PRIORITIZATION OF INFORMATION TECHNOLOGY BUDGET REQUESTS

Category: State CIO Office Special Recognition

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Executive Summary

Each fiscal year, Washington State Government spends over $900 million on information technology (IT). There are about 100 state agencies looking for a piece of that budget pie. The Office of the Chief Information Officer (OCIO) is charged with ensuring every IT dollar advances the governor's policy goals. Each agency has a different business issue to solve and a different technology approach to solving it. Legislators, who evaluate the agency budget proposals look to the OCIO to help them answer the question, "Does this technology approach make sense?" For the 2013-2015 biennial budget, the legislature asked the OCIO to create a prioritized list of the technology-related budget requests. That legislative directive prompted the OCIO Prioritization of Information Technology Requests project.

State CIO, Michael Cockrill explains, "The original challenge was how to deliver a prioritized list of technology projects. The more interesting problem—and the one we set out to solve—was how to build a highly transparent and efficient process that would align agency IT plans to the overall IT strategy of the state. When agencies are planning projects, we want them to be thinking about building them in the cloud, implementing strong cybersecurity measures, using agile development techniques—really thinking about how technology can fuel further efficiencies and innovations."

In the search for a new prioritization tool, the OCIO team landed on a SaaS product, DecisionLens, based on metrics rooted in Thomas L. Saaty's analytic hierarchy process which analyzes complex decisions using both mathematics and psychology to determine a ranking hierarchy. Using the results of the OCIO's prioritization process, the legislature funded 27 of the top 30 projects on the OCIO list. The three that were not funded were not supported by the Governor's office for reasons that where independent of technology

The Prioritization of IT Budget Requests is the kind of project that just keeps on giving benefits. Whereas transparency and stakeholder engagement have improved significantly, the process ignited by this project will continue to evolve and to deliver greater transparency and engagement with each budget cycle. Additionally, the benefits of this project in terms of informing the state strategic IT direction will unfold with each quarterly release of the new state strategic IT framework.

Business Problem and Solution Description

Each fiscal year, Washington State Government spends over $900 million on information technology (IT). There are about 100 state agencies looking for a piece of that budget pie. The Office of the Chief Information Officer (OCIO) is charged with ensuring every IT dollar advances the governor's policy goals. Projects must either improve revenue or reduce costs and have a direct and positive impact on citizens and/or public safety. The analysis of complex IT projects needs to be boiled down to easy-to-read recommendations in which even technophobes can understand the risk versus benefit equation.

The Challenge

In 2013, state agencies made budget requests for 86 different IT projects of varying size and complexity. Projects ranged from settling tax boundary disputes to tracking marijuana from seed to sale to Medicaid shopping plans. In the past, agencies would develop an IT plan using their own importance criteria and risk assessment. Then, they would mine their personal contacts for support and figure out a way to get the attention of someone in the Office of Financial Management (OFM). The goal was to make sure their project got on OFM's budget proposal and become part of the Governor's budget. To say this put IT budget decisions all over the map is an understatement.

Each agency has a different business issue to solve and a different technology approach to solving it. Legislators, who evaluate the final budget proposal, understand policy but may not have the technology background needed to assess these diverse and complex projects. The legislature looks to the OCIO to help them answer the question, "Does this technology approach make sense?" So, instead of trying to puzzle through the project proposals for the 2013-2015 biennial budget themselves, the Legislature asked the OCIO to create a prioritized list that ranked the projects as high, medium or low. The legislature didn't identify specific budgeting criteria. They gave that task to the OCIO.

Prioritization Version 1.0

Governor Inslee is very clear about the importance of a transparent, effective and efficient government. "Washingtonians expect their tax dollars to be put to the best possible use. That means investing in state services that are the most important to them, providing those services with excellence and then making results easily available to the public."

With this goal in mind, the OCIO got to work on their first version of a prioritization tool. We built a fairly unsophisticated Microsoft Excel model that looked at some basic bottom line numbers. In theory, it sounds like a straightforward process. In practice, it was the opposite. The prioritization request from the legislature came after agencies submitted their IT budget requests. The information the OCIO needed was incomplete or absent from those requests. Because the legislature was already in session, the OCIO team had an extremely short timeframe to determine the criteria, meet with as many agencies as possible to understand their needs and then rank the requests. The team was developing criteria and prioritizing at the same time. Every time a criteria changed, the team had to go back and rescore the eclectic set of requests.

Lessons from Round 1, Version 1.0

The OCIO learned a quite a bit from that first prioritization exercise. First, if we were asked to prioritize projects again, we needed to get criteria to agencies before they submitted budget requests. Second, we needed a better tool. The Excel model we built was just not sophisticated enough to reflect everything that was important in evaluating projects. Minor changes in the model could have major implications but it was hard to identify which changes were causing issues. The tool did not give enough control over the color of money (appropriation categories). There was also no way to check priorities against an ever changing budget and there was not a clear understanding about what happens when a particular project—especially a large project—was moved to the top of the priority list.

Prioritization Version 2.0

For the second version, the OCIO also wanted broader community input on the process. The OCIO retooled the process for weighting the criteria to include not just members of the OCIO but input from the Governor's budget staff and input from members of the Technology Services Board (TSB). The TSB is an oversight board that includes members from the Legislature, state agencies, labor and three representatives from the private sector.

Overall, the criteria were more detailed and nuanced. And, each agency had to start their request by looking at how their project fit into the big picture by answering the following questions:

1. How well does the project align with the priorities of the Governor?
2. How well does it align with the mission of the agencies?
3. Does it contribute to increased revenue or reduced costs?
4. How risky is it?

5. How well does it align with the State's IT policy and direction?

While sharing the governor's focus on creating an effective, efficient and accountable government, the OCIO also wanted to ensure agencies planned IT investments using certain key drivers.

Current state CIO, Michael Cockrill explains, "The original challenge was how to deliver a prioritized list of technology projects. The more interesting problem—and the one we set out to solve—was how to build a highly transparent and efficient process that would align agency IT plans to the overall IT strategy of the state. When agencies are planning projects, we want them to be thinking about building them in the cloud, implementing strong cybersecurity measures, using agile development techniques—really thinking about how technology can fuel further efficiencies and innovations."

Version 2.0 Looked Very Different

In the search for a new prioritization tool, the OCIO researched analytics and decision-making theories. We wanted a more sophisticated tool that could not only analyze and rank complex project scenarios, but also allow the OCIO team to understand immediately the potential ramifications of making changes to the rankings. The team found a SaaS product, DecisionLens, based on metrics rooted in Thomas L. Saaty's analytic hierarchy process which analyzes complex decisions using both mathematics and psychology to determine a ranking hierarchy. The Washington State Department of Transportation (WSDOT) was actually using the tool to prioritize capital projects. Although the product hadn't been used as a legislative budgeting tool, the OCIO team was confident that the product would work well.

Results of Round 2, Version 2.0

Using the results of the OCIO's prioritization process, the legislature funded 27 of the top 30 projects on the OCIO list. The three that were not funded were not supported by the Governor's office for reasons that where independent of technology.

Significance

Governor Inlsee has challenged all agencies to do more to ensure a faster, smarter and more accountable state government. In his words, "Better information leads to better decisions which ultimately lead to a better government." The OCIO's Prioritization of IT Budget Requests initiative is a real life example of this philosophy. The project has

transformed the important, yet highly inefficient and inconsistent IT budgeting proposal process into a streamlined one that allows lawmakers to quickly understand and compare major IT project requests.

The process has had a significant influence on how agencies define their projects. Agencies know the criteria the legislature will use to review funding proposals and can consider the criteria—and the questions about alignment to the big picture strategies— before they submit projects. If an agency approaches a legislative member now about new projects, one of the first questions the legislator asks is, "Where do you rank on the OCIOs list?"

With the DecisionLens tool handling the underlying architecture, the OCIO can focus our efforts on refining the prioritization process. We continue to refine the criteria to make them as simple and appropriate as possible. Further, we are involving agencies more directly in the budget request prioritization process. In addition to the written budget requests submitted to OFM, OCIO invites each agency to pitch their IT-related requests to the prioritization scoring team. Agencies tell their own stories without relying on the interpretation of OCIO intermediaries. The agencies represent their own budget request case and answer questions directly in the pitch sessions. In advance of the pitch/scoring sessions, the OCIO team works with agency one-on-one, reviewing and providing feedback on budget proposals at the concept stage. By directly involving the agencies and by doing so early in the process, the OCIO has also found that the criteria and the rationale behind them is understood at all levels within an agency.

The tool is a huge success, providing stakeholders insight and unprecedented transparency into the budgeting process. The OCIO has delivered training and access to the tool for House of Representatives, Senate, and the Legislative Evaluation & Accountability Program Committee (LEAP). As a result of the success, the OCIO established a statewide master contract with DecisionLens that makes the tool available to all State agencies, Cities, Counties, and non-profits.

Benefits of the Project

The Prioritization of IT Budget Requests project has garnered a host of benefits including increased transparency, stakeholder engagement, broader input into and buy-in of the state's technology priorities, scalability, a deeper alignment of business and technology, and a game-changing way of anchoring the state technology framework in the state's budget process.

With regard to increased transparency, decision criteria are published along with OFM's budget instructions. Agencies are informed well in advance of their budget submittals of exactly the criteria by which their budget requests will be scored. The OCIO offers agencies feedback sessions at the concept stage of budget requests. Stakeholders including the TSB, OFM, agency deputy directors and CIOs are involved in weighting the decision criteria. All prioritizations results are published in various formats. Further, the OCIO provides wide exposure to the tool, DecisionLens, so that stakeholders can analyze the scoring results with their own particular concerns in view.

In advance of the prioritization sessions, the OCIO engages stakeholders in weighting the state technology objectives. This process reveals that the TSB and agencies' deputy directors show a bias toward business importance while CIOs indicate more concern with risk and feasibility. The various biases and their respective owners are made transparent by the tool and the process, which rigorously informs the weighting of technology objectives and business alignment. All of that transparency contributes to the greater conversation about technology as an enabler of business.

The Prioritization Project demonstrated important scalability with regard to the process. The latest Prioritization round included a review, analysis and prioritization of 120 IT-related budget requests, up from 86 the first time around. And, the latest round provided for far greater inclusion and transparency.

Finally, the Prioritization process evolved into a central aspect of Washington State's new Strategic IT Framework. The benefit of connecting the budget process to the state's strategic plan turns what might have been a shelf document into a vital strategic framework designed to be incrementally improved with each budget cycle. Agencies are clearer about the state's strategic technology direction and increasingly empowered to help shape that direction.

The Prioritization of IT Budget Requests is the kind of project that just keeps on giving benefits. Whereas transparency and stakeholder engagement have improved significantly, the process ignited by this project will continue to evolve and to deliver greater transparency and engagement with each budget cycle. Additionally, the benefits of this project in terms of informing the state strategic IT direction will unfold with each quarterly release of the new strategic IT framework.