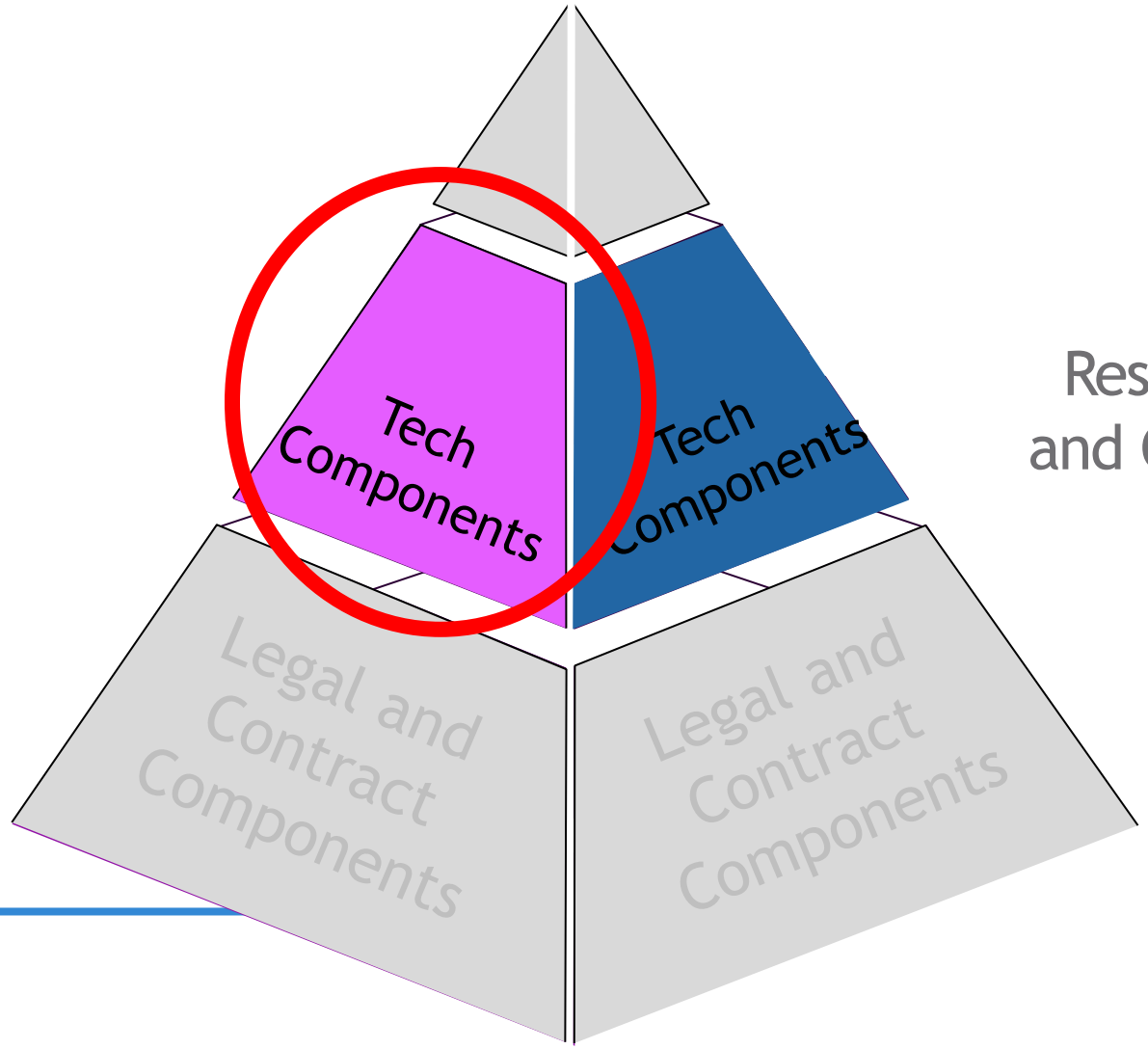
Broker Model – Business Ops



- OCM
- Training
- Reporting

Technology Strategy

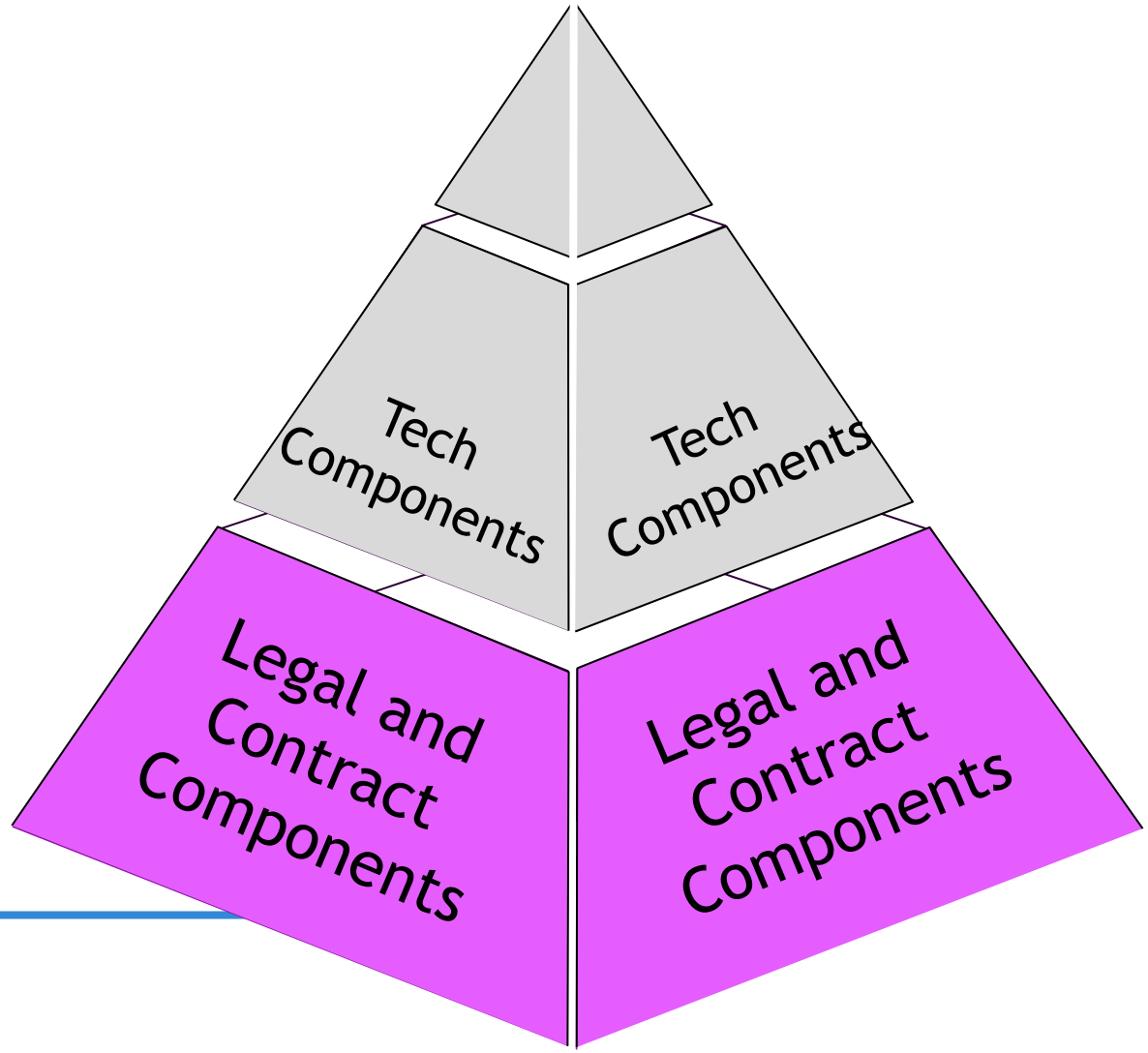
What Goes Here?



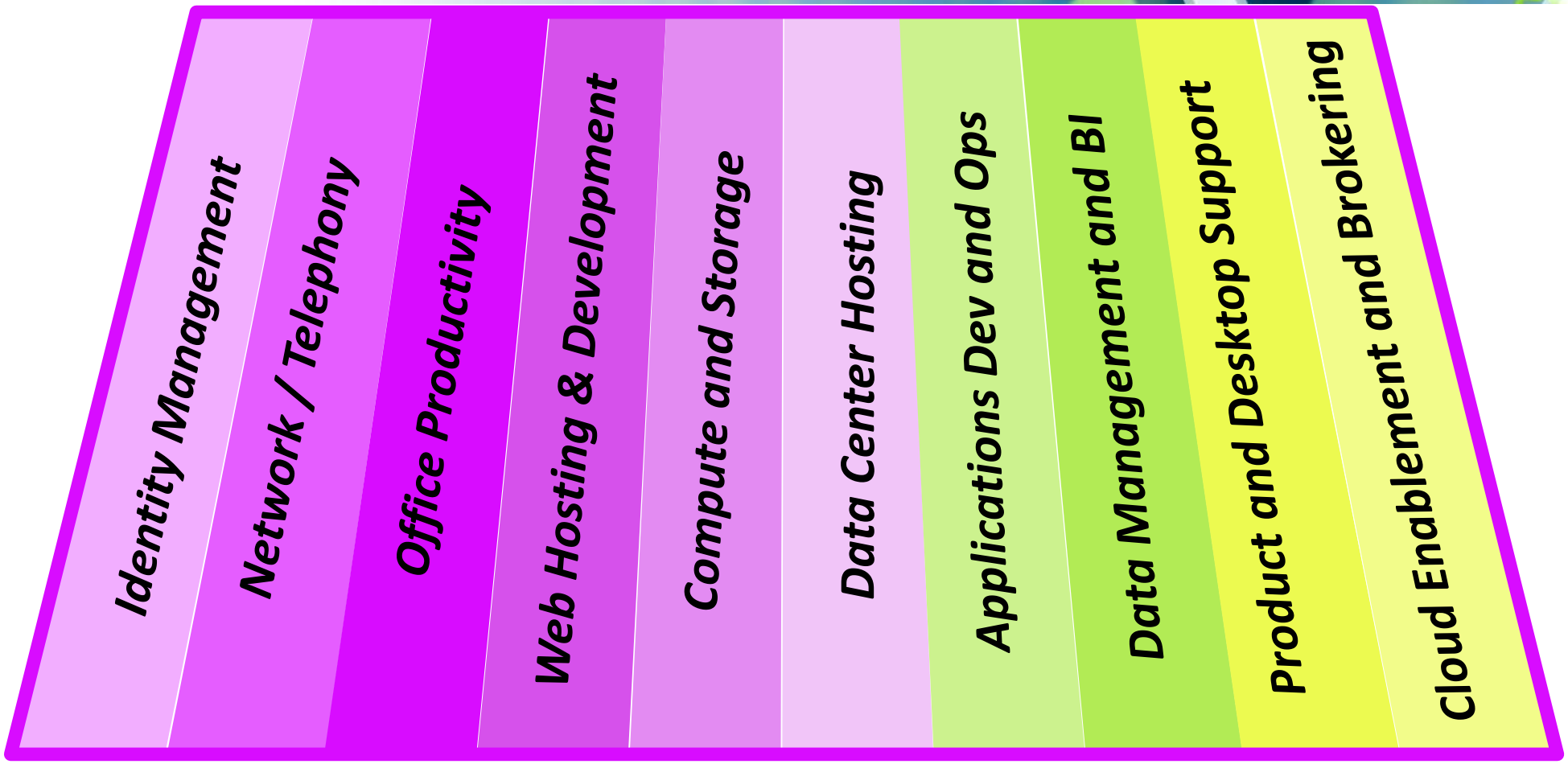
Respond to Market and Customer Needs

Technology Strategy

What Investment Here?



Core Technology Investments



Network and Telephony Deep Dive

Enterprise Data Consumption

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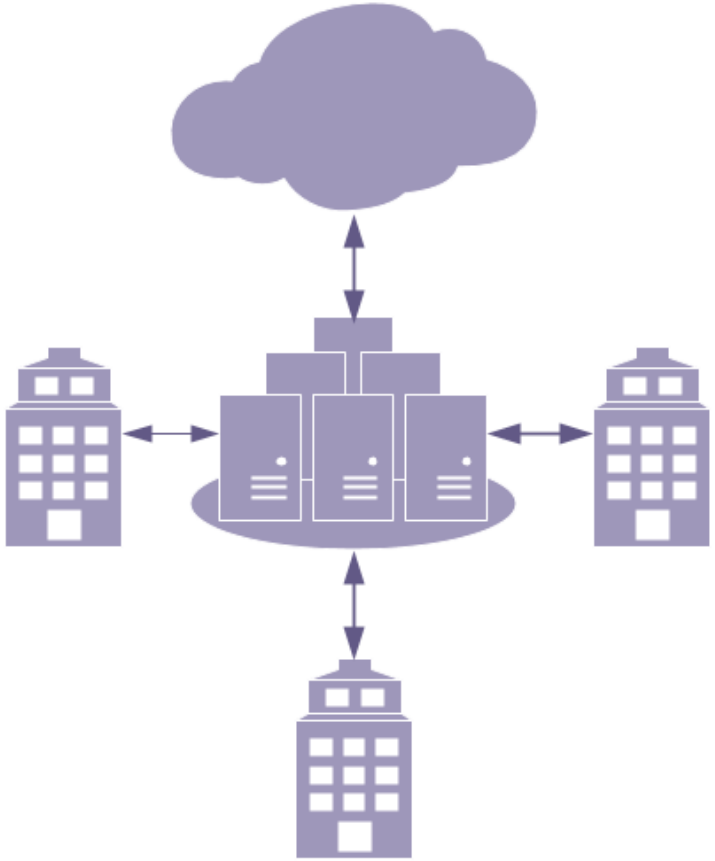
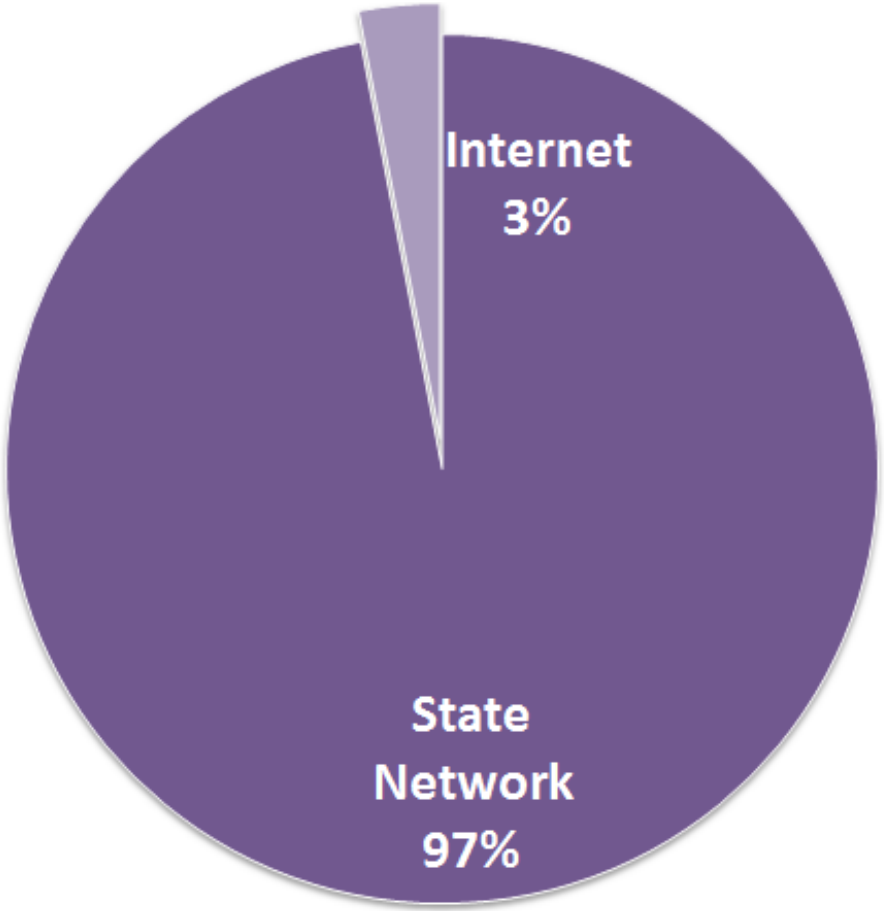
Network Analysis Overview

- Based on previous conversations, we asked two questions
  - Are people using the network in the way that it is intended to be used?
  - Is our Internet connection scaled and protected properly?



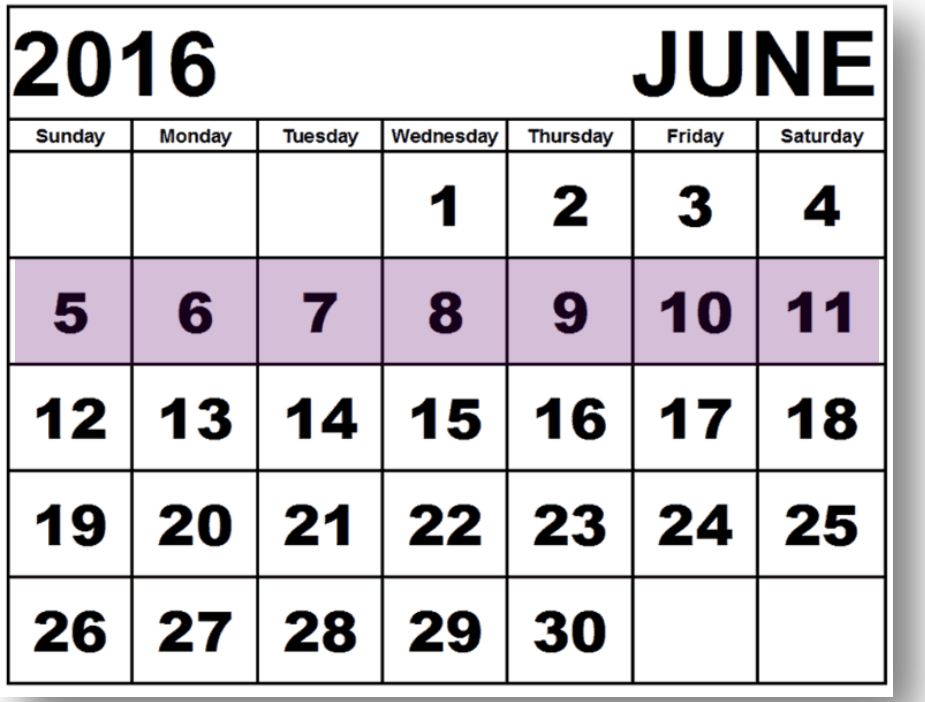
Data Consumption

- The bulk of data transmissions stays within the State's network
- 3 Petabytes of data per month, or approximately 100Tb per day
- The Internet connections account for 3% of the overall network traffic

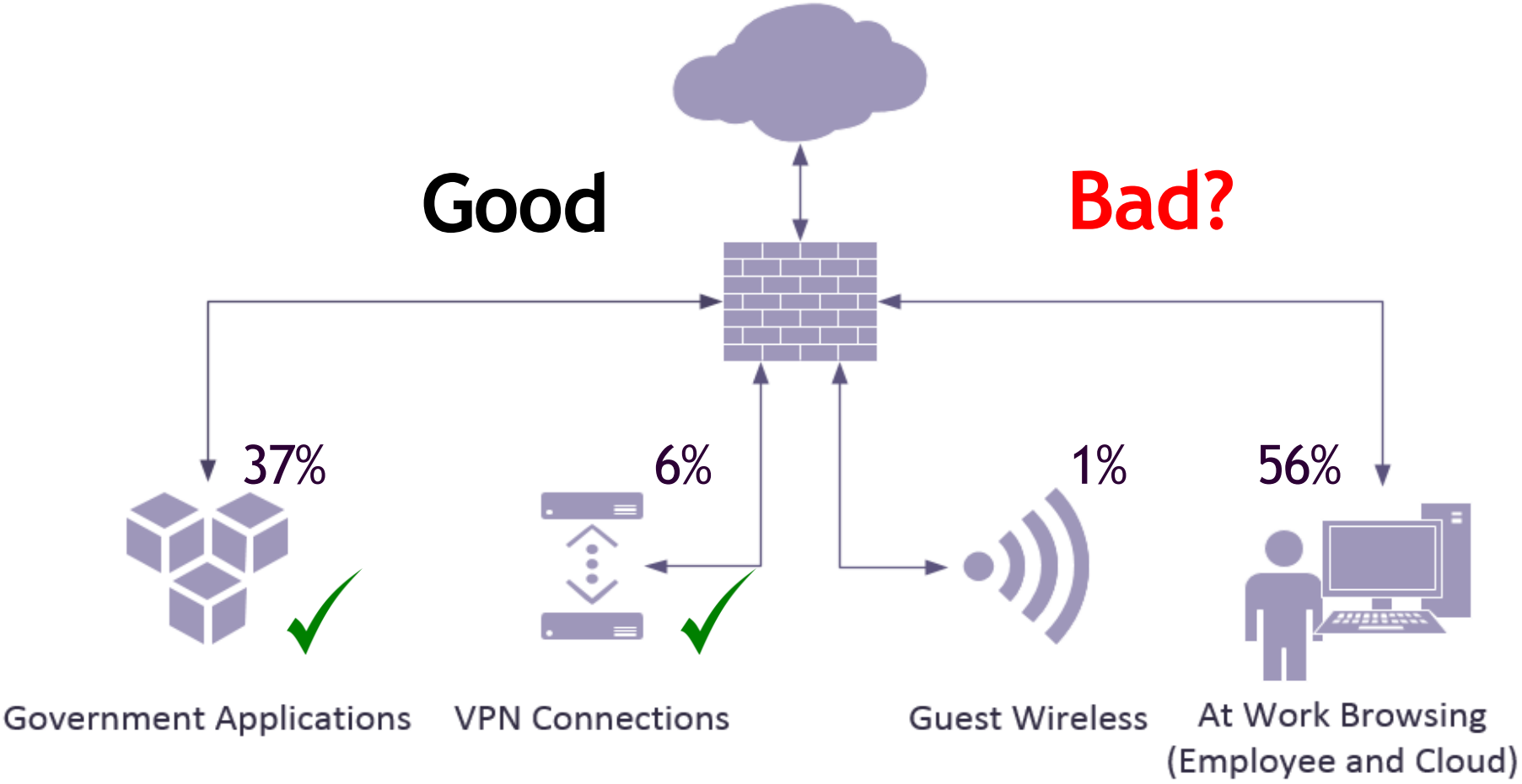


Overview

- Internet traffic poses the greatest security risk.
- What does the 3% of Internet traffic look like?
- “Good” use vs. “Bad” use



Data Consumption



Data Consumption

- User generated traffic accounts for only 1.7% of the overall traffic

At Work Browsing

- The trending of streaming services will need to be monitored for capacity impacts

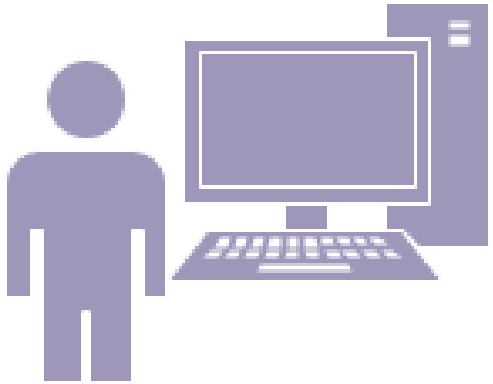
Guest Wireless

Data Consumption - At Work Browsing

Block Warn Allow
Override Bypass Monitor

Category	Hits	Bytes	% Bytes
Business	4.82M	989.44G	19.2%
Streaming Media	295,715	930.46G	18.0%
Content Server	1.26M	695.3G	13.5%
Internet Services	4.16M	458.42G	8.9%
Search Engines	948,565	382.48G	7.4%
General News	666,626	324.78G	6.3%
Web Ads	1.08M	320.6G	6.2%
Software/Hardware	3.01M	210.65G	4.1%
Portal Sites	349,500	148.12G	2.9%
Education/Reference	322,034	120.94G	2.3%
Public Information	704,033	88.62G	1.7%
Entertainment	190,948	69.45G	1.3%
Social Networking	289,548	67.8G	1.3%
Online Shopping	98,374	56.36G	1.1%
Blogs/Wiki	145,376	55.78G	1.1%
Government/Military	998,409	52.26G	1.0%
Internet Radio/TV	156,991	51.47G	1.0%
Marketing/Merchandising	140,219	47.27G	0.9%
Sports	82,330	43.22G	0.8%
Personal Network Storage	203,574	41.73G	0.8%

Web Consumption	Percentage
Probably Good	79.6%
Probably Bad	18.5%
Uncertain	1.9%



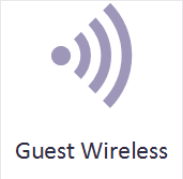
At Work Browsing

Data Consumption – Guest Wireless

- Trending service has grown over 400% in past 12 months
- Not a significant percentage of Internet traffic during steady-state, but may burst to 30% of Internet traffic

Data Consumption – Bursting Traffic

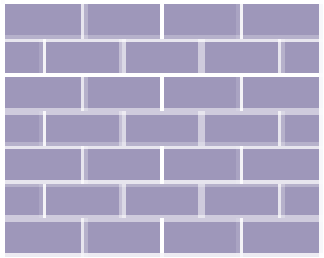
Options for when user-generated data consumption bursts

	Wired	Guest Wireless
Good Traffic	• Highway to the Cloud • Patch Service 	• Traffic Shaping
Bad Traffic	• Terms of Service • Policy 	• Terms of Service • Traffic Shaping

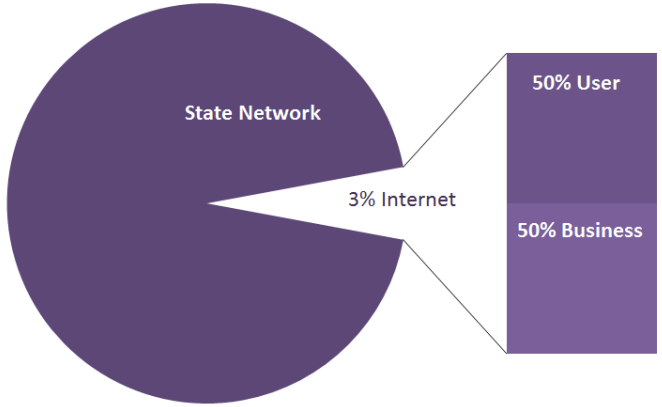
Business Problems

Burst

Systemic



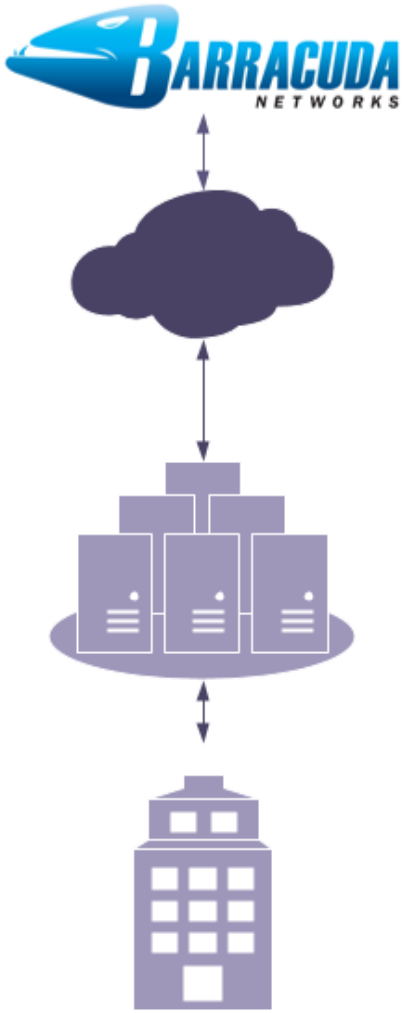
Security



Backup Services

Systemic

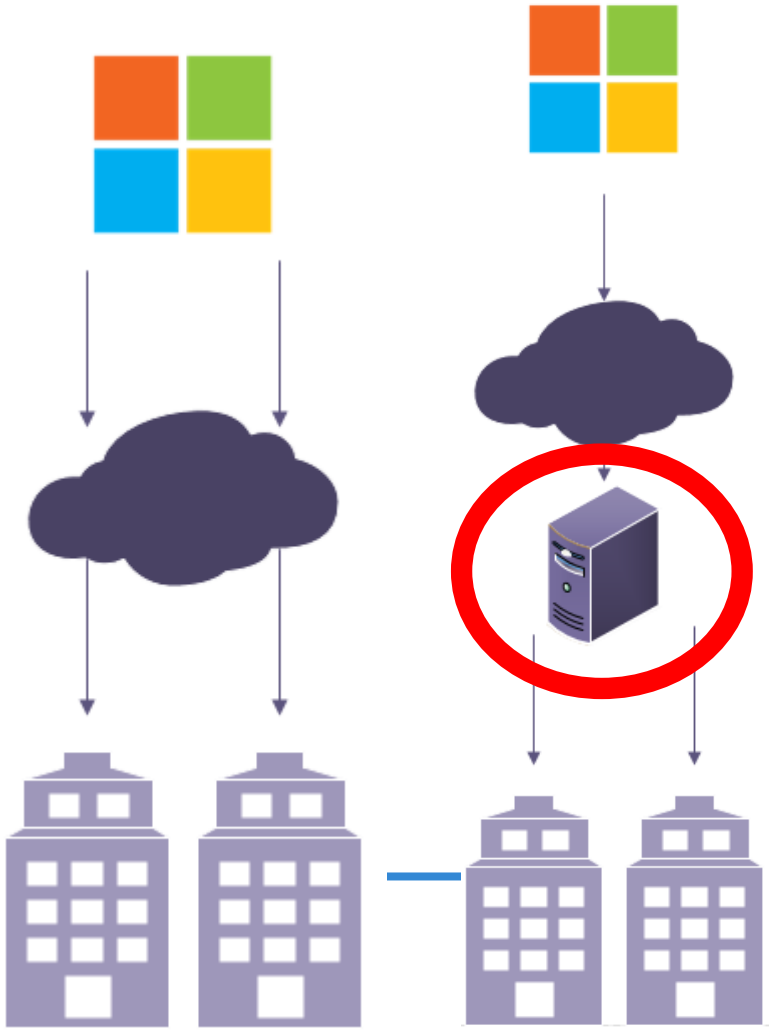
- Primary path to the cloud = The Front Door
- Up to 3.5 Terabytes of data being generated daily from 10 customers



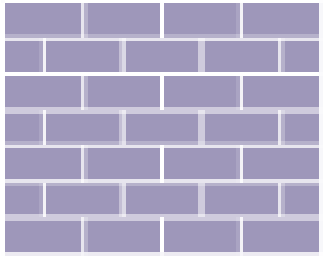
Patch Servers

Systemic

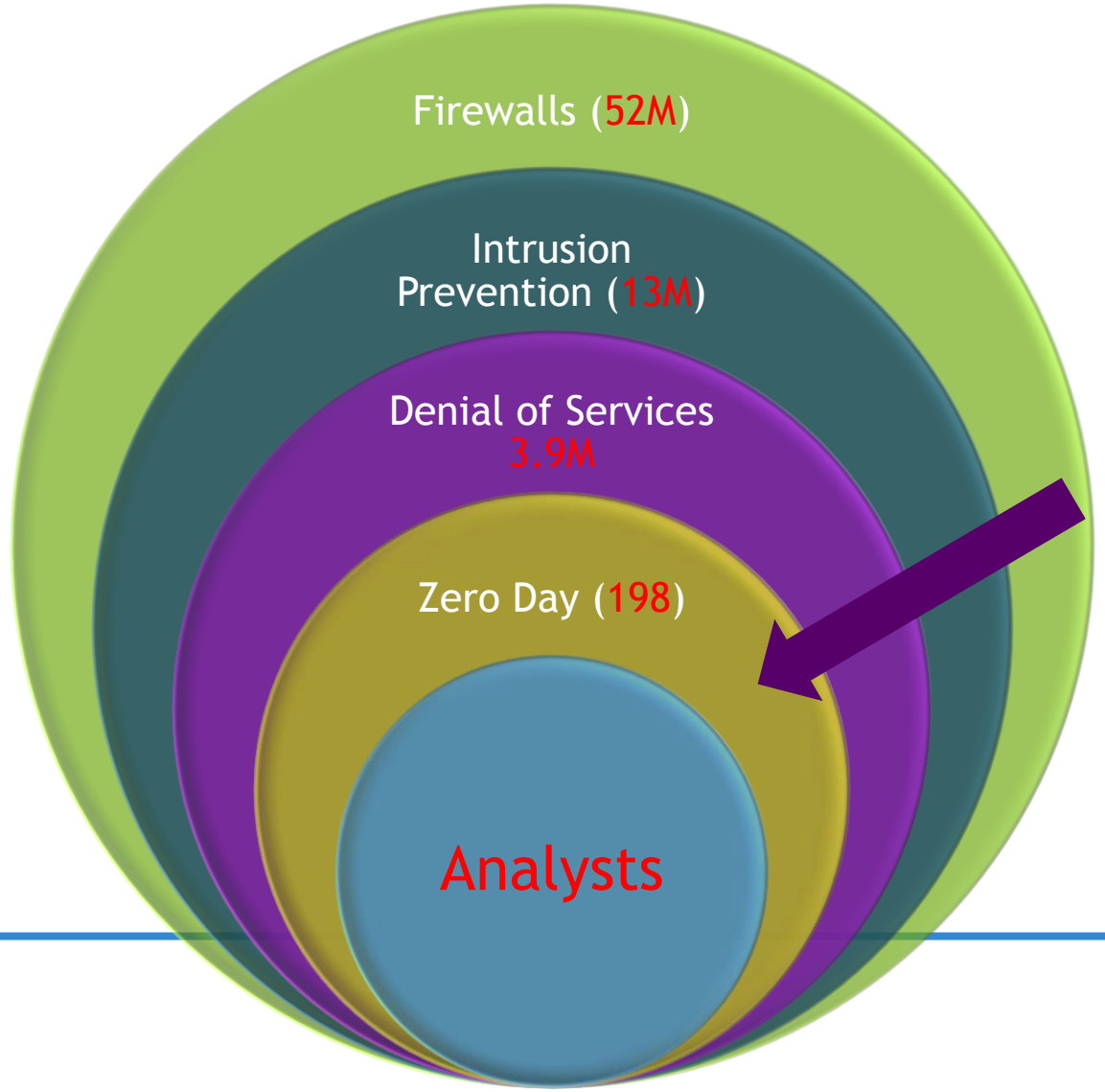
- Multiple connections to the Internet versus a single connection to a patch server
- Traffic reduction for commonly deployed applications



Defense in Depth



Security



Inspection occurs at line-speeds; more hardware as consumption increases

Business Problems

Issues

Solutions	Burst	Systemic	Security
	• Load Balancing • Terms of Service • Policy	• Load Balancing • Highway to the Cloud • Patching Service • Limited Analytics	• Load Balancing • Security Decision Package

Questions – Burst Strategy

- Currently burst at 6Gb / second
  - Security infrastructure impaired at 4Gb / second
- Requires investment to scale security infrastructure
- Decision package for security investment is in draft
- The requested investment gets us to approximately 12-18 months of coverage

Enabling Office 365 and Others

Cloud Enablement Program

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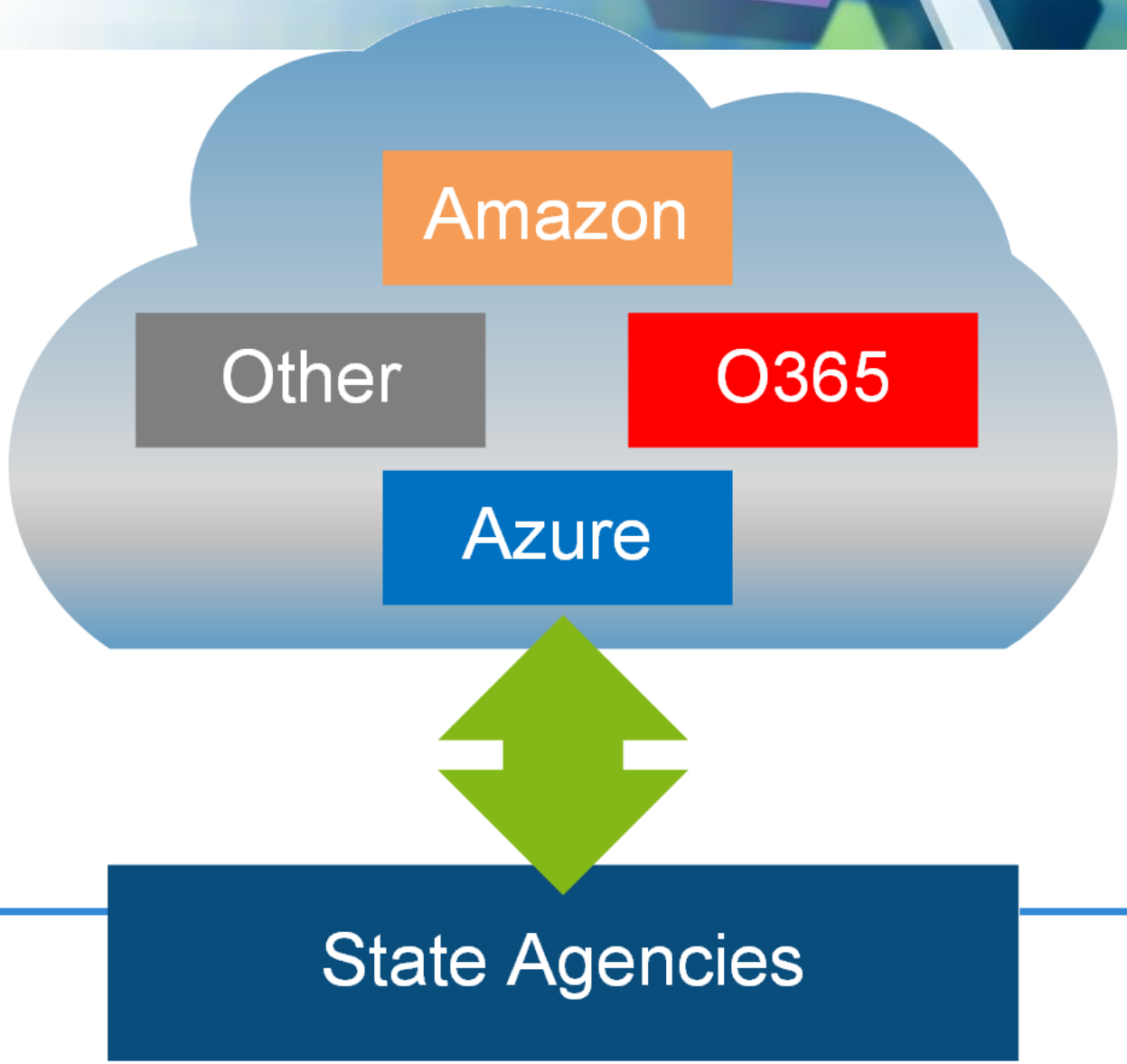
Cloud Enablement Program



Office 365

Enterprise Productivity **-** Cloud Services

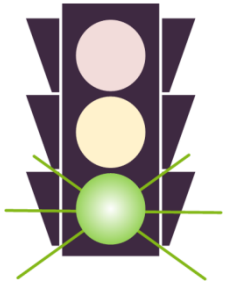
- SharePoint, OneDrive, Skype for Business
- Subscription licensing model

  (5 devices per person)

+ +

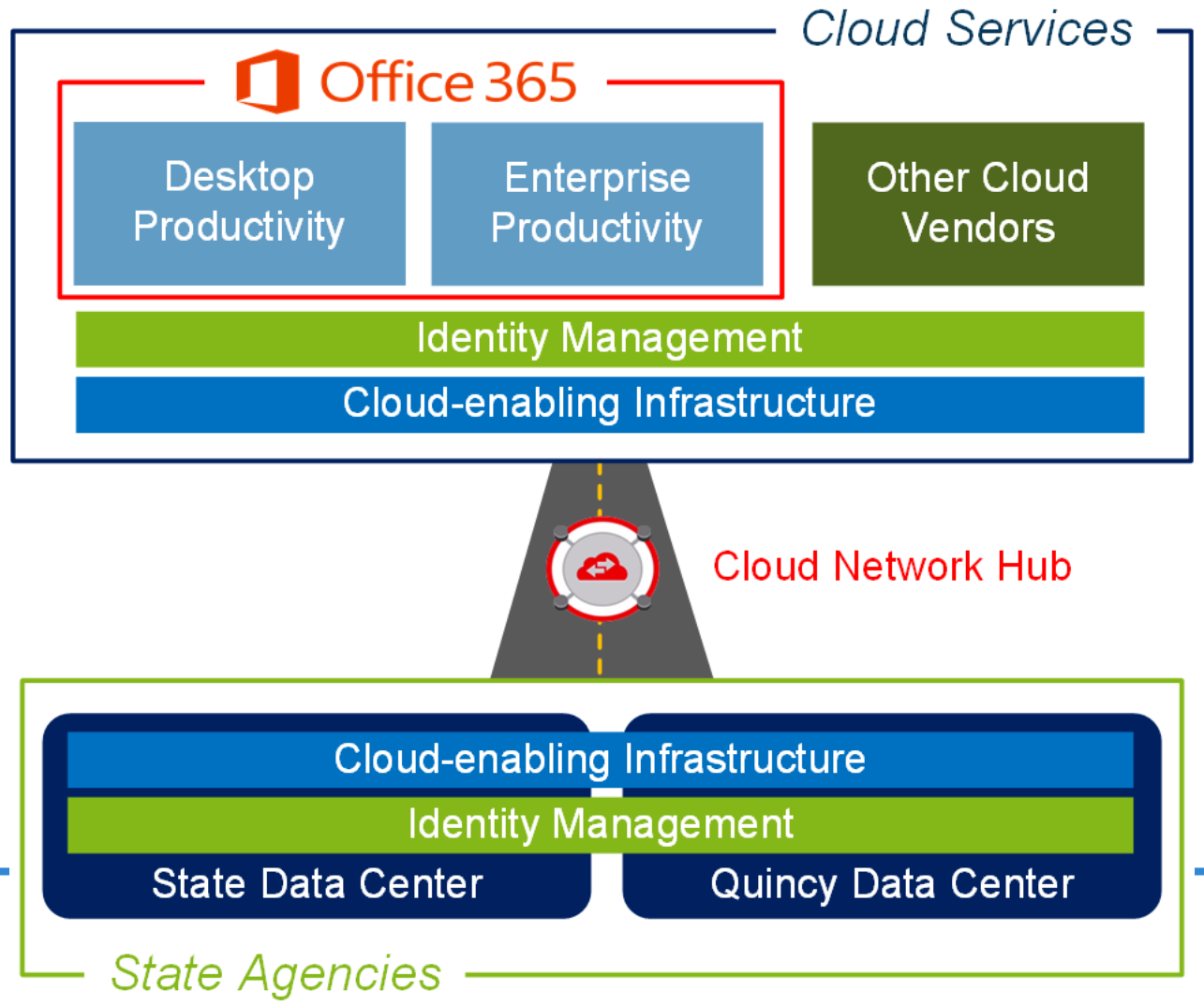
Desktop Productivity (Email, Word, Excel, PPT, others)

Project Initiation

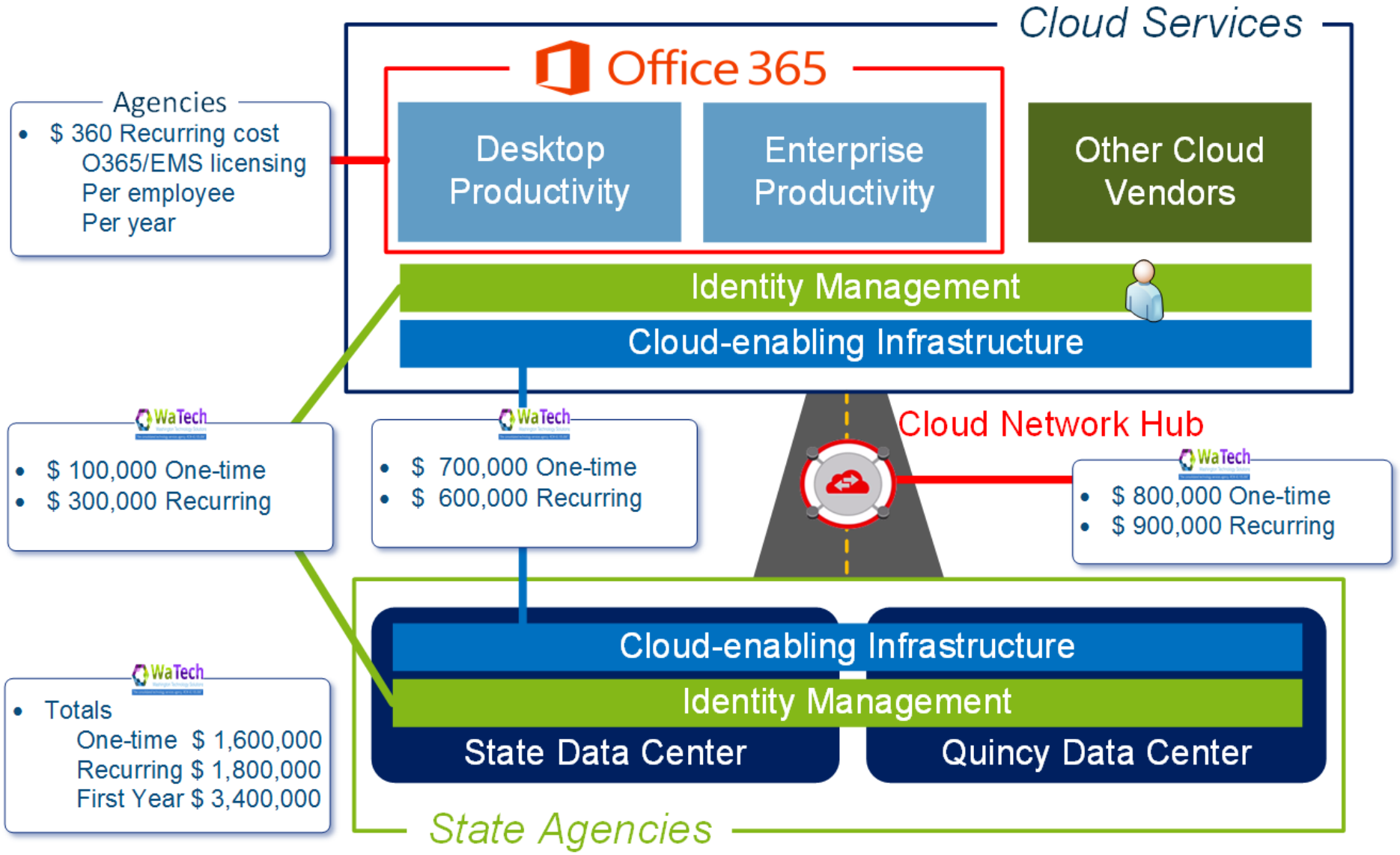


WaTech Washington Technology Solutions "the consolidated technology services agency -RCW 43.105.006"	Agencies
Hire Project Manager	Assess Business Requirements for Office 365
Organization and Governance	Assess Business Requirements for Other Cloud Services
Charter	Identify Lead for Cloud Enablement Project
Communication Plan	Participate in Stakeholder Committees
Formalize Project Teams	
Oversight & Quality Assurance	

What we are building



Estimated Costs

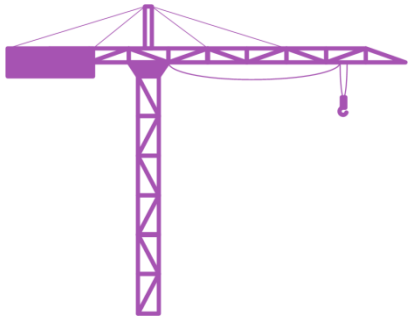


Swim Lanes

Licensing

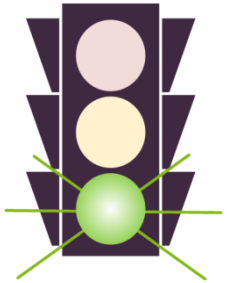
Migration

OCM



Technology

Project Initiation



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Technology

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Agencies

One Time Costs

- Build Cloud Network Hub
- Build Cloud-enabling Infrastructure
- Deploy Identity Management Service

- Assess Network Capacity

Recurring Costs

- Cloud Network Hub
- Cloud-enabling Infrastructure
- Identity Management Service

- Implement any needed network upgrades

Licensing

	WaTech Washington Technology Solutions "the consolidated technology services agency" -RCW 43.105.006	Agencies
One Time Costs	Evaluate Cloud Service Provider (CSP) Model	Purchase Enterprise Mobility Suite (EMS) licenses
Recurring Costs	Provide Cloud Service Provider (CSP) Support	Purchase Office 365 Licenses

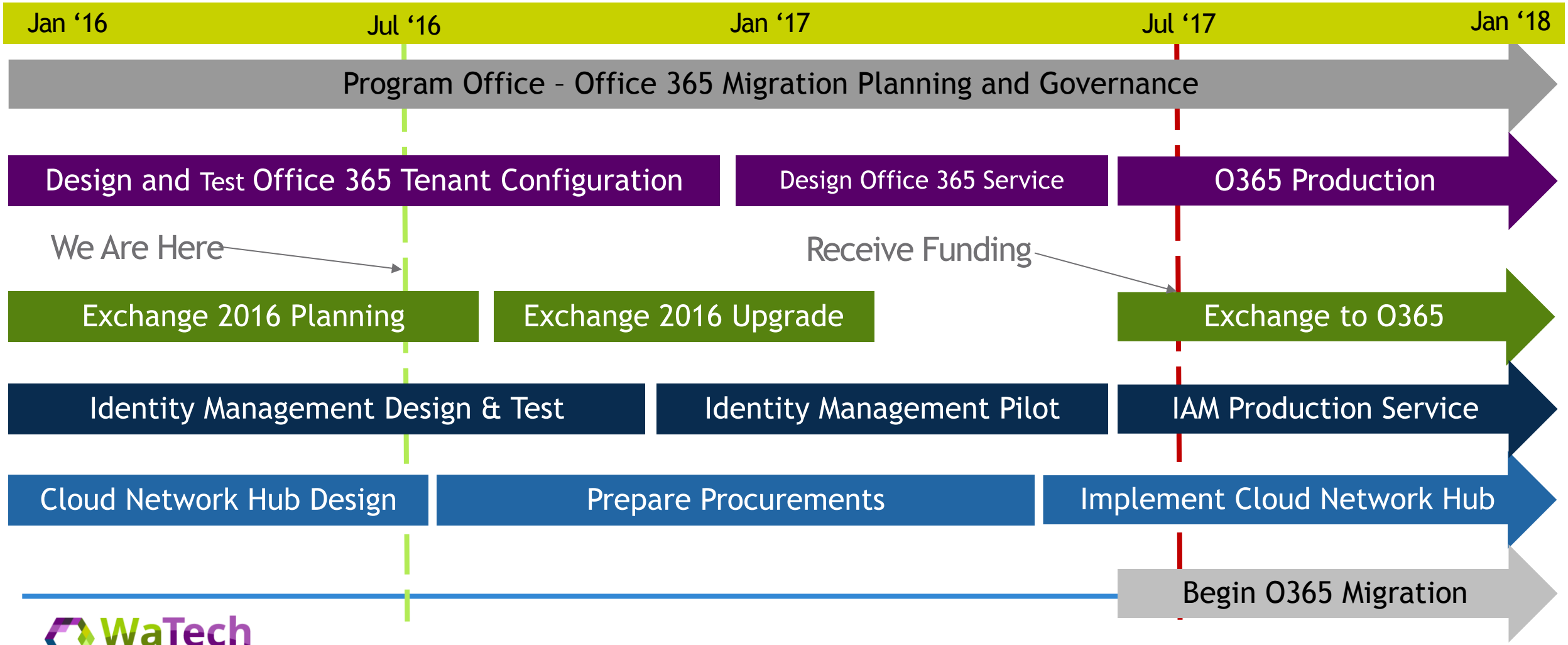
Migration

	WaTech Washington Technology Solutions "the consolidated technology services agency" -RCW 43.105.006	Agencies
One Time Costs	Estimate Cost and Support Requirements	Assess Data Security Requirements
Recurring Costs	Manage Migration to Shared Tenant	Assess Migration Costs
		Identify Workloads to Migrate

OCM

	WaTech Washington Technology Solutions "the consolidated technology services agency" -RCW 43.105.006	Agencies
One Time Costs	Establish an Enterprise Cloud Program	Train Staff for O365 Support Roles
	Implement Business Process changes	Implement Business Process changes
Recurring Costs	Training for Administrators	Training for users

Progress and Milestones



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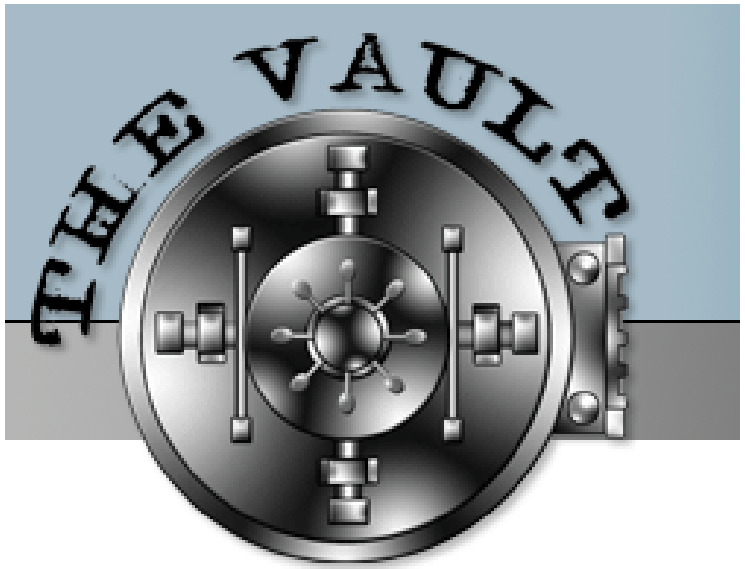
Known Issues



WaTech Financial Update

July 2016

The First Year and Plans for the Next Biennium

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FY 2016 Financial Activity and Progress
A Promising Start

Transparency:

- ✓ Financial Architecture Reflects the Organization of the Agency
- ✓ Organization of the Agency Reflects Customer-Facing Services
- ✓ Accounting and Budget Information Fully Reflected in Enterprise Systems
- ✓ Developed Fiscal Strategy for Cost Recoverability

Accountability:

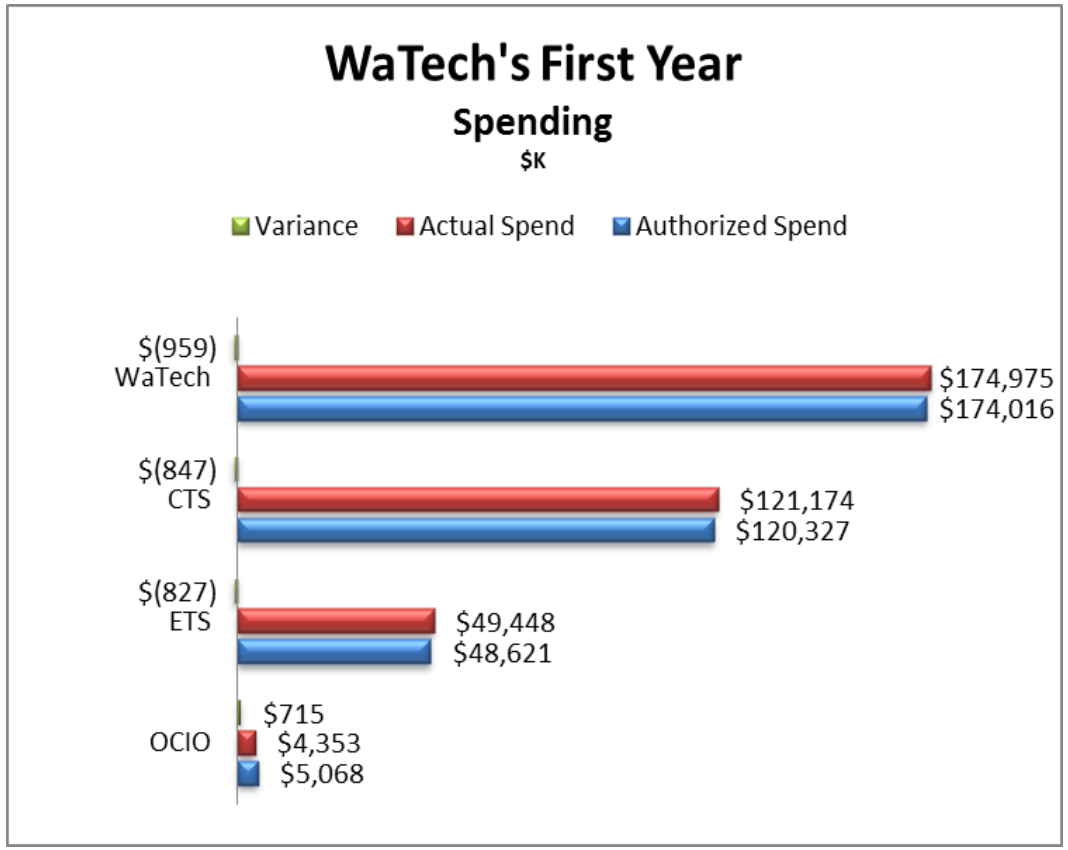
- ✓ FY 2016 bent the loss curve
- ✓ Submitted Rate Plan
- ✓ Announced Rate Reductions
- ✓ Refined Focus on Core Services

Revenue Sources Reminder

MOUs	Fee 4 Service	Allocations
OFM DES Smalls	Email Data center Web hosting	12 fees Enterprise Services Fee Network Security

FY 2016 Spending as Anticipated

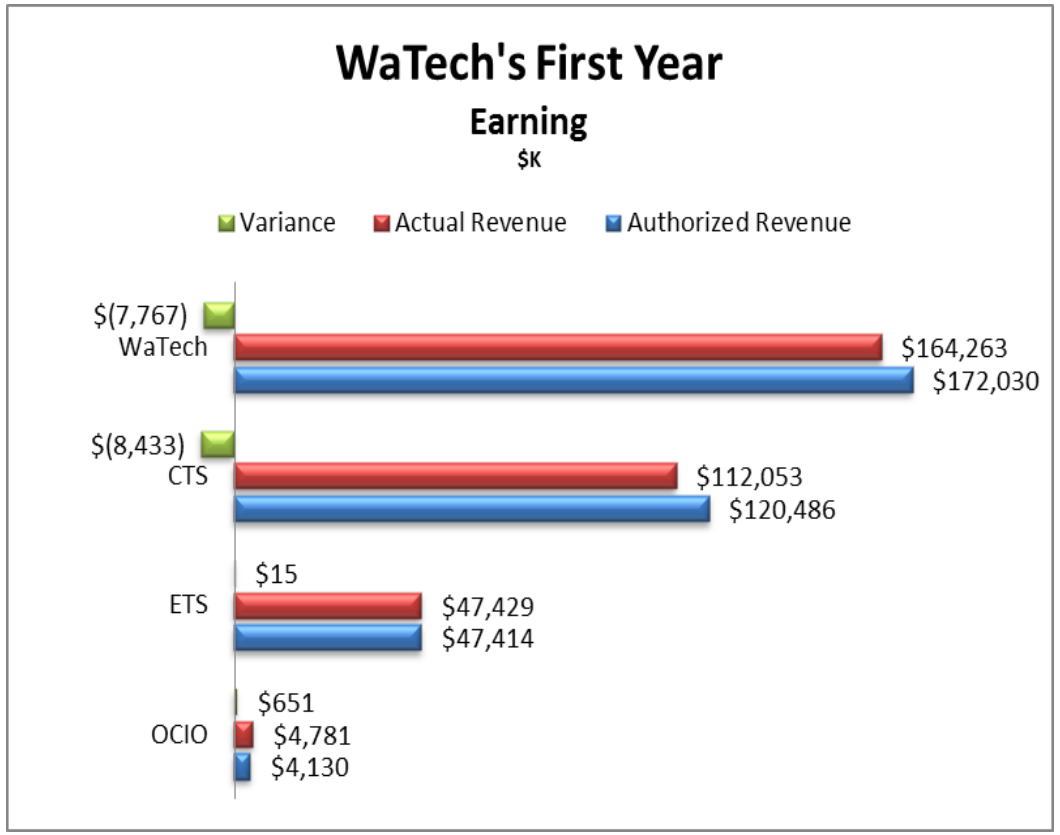
Good News for the Realignment



- Agency spending over authorized level less than 1% (0.55%)
- Cross-agency costs steady
  - Salaries, rent, overhead
- Aggregate view does not illustrate problem

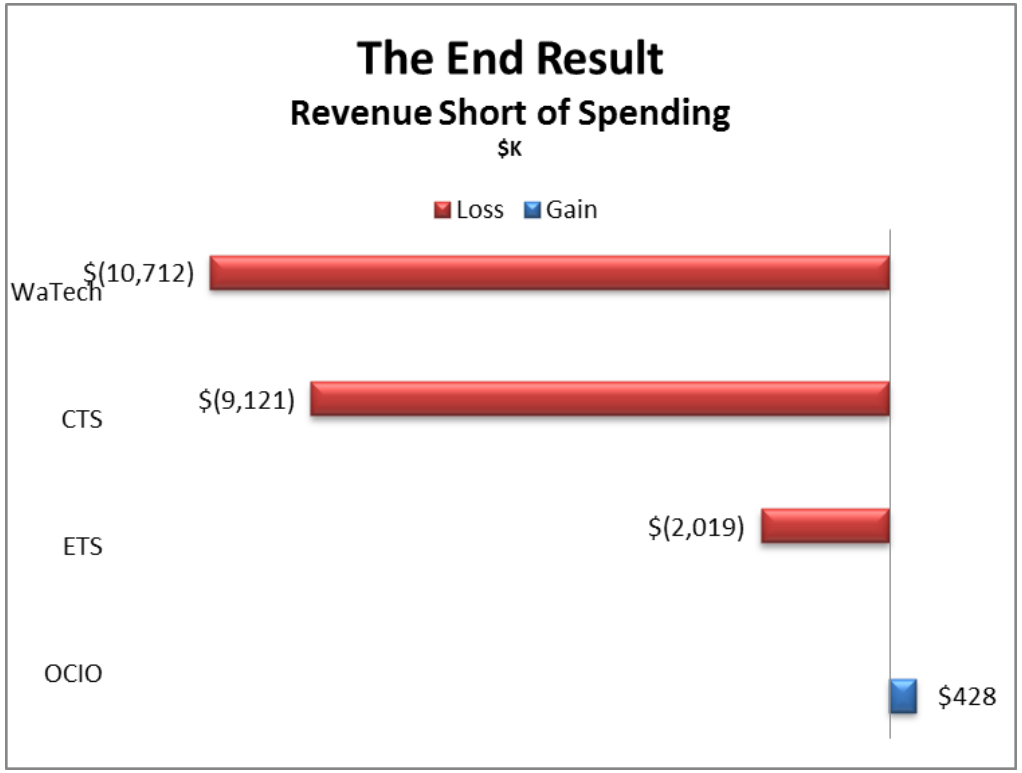
FY 2016 Earning Not as Anticipated

Realignment Didn't Address Revenue



- Shortfall concentrated in (FFS) Services:
  - Server Hosting
  - Storage
  - Data Center
- Issues with Allocation Revenue:
  - Security Allocation covered Disaster Recovery investments
  - Network's lower than expected revenue turned out not to be a problem
  - Enterprise Systems revenue not large enough to cover inherited expenses

Better than FY 2015



- FY '15 CTS's operating loss $17.8m
- 16 WaTech's operating loss $10.7m
- Visibility post-OB2
- Manage revenue not just expenditure
- Revenue is hard to project
- Biggest success moves from FFS to Allocated

Reasons not Excuses

Revenue Challenges

Services with inadequate revenue

- JINDEX
- Dial.wa.gov
- NeoGov
- E-Learning
- Tenant Rent Relief
- FFS Service Rates that haven't moved in over five years.

Expenditure Challenges

Unanticipated or unfunded costs

- Olympia Fire Protection
- 3% and 1.8% Salary Adjustments
- Internal Facilities

- Strategic Investments without seed money

Goals for the 2017-19 Biennium
Strengthening the Basics

- Focus on Core Capabilities
- Funding/Financing Strategies Geared Toward:
  - Allocations for foundational, widely used, mature services
  - Reviewing rates and service packages
  - Assessing FFS's future financial viability and compatibility with core capabilities

Proposals for the 2017-19 Biennium

WaTech's Budget Request :

- Evolution of Cloud Access
- Continuing Network and Application Security
- Business Support for IT Investments
- Allocations for Mature, Enterprise Services
- State Data Center Utilization

To support customers' needs for transport, compute, storage whenever where ever in secure and resilient fashion.

WaTech Customer Survey Results June 2016

Executive Board Briefing
July 25, 2016

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Reprioritized to Take Action

- WaTech Website
- Customer Portal
- Publish O365 & Cloud Strategy Sheet
- Audit the 3 months of communications (Incident/Change)
- Additional level of monitoring tickets (measure/track)
- Meeting structure: CIO Forum, Quarterly Customer Meeting

3 Strategic Goals

- Supply the technical foundation that enables agencies to focus on their highest value
- Become the supplier of choice for state agencies
- Be intentional with customer relationships

Customer Survey

- Goal
  - Baseline understanding of customers experience
  - Underscore listening message
- Methodology
  - Targeted 75 customers, “buyers of our services”
  - 62 interviews were completed (83%)

Results

- Quantitative and qualitative baseline
- Letter grades: A, B, C, D, F
- Organized by small, medium, large agencies
- Executive summary + detailed report

Themes

- Success/Frustration
- Monopoly/Customer Service
- Communication
- Understanding Agencies
- Value

Recommendation Areas

- Marketing services
- Relationship
- Communication
- Expertise & structure
- Customer service
- Technology & innovation
- Value & pricing

Questions?