Technology Business Management Case Study: Washington State
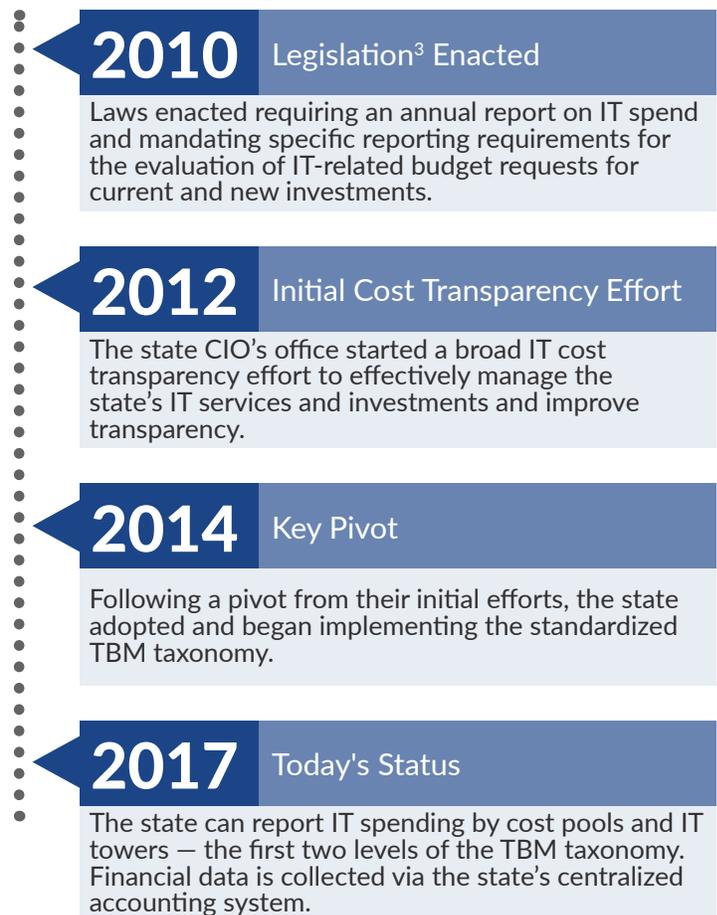
The Federal government spends at least $90 billion a year on information technology (IT), nearly three-quarters of which pays for maintenance of existing systems. Federal agencies, in coordination with the Chief Information Officers (CIO) Council and the Office of Management and Budget (OMB), are using the Technology Business Management (TBM) Framework[1] to improve the transparency of their IT spending. The standard TBM taxonomy[2] can help agencies model and improve management of IT costs and services.

This case study reviews the largest TBM implementation to date in the public sector, in the State of Washington, to understand the challenges, lessons learned and how greater IT cost transparency is making a positive impact. Implementing TBM is a journey and Washington State still has work to do to fully realize all the benefits of the framework and methodology. However, the state's results to date are encouraging and demonstrate the tremendous potential of TBM.

Background

Much like the Federal government, the State of Washington is a federated system where each agency operates with significant autonomy. For years, Washington's CIO and the state Legislature wanted more insight into how state agencies were spending taxpayer dollars on IT, as well as better information on the value that taxpayers were receiving for this spending. However, the lack of credible data made it hard to understand the composition of agency- and enterprise-wide investments, or where and how resources could best be spent. To address these issues and help develop the state budget, the Governor, state Legislature and the public began the push for greater IT cost transparency.

Washington State's Implementation Timeline

2010 — Legislation[3] Enacted

Laws enacted requiring an annual report on IT spend and mandating specific reporting requirements for the evaluation of IT-related budget requests for current and new investments.

2012 — Initial Cost Transparency Effort

The state CIO's office started a broad IT cost transparency effort to effectively manage the state's IT services and investments and improve transparency.

2014 — Key Pivot

Following a pivot from their initial efforts, the state adopted and began implementing the standardized TBM taxonomy.

2017 — Today's Status

The state can report IT spending by cost pools and IT towers — the first two levels of the TBM taxonomy. Financial data is collected via the state's centralized accounting system.

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1. The Framework governs the disciplines, organizational elements and value conversations of TBM.

2. The TBM taxonomy is a component of the TBM Framework that defines cost categories for financial resources, IT towers and IT services. Version 2.0 of the standard Technology Business Management taxonomy can be found online at https://tbmcouncil.jiveon.com/docs/DOC-7736.

3. Washington State Legislature. RCW 43.105.054 Governing information technology—Standards and policies—Powers and duties of office. See part (f). http://app.leg.wa.gov/RCW/default.aspx?cite=43.105.054

Improving Transparency

Initially, the Legislature attempted to increase IT cost transparency by conducting a total cost of ownership survey to provide a one-time, snapshot view of the state's IT spending. However, gathering the data and evaluating the investments did not provide the value or insight in a reasonable timeframe. Further, the state could not assess whether the IT spend was providing true business value to the programs it was supporting.

In 2011, the state started to centralize its IT services through the Consolidated Technology Services agency, also known as Washington Technology Solution (WaTech). WaTech operates the state's core technology resources, including a central network and data center. Within WaTech, the Office of the state CIO (OCIO) sets policy and develops the strategic direction and enterprise architecture. The primary funding mechanism for these operations is a working capital fund, to which each agency contributes to the extent that they use the centralized services. Funding for all state functions, including IT, is provided every two years.

The state began their IT cost transparency effort in 2012. Initially, implementation was challenging due to the lack of a standard taxonomy, lack of a centralized reporting mechanism and multiple agency instances of software reporting applications. These challenges were so significant that the entire approach had to be re-architected and the whole effort started again. After adopting the newly standardized TBM taxonomy, the state pivoted and restarted their efforts by consolidating the data collection approach, creating a TBM office within the OCIO and utilizing a single, enterprise-wide software configuration.

In 2017, the state can report IT spending by cost pools and IT towers - the first two levels of the TBM taxonomy. Financial data is collected via the state's centralized accounting system which requires the categorization of IT expenditure data in three ways: IT acquisitions, IT maintenance and operations, or data processing services (interagency charges). The state accounting system collects monthly consolidated financial transactions from all state agencies using the following identifiers: "X" designates IT acquisitions (new development spending) and "Y" designates maintenance and operations.

Interagency data processing charges between agencies and WaTech have their own sub-object class designation.

Cost pool data is rolled up for state-wide IT spend and IT tower data is provided for 44 state agencies with annual IT spend above $250,000 (the spend threshold required by policy for agencies to participate in the TBM program).

Today, Washington State uses TBM data to:

- Produce accurate data needed for the legislatively-mandated IT spend report with easily identifiable explanations of changes in spending at the programmatic level;

- Classify nearly all of the state's previously "undefined" IT spending;

- Support the restructure of the state's chart of accounts;

- Track data on a weekly basis and identify coding issues in the financial system so agencies can make edits before the month closes, eliminating the need for more process-heavy changes;

- Demonstrate how state IT spend as a percentage of state revenue compares to the industry average;

- Improve hiring decisions based on identified IT needs rather than guesses;

- Compare spend across agencies to identify opportunities to optimize spend and value trade-offs; and

- Spend taxpayer dollars more efficiently by evaluating the true cost for services and basing fees on those amounts.

The Value of TBM in Washington State

"TBM encourages collaboration among technology, business and financial decision makers in each agency — and across agencies — by collecting data about IT resources and reporting in multiple ways. This data provides a framework for measuring, managing and communicating the budget, cost, consumption and value of IT. In essence, the TBM program helps agencies run their IT programs more like a business."[4]

The State of Washington has seen significant benefits from implementing TBM, including greater transparency into IT spend, reduced reporting burden, more legislative confidence in the data and an increase in data driven decision-making focused on modernization. Below is a short description of some of the benefits that Washington realized through using TBM.

- **Improved data:** TBM is incentivizing agencies to not only increase transparency into their spending, but also to improve the way that data is coded so they're reported correctly. In one agency, preparing data for TBM reporting helped them identify that new staff had not been correctly coding IT spending. Because they understood their data, they were able to recognize and quickly fix the problem by training a new employee on the proper coding process. Overall, the state is now able to identify and classify nearly all IT spending. "Undefined" IT spending has decreased by 10 percentage points from 15% of total IT spend to 5%.

- **Reduced reporting burden:** The TBM data significantly cut back on the reporting burden, allowing OCIO to compile data needed for legislatively mandated reports and data calls. Generally speaking, identifying IT spend for 105 state agencies can now be done in minutes, rather than days or weeks.

- **More granular reporting:** TBM provides the granularity needed by the legislature to better analyze spending trends over the last two fiscal years. These spending trends demonstrate that IT costs in general have gone down. Through TBM, officials were able to easily explain and justify areas where costs may have increased. Specifically, they saw a significant uptick in IT spending for Higher Education due to project spend for new enterprise resource planning systems.

- **Demonstrated business value for IT:** TBM is providing business value to IT and business leaders by providing them with the information necessary to have data-driven discussions about the cost and value of IT and how it can best support business goals. In one agency, TBM data showed that a major service the agency provides is more efficient and cost effective, with less overhead, than the average in the private sector. This allowed the agency to demonstrate that they can provide their services cheaper than a private sector option.

- **Making the case for modernization:** An agency that provides direct services to nearly every citizen in Washington used TBM to analyze the fees that they charge for these services. TBM data allowed the agency to track the cost of IT through the whole process. When they undertook a modernization initiative, they could justify the need for increases in fees to cover the cost of the project. As the project progressed, they've realized that they'll be able to reduce fees before the project is over, because they know the true cost of this initiative. In the future, they would like to track the costs for the non-IT portion of their services so that they create a fee structure based on the total cost of ownership.

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4. Agency Information Technology Budget Detail, http://www.ofm.wa.gov/budget17/IT_ExpendReport.pdf
5. http://waocio.force.com/

- **Project Dashboards:** TBM has allowed Washington to improve their IT Project Dashboards.[5] Though the projects themselves are currently self-reported, the data behind the projects is based on TBM cost pools and IT towers. With this project tracker as well as the associated TBM data, OCIO and the agencies are able to analyze trends in project spending. For example, one agency had very high telecom costs relative to other state agencies, so they analyzed the data and found that their high telecom costs were due to a unique service they provide that required special equipment.

- **Saving Taxpayer Money:** Implementing TBM allowed one agency to critically examine data from a large invoice where they discovered that some non-IT spend had previously been coded as IT. This led to a closer examination of their data, which resulted in identifying savings in other areas. By obtaining consumption data from their cloud service provider, they realized that it would be more cost effective to expand the cloud storage available instead of continuing to purchase external hard drives. With the assistance of the OCIO TBM Office, they were able to get better data and ultimately save the taxpayer money.

A State-wide Success Story

Both at the state level, and within agencies, **TBM has shown its value.** With partnerships across the government, the joint effort has helped make TBM implementation a success story. There's a strong and continued dedication to cost transparency from the Governor, through the Legislature, to the state CIO, and agency directors and deputy directors. Moreover, the state employees working on this effort have seen real value in the reduced time they need to spend on data calls. By understanding the most crucial questions and use cases that TBM can be used to answer, agencies are able to better prioritize and manage their efforts.

In addition to the agency specific examples of TBM success, the government as a whole has achieved major victories. For example, **TBM has opened** paths **of communication** across functional areas. Chief Financial Officers (CFOs), CIOs, acquisition professionals and non-IT staff are able to **communicate in a common**

language. Specifically, cost pool data provides the transparency needed by CFOs and IT tower data helps CIOs better understand their business. The central TBM office is a resource to all agencies and acts as a TBM "helpdesk." They also have visibility into all TBM reporting, ensuring consistency across agencies.

CFOs and CIOs are **working together to understand and build better services**. Recently, OCIO collaborated with the Office of Financial Management (OFM) to adjust the state's chart of accounts to get each team the data they need to successfully perform their jobs. Further, TBM data shows that the state government spends 25% less on IT as a percentage of state revenue, relative to the private sector.

Across the agencies, hiring decisions are based on accurate business needs, rather than just replacing staff who leave or retire. A comprehensive list of IT applications spurs discussion at agencies about how to modernize, upgrade or replace legacy applications. Agencies can more easily identify where to invest or avoid spending money on legacy systems that are out of date and no longer needed. There is a strong attitude that the data can improve and even get better over time. With agencies ultimately retaining accountability for the numbers and the data in their source systems, the drive continues to close data gaps and improve the data. When someone in an agency says, "This error or bad data will be exposed," the response has become, "Great! Take that as a win! You found a problem and are correcting it." This changes the conversation.

After a five-year journey in cost transparency, agencies are **making better business decisions** as a result of TBM. They have greater accountability for the data in their source systems. They're able to **justify their budget requests**. They can provide better answers to legislative and public inquiries on how taxpayer dollars are being spent. They're able to respond quickly to data calls with solid and accurate data. With the help of a standard TBM taxonomy, the state has been able to provide clear year-over-year trends, as well as benchmarking their data against industry standards. Though there is still room for improvement, the value that the state's already received when it comes to IT cost transparency is more than justified.

Lessons Learned For Federal Adoption

The State of Washington story reveals several key lessons that can be used by federal agencies to accelerate TBM adoption:

- **Employ a Standard Taxonomy:** When Washington State began their IT cost transparency efforts, the standard TBM taxonomy was not available. After the taxonomy was standardized, the state was able to accelerate implementation. Though the taxonomy does allow some flexibility for agencies to adapt for their business/mission needs, they all start with a common base of terms and structure. Having a standard taxonomy allows agencies to focus on maintaining the data, rather than maintaining the taxonomy.

- **Just Get Started and Drive Continuous Improvement:** The state found that its data were not perfect - they lacked the granularity needed for the taxonomy. Rather than waiting to clean up the data, the state moved forward with TBM. Through their work, they identified areas for enhancing their data collection methods and are constantly working to improve based on the needs of OCIO, WaTech and the state agencies.

- **A strong partnership between the OCIO, the OFM and executive leadership has been critical to implementing TBM.** The TBM program is important to the Governor's Office and the agency heads. The CFO of one state agency shared three reasons TBM is important to him.

  "I have three primary responsibilities as the CFO of my organization:
  1) I have a commitment to help my customers make effective management decisions - the CIO is my customer.
  2) I have responsibility as a CFO for effective and accurate reporting of the financial data in my agency.
  3) Without TBM we're not making the best data-driven decisions that we can."

- **Create a Central TBM Office and Advisory Group to Manage Adoption:** The State of Washington OCIO serves a centralized policy-making role and houses the state-wide TBM office. The central TBM office ensures consistency across the state, acts as first-line support when agencies have questions and drives continuous improvement and adoption. It also relies on its TBM Advisory group, consisting of agency CIOs and CFOs, to help create a strategic roadmap with feasible milestones. The TBM Advisory group supports the OCIO monthly 'boots on the ground' agency meeting for those directly involved in TBM implementation to identify problems or challenges, talk through possible approaches and share best practices. This group has proven instrumental to their success.

- **Older Financial Systems Should Not be an Obstacle:** Washington State's centralized accounting system is over 40 years old. In order to implement TBM, the state realized it did not need to make wholesale changes to the system. As a result of their TBM efforts, the state is making changes to the chart of accounts to better align the needs of the CIO, CFO and the Legislature.

- **Strive for Automation:** Prior to their TBM efforts, the state Legislature initiated periodic studies to shed light on IT spend. These studies proved to be very time consuming, as each agency had to identify activities per the requirements of the individual study. Furthermore, the studies shed little insight into actual spend, consumption, or value. To overcome this, the state emphasized a TBM program currently based upon standards, processes and tools to provide actionable information on a regular basis.