Technology Business Management
Agency Case Study: U.S. Environmental Protection Agency

"Components need to understand not just what they are buying from IT but what they are consuming."

- Harrell Watkins, Director of IT Operations

The U.S. Environmental Protection Agency (EPA) protects human health and the environment by developing and enforcing regulations, giving grants, studying environmental issues and teaching people about environmental issues. EPA has ten regional offices in addition to headquarters located in Washington, D.C.

In late 2016, EPA's Office of Environmental Information (OEI) began implementing TBM. EPA viewed TBM as a way to demonstrate to executive leadership and component offices how much IT contributes to mission goals. TBM now enables EPA to have conversations with their agency customers about value rather than conversations only on cost. In addition to improving visibility into EPA's IT dollars, the process of implementation improved data collection and clean-up.

EPA began implementing TBM to provide an analysis of the value customers receive from the services that the CIO's office provides and how IT contributes to the mission at EPA. They began by conducting a TBM proof of value using infrastructure data from its Working Capital Fund (WCF) that consisted of rich datasets with operational and financial components. The WCF IT services are reviewed regularly and a chargeback model already existed. Following the proof of value, they purchased a software tool to facilitate cost pool and IT tower data mapping. Various staff members and contract resources within OEI continue to focus on this effort, including one full-time employee.

Plans are in place to incorporate additional data from Capital Planning and Investment Control (CPIC) investments, major projects and resource allocations such as labor into the TBM mapping. After this is complete, EPA will determine what additional data should be added. OEI plans to socialize the working demo across the agency in the coming months and intends to use this data for quarterly portfolio reviews, the WCF Board, and the CIO Strategic Advisory Council.
CHALLENGES

Lack of resources: The budgetary environment presents challenges for EPA’s TBM implementation. The agency believes that additional FTEs would allow it to demonstrate value more quickly and accelerate its expansion into other OEI cost centers. A temporary resource surge would enable EPA to move the tool into an acceptable, steady state and to transform the practice and the management of infrastructure activities. While TBM implementation and expansion is a priority, budgetary uncertainty could temporarily slow expansion into other cost centers.

Data Identification: TBM helped EPA work through some of its data issues. This included uncovering multiple data gaps, including data on how IT services are consumed, and identifying sources of more robust data, like storage and usage levels across the agency.

Building Partnerships: Currently, OEI doesn’t have direct access to the agency’s Financial Management System (FMS). However, OEI is able to obtain financial data by requesting a monthly flat file of budget execution data at the transaction level. OEI and OCFO are working to automate this process over time.

LESSONS LEARNED

Start with a proof of value - To understand the TBM implementation process, start with a proof of value pilot using a line-of-business where data is robust. This proof of value, while not perfect, will help determine best practices, necessary resources and a strategy for success. The pilot can be demonstrated across the agency to show value and gain buy-in.

Develop a roadmap to communicate path forward - The proof of value pilot can be used to develop a roadmap and a strategic plan for the entire spectrum of IT spend. After completing the proof of value, EPA made improvements to their chargeback model and planned for future ways to utilize the TBM framework. In addition, it also developed metrics and a communications plan.

Use TBM for more than just data analysis - TBM data must be used to drive conversations about value. Once implemented, TBM can be a tool for project management, budgeting and change management. Ultimately, OEI would like use the TBM data to improve allocation of resources and assign projects in a systematic way. Industry-wide benchmarking data can be used to compare resource allocation across similar portfolios and measure ways to align day-to-day operations with available resources.

To learn more about the TBM initiative, visit CIO.gov/agenda/sustainability-transparency/tbm

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