State of Wyoming saves by having IT service cost information at their fingertips

Non-profit, chargeback funded agency providing enterprise IT operations and services for the State of Wyoming.

IT Strategy:

Provide more detailed cost accounting and billing information to increase customer satisfaction and lower cost of IT operations.

Solution:

IBM Tivoli Usage Accounting and Manager

Benefits:

Reduced manual involvement in service bill processing by 80%

Improved service billing transparency and accuracy

Improved timeliness, accuracy and access to account information for end-users

Fast, easy access to actionable information to control and manage IT costs

"The most surprising result was how having access to detailed information about services and costs led to agencies changing their behavior. Once the agencies could access and drill down into the cost of various services, they started comparing the cost to benefit which led to changes in how often services were requested, revision of processes and elimination of some services."

**Jackie Childress
IT Technology Business Services Manager**

The Challenges: Productivity and Usability

Both the IT organization, which charges for all services it provides, and its customers were struggling with the existing mainframe-based chargeback system. For IT, productivity and interface complexity were the major problems. For client agencies, it was a lack of detail and actionable information in billing reports provided to the agencies.

IT's services are delivered to the various state agencies with a combination of mainframe and distributed mid-range systems. The mainframe and all associated services remain under the control of the central organization. The mainframe service billing was based on access and use of the mainframe by the staff of the various agencies. Data collection was somewhat automated on the mainframe, and was collected continuously and posted nightly. However, converting this raw data into accurate customer bills was inherently a manual event-driven process – a process that left much to be desired from the viewpoints of both IT and its customers. Billing runs needed to be manually scheduled and monitored. A staff person needed to manually initiate sequential jobs for consolidation and analysis for reporting. Also, the interface was not user-friendly. It was complex; requiring both extensive mainframe knowledge and significant coding expertise to make changes, whether for job control, report revisions or data analysis. The Komand billing system occupied the full-time support efforts of an IT staff member for the entire month.

Most mid-range systems remain the property of the agencies which control and provision the systems; however, the central IT organization is responsible for providing support services, such as disk and tape storage, rack space, change, configuration, and backup services. The siloed nature of ownership and local management of mid-range systems put additional constraints on the billing system. The IT organization would be unable to fully automate utilization data collection on many of those agency owned systems. Data from these systems would still have to be manually collected and posted on a monthly basis. Furthermore the billing would be much less granular, based primarily on inventory and task counts. Therefore, any new billing system would have to be flexible enough to handle this situation.

About Wyoming's IT organization

The State of Wyoming's IT organization is an unfunded, non-profit operation, therefore the IT organization funds all its activities by charging for services provided to its client agencies. User services are defined and directed by the Governor. IT organization's main responsibilities involve providing core functions, such as control and management of the mainframe, while providing operational and application support services for agency-owned distributed systems. Cost effectiveness and billing transparency allow it to improve its services, while dramatically reducing costs to existing client agencies.

"There were six jobs running every night. It used to take as much as an hour for each to run, and they required someone to push buttons at set times. Now with Tivoli Usage and Accounting Manager, they run automatically and finish in about 10 minutes total. It uses standard XML and has a web based interface our users are already familiar with."

Jackie Childress
IT Technology Business Services Manager

Another problem frustrating both IT and the client agencies alike was a lack of detailed and actionable information in the billing reports provided to the agencies. The monthly reports tended to be high-level overviews and summaries of usage. Agency customers did not receive explicit information about whom, how and when IT services and applications were run. In many cases, neither IT nor client agencies could associate IT jobs and service consumption to the costs charged for delivering them.

The information contained in the reports did not help agency staff make informed decisions on the necessity and value of the services they received from enterprise IT. Worse, the management solution did not have an interface or the structure that would easily allow even IT to revise and rerun the reports to provide information requested by decision makers in IT or the agencies. IT was frustrated with the amount of time consumed with the existing solution and the lack of detailed information it could provide to its customers.

Clearly the IT organization needed a new chargeback system which is more user-friendly, could facilitate moving from paper-based to on-line billing, and run much faster.

The Solution: TUAM Saves Time, Increases Information Utility and Changes Agency Behavior

For the State of Wyoming, the performance of Tivoli Usage Accounting and Manager (TUAM), along with its ease of use, proved to be among the most useful capabilities to address Wyoming's challenges. Wyoming's IT organization, and its agency clients, found additional value in:

> *"We wanted a system that is more user friendly, allows us to eliminate a lot of the paperwork and one that ran a lot faster. We wanted to get away from a labor intensive system to one that allows faster posting. Now, on a daily basis, my billing clerk can make sure everything posts…it takes less than 5 minutes. For the end of month run, she can have things closed out, ready and on-line in about 4 hours."*
>
> Jackie Childress
> IT Technology Business Services Manager

- ➢ Automated billing consolidation, which allows bill processing jobs to execute much more quickly and reliably, without requiring a mainframe expert to monitor and manage them.
- ➢ Actionable information and data from billing reports that are easily accessible to agency management and staff.
- ➢ Mainframe data collection and processing that are fully automated.
- ➢ Mid-range system resource usage data collection processing, performed through simple file transfers to TUAM.
- ➢ Bill processing jobs which are scheduled and run automatically, without requiring manual intervention.
- ➢ The new interface which simplified the transition to online billing.

TUAM allowed Wyoming to fully automate the mainframe data collection and processing necessary to transform raw utilization data into information usable by the agencies. Automation yielded immediate IT staff time savings. Instead of requiring the full-time efforts of one staff member, today a part-time employee spends only 8 hours a week monitoring the billing task.

Working with IBM, the state IT staff was able to develop customized data analysis and reporting, which when combined with the easy to use web-based interface, allows agency clients to get the reports that meet their specific needs. Instead of high-level overviews and abstract summaries, they have data, information, and analysis capabilities that allow them to take action and make decisions. The agencies can drill down to their desired level and get information about who is using which programs and for how long. As an example, it wasn't unusual for an agency, following established practice, to run some jobs daily. With the new, additional detail and drill down capability now available, staff can actually see the cost of a daily run and determine if it was truly necessary and cost efficient. It is even possible to find jobs being run that no longer needed to run,

as well as finding ones that can be consolidated. Both IT and the agencies benefited from the resulting increase in effectiveness and efficiency of operations.

The web-interface also provided significant benefit by making it easy for agency staff, managers and financial IT to review billing details quickly and easily. They have the ability to do their own analyses and inquiries without needing IT to create a report or write an application.

IT benefits from its ability to drill down to respond to inquiries about the justification of a charge. What once was the source of intensive manual research and discussion, now can be resolved quickly and easily. The value and cost of IT services and who is getting those services are easily accessible, presented clearly and at a level of detail useful by the agencies and IT.

Unanticipated Expansion Allows Others to Share the Benefits

IT had been interested in expanding resource usage accounting to the mid-range processors, as well as integrating the accounting of non-IT infrastructure services into its system. Nothing had been done to expand services to do this due to lack of resources and, more significantly, political interest. However, the benefits and obvious success of the TUAM solution did not pass unnoticed. Some agencies have requested to have more management of their mid-range systems be performed by the enterprise IT group.

> *"The governor and state of Wyoming agencies were very pleased with the results of this effort. With the active support of the governor, legislature, and agencies, we will be looking for new, additional ways to use IT to benefit and improve state operations."*
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> Jackie Childress
> IT Technology Business Services Manager

Two non-IT groups did inquire about the possibility of being able to integrate into the automated TUAM billing system. The State Motor Pool and Central Mail functions used the centralized enterprise system, but neither were originally included in the new billing system. Enterprise IT contacted IBM to determine the feasibility of the project. It took IBM less than one week to integrate both groups into the automated billing system. The results are almost entirely self-maintaining operations. IT ensures the data is ftp'd to the mainframe and the rest is automatic.

For the State of Wyoming, the full benefits of the system were not known until after successful implementation and switchover to the full system. IT believes that time and continued success will attract more agencies to seek out integration into the enterprise management solution.

Future Plans

For the IT staff, agencies and other groups, the full benefits of the system were not known until after successful implementation and switchover to the full system. Even then, no one anticipated the change in behavior of users to actively review, revise and eliminate jobs, which resulted in significant benefits for all. For its own future expansion, IT is investigating the budgeting capabilities inherent in TUAM.

IBM Advantage   Company Benefits

Flexibility of data integration

- Rapidly adds new data sources
- Expands billing coverage to non-IT infrastructure services

Web-based user interface

- Easy for agency users to learn and use
- Frees IT resources from requests for custom data runs and analysis
- Ability to justify invoice line-items which improves agency cost effectiveness

Service focused scheduling

- Eliminates manual efforts and tasks required to collect, consolidate and report information
- Allows complex process automation which improves IT productivity
- Increased flexibility in identifying and applying scheduling dependencies
- Shrinks service activation times which improves agency productivity

IBM Support Organization

- Enhanced solutions to support billing for non-IT groups
- Made migration to the new system straightforward and quickly completed
- Focused on efficient skills transfer and enhancement to IT staff

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