



T B M C O U N C I L



**FEDERAL
IT COST COMMISSION**

March Meeting

March 30, 2016



Welcome!

David Shive, CIO

U.S. General Services Administration



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The ITCC Journey

Todd Tucker, General Manager, TBM Council



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Private Sector Partners



Findings & Recommendations

Brian Wissinger, Senior TBM Analyst, Cask

Kathleen Flynn, Principal, Capgemini

Paul Schmidt, Partner, ISG

Mitchell Bostelman, Competency Leaders, Deloitte

Suzanne Chartol, Program Manager, TBM Council

***Moderated by:* Todd Tucker, General Manager, TBM Council**



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The Challenge



Programs Mission Areas

- IT costs seem confusing, unfair, irrelevant
- Unclear where to reduce or shift costs while preserving service
- Decisions over time lock IT into high O&M cost structure



Infrastructure/Ops App/Service Owners

- Hard to demonstrate efficiency or show what drives cost
- Difficult to justify investment and budgets
- Programs consume IT like it's free



Budget Office Procurement

- IT data and perspectives difficult to integrate into financial view
- Decisions over time lock IT into high fixed cost structure
- Too much time manipulating data, not enough on analysis

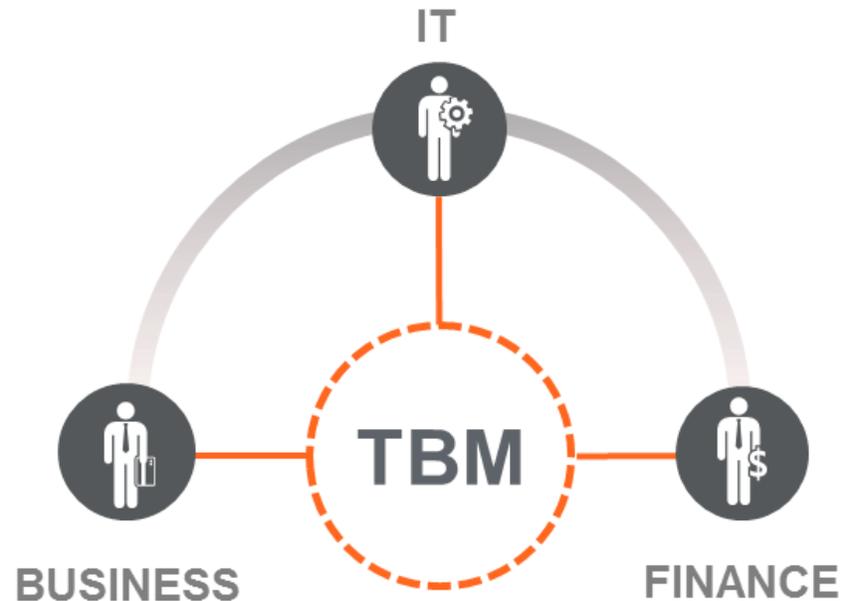
“I made the last decision [to move to a software-as-a service provider] based on my gut. I’m tired of using my gut – I want to use data to make decisions.”

— Federal CIO

What is TBM?

**MANAGE SUPPLY AND DEMAND
TO ACCELERATE INNOVATION**

**UNDERSTAND OPTIONS,
COSTS & VALUE**



**MAKE COSTS
UNDERSTANDABLE TO
DRIVE ACCOUNTABILITY**

Technology Business Management, or TBM, defines a business model which enables IT to run like a business. It is a decision-making framework for making informed trade-offs of the cost, quality, and value of IT services.

TBM Standards to Drive Outcomes



Mission Area

- What is the total IT cost to fulfill mission area activities?
- Is our IT spend aligned with our mission priorities?
- What are the trade-offs between our investment choices?

Apps / Services

- Which applications are the most expensive?
- How much will we save by eliminating duplicate systems?
- What is the true cost of providing an IT service?

IT Towers

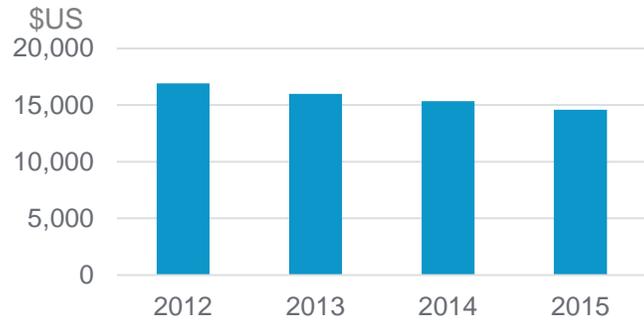
- What should we move to provisioned services?
- Where can we bundle purchases to reduce cost?
- Are there opportunities for shared services across agencies?

Cost Pools

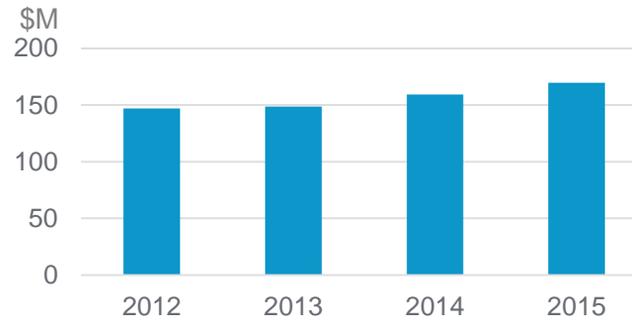
- Which leaders are accountable for the over(under) spend?
- How much do we spend by vendor?
- How much flexibility do we have in our cost structure?

Example: Infrastructure Rationalization Opportunities

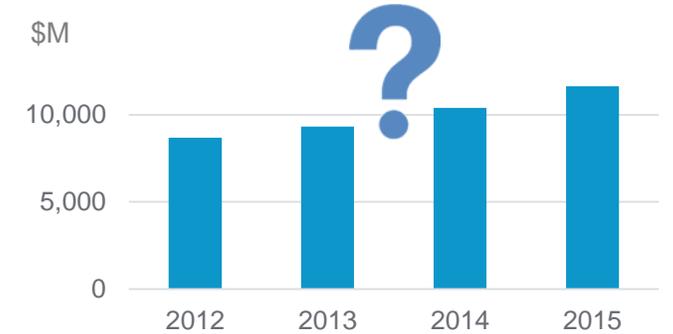
Server Unit Costs¹ Were Dropping...



... Yet Total Costs² Were Climbing



Discovered Server Count Was Climbing Far Beyond Expectations – While App Count Was Shrinking



By leveraging links between CMDB, Application Data, Server Mapping System and General Ledger, the hosting team revealed that many retired apps were not being fully removed from environment

Immediate opportunity: finish decommissioning retired applications	\$11.2M
Future opportunity: fully retire applications to be decommissioned over next 12 months	\$14.7M

Value Created

**Discovered opportunity to immediately save over \$11M per year
Established systems to ensure problem would not recur**

Data has been disguised 1. Fully loaded annual cost of an average server 2. Fully loaded total annual cost of servers

Example: Data Center Inefficiencies

Atlanta Data Center

Server Type	Fully Loaded Annual Cost (\$)	Server Count	Cost per Server (\$)	Average Utilization	Cost Normalized to 75% Utilized Server (\$)
Small	14,172,655	1,535	9,233	60%	15,388
Medium	18,376,512	1,243	14,784	67%	22,066
Large	28,435,582	1,621	17,542	65%	26,988
Total	60,984,749	4,399			

Despite Las Vegas having lower costs of operations than Atlanta, under-utilization in Las Vegas drives normalized server costs significantly higher

Las Vegas Data Center

Server Type	Fully Loaded Annual Cost (\$)	Server Count	Cost per Server (\$)	Average Utilization	Cost Normalized to 75% Utilized Server (\$)
Small	18,553,479	2,247	8,257	55%	15,013
Medium	41,249,115	2,745	15,027	60%	25,045
Large	11,757,504	627	18,752	43%	43,609
Total	71,560,098	5,619			

Business Insights data surfaced huge cost of under-utilized servers. Could accomplish same work with 168 fewer servers at 75% utilization saving ~\$3M

Chicago Data Center

Server Type	Fully Loaded Annual Cost (\$)	Server Count	Cost per Server (\$)	Average Utilization	Cost Normalized to 75% Utilized Server (\$)
Small	1,219,050	70	17,415	52%	33,490
Medium	1,042,750	43	24,250	47%	51,596
Large	163,938	6	27,323	84%	36,431
Total	2,425,738	119			

Cost Transparency justified closure of Chicago data center. Overcame resistance of headquarters team that had long defended local center

Value Created

Identified opportunity to save \$20M per year by increasing utilization to 70%
Closing Chicago DC saved ~\$800k and simplified operations

Example: Application Savings



IT Finance VP shared showback invoices with controllers and business leads. Immediately identified many opportunities for savings

Reduced infrastructure footprint by 80%

Marketing leads did not recognize these apps. Flagged for immediate decommissioning

Application portion of marketing invoice (\$)			
Application	Infra	Labor	Total
Marketing 360	9,364	417,649	427,013
UXi Rainmaker	26,691	127,498	154,189
Constant Contact	19,913	71,315	91,228
SharpSpring	46,854	21,081	67,935
Pardot	10,312	7,469	17,781
B2B Link	11,128	2,475	13,603
Contact Hub	6,221	4,119	10,340
DemandCenter	5,542	4,236	9,779
WebGlide	5,345	2,556	7,901
Ambassador	3,386	4,084	7,470
WhiteSpace	3,176	3,424	6,600

Replatformed many apps. E.g. dev and test moved to tier 3 infrastructure

Realigned labor based on app priority

Value Created

**Reduced annual application costs from \$87M to \$75M
Moved \$12M to IT investment**

Example: Infrastructure Under-Utilization

Application	Server Count	Production Platform?	Average Utilization	Annualized Cost (\$US)	Replacement Cost (\$US)
PD-US	294		-	535,177	1,684,202
ShowcasePRC	281	✓	14%	493,327	1,317,512
AccuFind	195		-	321,752	884,778
Optim	199		-	317,405	1,283,450
RateTrack	141	✓	6%	284,555	933,217
Condunest	132		-	193,221	471,301
SSI Interface	154		-	193,002	775,606
Pre-Rate	117	✓	2%	184,942	757,602
HubSmart	97		-	125,772	531,112
POS Platform	116		-	119,004	471,252
ROMK	102	✓	11%	107,224	395,017
SteelTeeth	95		-	95,449	300,578
Oracle Manager	87		-	93,377	275,418
StateGuard	85	✓	1%	84,969	240,222
DawnLight	64	✓	5%	83,871	179,300

Prime Targets

Identified physical servers with just one virtual machine on production platforms with <20% utilization and on all non-production platforms

Lesson Learned

IT leaders knew that under-utilization of VMs was a problem but attaching costs spurred change

Immediate savings opportunities. Costs of power, cooling, maintenance, support...

Capital cost avoidance opportunities if hardware is freed up through optimization

Value Created

Annual savings: \$4.7M
Capital cost avoidance: \$15.6M

Kaiser Permanente

2015 TBM Award Finalist

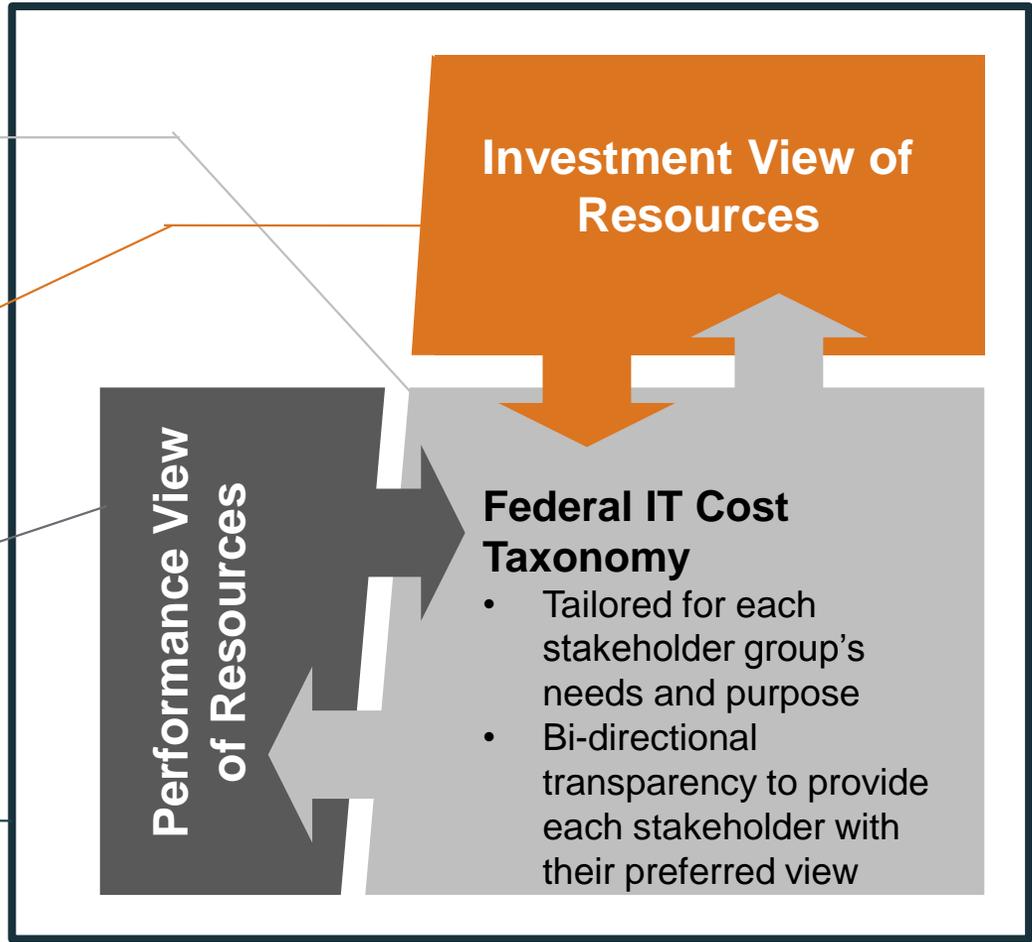
IT COST Commission Work Streams

- 1** **FACT**
Define a common cost taxonomy for all Federal IT cost identification, estimation, and reporting

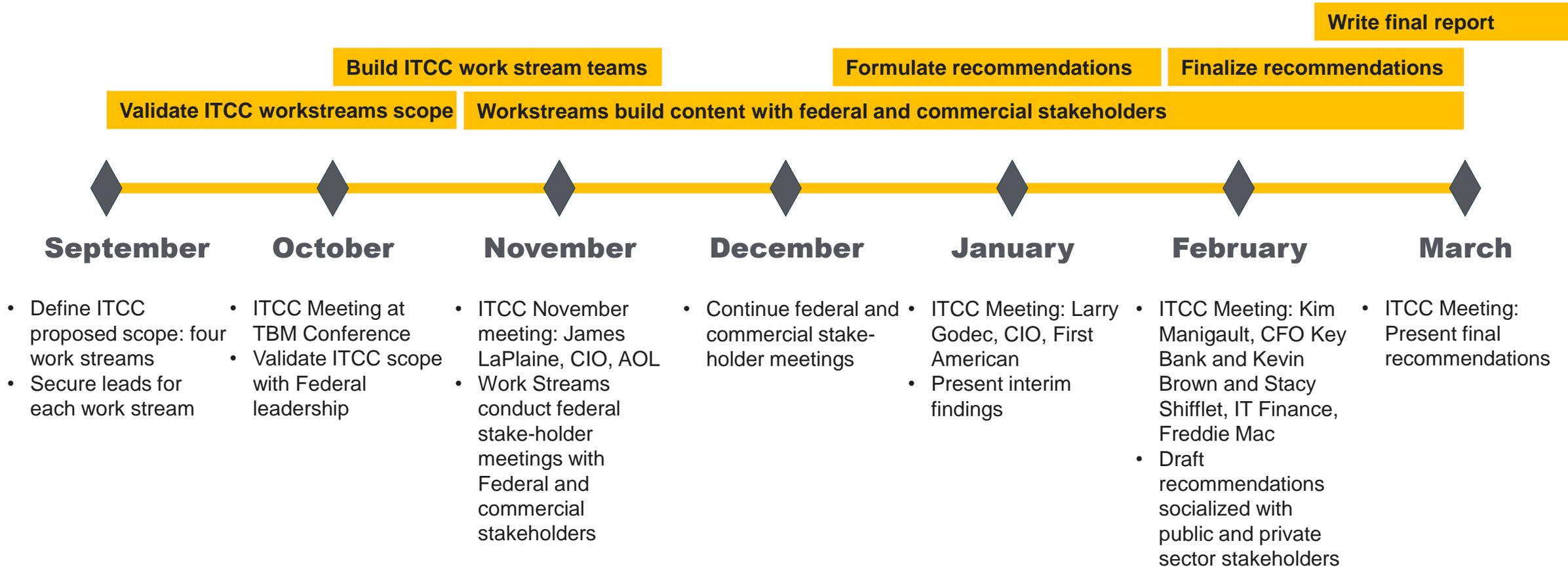
- 2** **IT Investment Framework**
Understand costs of capabilities, activities, deliverables, and supporting services by IT investment

- 3** **Performance Measurement**
Measure cost and operational effectiveness of IT capabilities and supporting services

- 4** **Reporting Standards**
Understand Federal policy, standards, guidelines, circulars, and data and reporting requirements related to IT costs

Timeline



Key Findings Overview

- ▶ TBM is appropriate for use in the federal government.
- ▶ The FACT model can be adapted from the commercial taxonomy by standardizing on Government language, and tailoring definitions and inclusion criterion from the agencies.
- ▶ Classifying investment requests within the FACT construct will enable tracking against actual spend down the road, and over time will enable improved cost estimates and planning.
- ▶ Of the 315+ identified metrics that can be calculated using the FACT, a generic subset has been recommended as a starting point, but agencies should use the recommended methodology to choose those that they will use internally for both the near-term, and as they mature TBM.
- ▶ Current data is usable for TBM, but some standardization within the financial system will make it easier to classify spend into the FACT.
- ▶ TBM is not meant to be static. A governance process (both at the federal and agency levels) needs to be put in place to manage needed changes over time.

Panel Discussion

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State of Washington

2014 TBM Award Winner



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Thank you for joining today!



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Networking Reception

Hosted by:

Deloitte.



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