



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Mital, Simpson, Helgeson, Manning and Brown
FROM: WAM Steering Committee Co-Chairs – Frank Lawson, Systems Engineering Supervisor; Erin Erben, Information Systems Manager; Sue Fahey, Finance Manager
DATE: November 20, 2015
SUBJECT: Type 2 Project Update: Work and Asset Management (WAM)
OBJECTIVE: Information Only

Issue

This memo addresses the Eugene Water & Electric Board (EWEB) of Commissioners' request for an update on EWEB's Work and Asset Management (WAM) system project.

Background

EWEB manages capital assets and other resources for the delivery of drinking water and electricity to our customers. Including water and electric utilities, EWEB manages approximately \$973 million¹ of assets in service, \$36 million in construction in progress, \$6 million in inventory, and the labor of more than five hundred people. Historically, managing work and assets at EWEB involved several legacy, stand-alone systems with limited ability to discern between individual assets and asset classes, departments, or types of projects for decision-making. Understanding asset values in classifications beyond required general financial statements was difficult to impossible. Physical assets were managed individually, and processes evaluated from a limited departmental (non-enterprise-wide) perspective. Utilities are driven by capital cost and are extremely capital intensive. It is essential that such businesses have good systems to track and manage those assets. In response to these limitations, the EWEB Board approved management's proposal to acquire and implement an enterprise-wide system to "fully integrate core business processes, share and track data across these systems to support better decision making and reduce operational costs by streamlining functions and reducing redundancy."²

Discussion

The Board approved the contract and license agreement on May 7, 2013, with Five Point Partners (later to become part of Ernst & Young, LLC) and their partners Oracle Utilities, RIVA Modeling,

¹ Electric, \$734 million; Water \$239 million. Prior to accumulated depreciation.

² Board Memorandum and Contract Approval, dated May 25, 2013.

and GeoNexus Technologies for the WAM system software and support services. EWEB went “live” with the Oracle-based WAM system on November 1, 2014, and began using the system for work tracking (including timekeeping), inventory, purchasing and financial recording purposes. Following Go Live and year-end financial closing, the first system audit by Moss-Adams found no deficiencies in the functionality, financial controls and reporting of the system. The project also provided basic performance as expected, and was on budget. However, post-implementation also experienced some challenges including limited reporting, lack of internal technical support capability, insufficient user change management and training, and under-developed pre-WAM and post-WAM business processes. Moss-Adams did raise some important issues in the management letter and those are being addressed (see the audit findings update in the December board run). It is important to understand and keep these issues in perspective. In most industries, a large percentage of IT projects experience failure or major issues, and almost all experience a multitude of minor issues. WAM passed its basic functionality, financial controls and performance issues. The WAM system is fully operational and performing. It was completed on budget, another major accomplishment for any IT project. The kinds of issues being experienced are common to many IT projects.

WAM Business Stabilization Project

On February 4, 2015, in light of organizational challenges with WAM adoption, General Manager Roger Gray initiated the WAM Business Stabilization Project, assigned three co-chairs representing Finance (Bloom, subsequently Fahey), Information Systems (Erben), and Operations (Lawson), and chartered the WAM Steering Committee and Project Manager with the following goals:

- Assess and identify knowledge, business process and technical gaps still being experienced from the WAM release.
- Prioritize and decide scope of issues, and address in-scope gaps with appropriate resolutions.
- Complete WAM technical and business knowledge transfer and technical infrastructure, and deliver WAM into an improved Operations status.

Over the past six months, the WAM Core User-Support Team and WAM Technical Team, along with key business users, have been instrumental in accomplishing initial progress on WAM functionality, business processes and adoption. Specifically, new processes have been developed and launched to manage work orders and the supply chain for parts and materials. Reporting capability has been enhanced, and EWEB is now able to author user-specified reports including those needed for general financial and operational reporting. Technical training and knowledge transfer has increased EWEB’s Information Systems (IS) support capability, significantly reducing contracted support requirements. This specifically addressed an issue raised by Moss-Adams.

Overall, the WAM Business Stabilization Project has improved EWEB’s adoption of the WAM system. As of today, many aspects of the WAM system are functional, and business processes are improving. However, for WAM to become an integral and effective tool for EWEB’s management of assets and resources, more improvement is needed. Some processes remain cumbersome, and have not been optimized to provide strategic decision-making support. Much of the data being collected in WAM has not been extracted or made available in useful operational reports. Other “targeted” processes have not been fully incorporated into WAM, limiting the value of the enterprise-wide data in the system. These present opportunities which will be addressed as we advance our application of the system.

WAM Advancement Project

Going forward, as we improve the usability of the WAM system, our efforts will include the refinement of asset strategies and the work processes interacting with the system. Future work has been prioritized and will focus on selectively-justified and specific aspects of work and asset management using the WAM system. Over the next six months, we intend to focus on developing and integrating asset management strategies with infrastructure planning efforts, finalizing remote inventory management processes, determining the role and methods of the WAM system that support asset maintenance, and refining work order and closeout processes, including asset identification/definition.

Continual Improvement

In the future, EWEB will apply the improvements discovered during the WAM project to other upcoming systems, especially those involving the entire enterprise. The most significant lessons learned include the following:

1. ***Focus on the system's role*** – Information technology and systems are tools supporting human processes that accomplish organizational goals. The processes and the IS tools must be created to align with EWEB's strategic and IS strategic direction. Every strategically-driven project should have specific and measureable features, advantages, and benefits identified and descriptions highlighting "how" the system supports the processes used to meet EWEB's goals.
2. ***Leadership accountability*** – Organization-wide projects (e.g. enterprise systems) need leadership immersion, including support and situational detailed involvement and knowledge. This includes, but is not limited to, strong communication, commitment of resources, detailed understanding of critical issues/decisions, and accountability for decisions.
3. ***Cultivate knowledge transfer*** – The transfer of identified consultant knowledge, abilities, and skills should be formally planned early, and executed in order to fill internal resource gaps.
4. ***Proactive project "tollgate" decision criteria*** - "Go Live" readiness for any major system needs thorough evaluation to insure that the production release can be effectively supported, and that it will not unexpectedly or adversely impact the organization. The evaluation should include all user levels (users, supervisors, managers).
5. ***Develop a change management system*** – Change management at EWEB needs further definition and improvement, and should be a formal requirement of projects and change initiatives. Change needs to be communicated formally to the organization.
6. ***Gear training to the user*** – Training on new systems should be delivered "Just-in-Time" before Go Live, using refined processes and user-oriented documentation. The training should be tailored for specific activities and/or jobs (for "their" work).

TBL Assessment

For this correspondence, the TBL assessment will concentrate on financial issues including evaluating WAM's return on investment.

Original justification for WAM included that the system would provide "a highly efficient enterprise Work and Asset Management structure"³ and eliminate 20 applications that are not standardized or

³ Board Correspondence, dated May 23, 2012

integrated.⁴ Additionally, “consolidation and simplification of the IT infrastructure along with efficiencies gained through work and asset management practices will significantly reduce operating costs”.⁴ The payback for WAM was projected to be 5.4 years with the majority of the savings occurring in later years from managing capital costs and maintenance expenses more strategically and proactively.

To date, the capital investment in the WAM system is \$8.7 million, including licensing, configuration and development, testing, and implementation. Of those costs, \$2.8 million is for internal labor (in-other-words, about 1/3 of the total WAM costs were EWEB employee costs who would otherwise have charged time to regular expenses). Approximately 15 of the standalone processes and programs intended for retirement are no longer active, but simply provide archived read-only data. Two other programs have been completely retired and no longer reside on EWEB servers. These represent savings as expected. Additionally, the internal labor savings that were projected by the business case in many cases were taken from EWEB divisional budgets. In-other-words, Management has already captured labor savings projected in the business case through labor reductions made during the past several years.

Generally, enterprise systems require a few years for operational benefits to be realized. While it is too early for a complete determination, presently some processes appear to have benefited from the implementation, while others have become burdened. Some of this "burden" appears to be a result of having a system that now tracks and records things that EWEB did not previously track and monitor. Extracting benefits from this new information can take years to realize. Only by continuing to evaluate these processes based on contribution to enterprise-wide strategic value, will EWEB be able to optimize practices and realize operational savings.

In the business case, the primary organizational value of WAM will be determined by the application of the system in making better long-term capital investment decisions, improving and extending asset life through improved maintenance, and understanding and balancing resources more efficiently and effectively. At one extreme, WAM may confirm that EWEB’s asset planning was optimal with little impact on overall capital expenditures. However, WAM is expected to provide information for decisions that reduce capital expenditures while better understanding and mitigating risk associated with these decisions. Without a system like WAM that tracks costs at a detailed level, it is not possible to manage capital assets effectively.

The bottom line is that WAM is operational, completed on budget, old systems have been retired, and savings have been captured. WAM passed important assessments by our external auditor, Moss-Adams, and we have effectively addressed some legitimate concerns raised by Moss-Adams. WAM is stable and functioning. We need to continue to improve how we use this new tool, which is why the WAM Advancement Project was established so we can continue to mine the benefits of this new tool.

For the first time in EWEB’s history, the organization has a system that tracks its significant asset investments. The standardization of processes and recordkeeping that has occurred and will continue to be refined, should allow EWEB to be more flexible and adaptable in the future. In 2016, staff will develop a process to update the Board on all large projects post-implementation.

⁴ Board Correspondence, dated April 25, 2013.

Recommendation

None

Requested Board Action

No Board action is required.

If you have any questions, please contact Frank Lawson (frank.lawson@eweb.org), Erin Erben (erin.erben@eweb.org), or Sue Fahey (susan.fahey@eweb.org).