MAXIMIZING ASSET VALUE

HOW ALIGNING ENTERPRISE ASSET MANAGEMENT WITH FINANCIAL OPERATIONS DRIVES BETTER DECISIONS





MAXIMIZING ASSET VALUE

How can we get the best value from an asset? An informed answer requires access to both financial and operational, non-financial information. Unfortunately, roadblocks often silo that information within the department responsible for the asset, blocking the flow of data to and from the finance office responsible for the overall local government or agency's budgeting and planning.

Eliminating these information roadblocks is essential to effective asset management, a complex process of acquisition-to-retirement measurement and evaluation. This process generates detailed operational records of maintenance, condition, usage, resource consumption, and much more, while the finance office captures and generates data about capitalization costs, depreciation, and replacement costs. Whether for a dump truck, a park bench, or a bridge, combining operational and financial data delivers a big-picture view that drives better decisions.

Recognizing the power of bridging information gaps, the International Organization for Standardization (ISO) has published guidelines to align asset management's nonfinancial and financial data and processes.

In this report, we explore how adopting ISO/TS 550101 alignment guidelines benefits local governments, and we explain the role of software in making the free flow of data possible, accessible, and useful.

¹ International Organization for Standardization. 2019. Asset Management – Guidance on the Alignment of Financial and Non-Financial Functions in Asset Management. (ISO/TS 55010.)

A ROADMAP TO ALIGNMENT: ISO 55010

In recognition of the value of effective asset management, the ISO has published a series of highly detailed, best-practice guidelines for building and maintaining asset management systems. ISO's goal is to help organizations maximize asset performance and value in support of an organization's overall goals.

A key component of the ISO guidelines is alignment between financial and operational/ non-financial systems through efficient data sharing. (For clarity, we simplify operation/ non-financial to "operational.")

So, what is the benefit of alignment between the financial and operational sides of asset management for the public sector? Bridging this gap "can encourage the breakdown of silos and improve cooperation, making better use of every department's expertise in achieving the organizational objectives as effectively and efficiently as possible," according to the ISO Technical Committee for Asset Management Systems.² Specifically, according to the ISO committee, alignment includes:

- Common terminology related to assets
- An efficient information workflow that breaks down department silos
- Collaborative financial and operational planning for a unified view of performance and financial management

Achieving these tasks requires integration of software systems throughout an organization. These systems must be able to access a single source of truth via shared data, and that data must be structured uniformly between software applications to achieve seamless integration between departments.

Successful alignment involves technological integration and strategic staff collaboration and covers all areas of management, from fleet and facility maintenance to bridge construction.

² ISO/TS 55010 Launched. (2019). Retrieved from https://committee.iso.org/sites/tc251/home/projects/ published/isots-55010.html

The ISO

The International Organization for Standardization (ISO) is an international organization that creates standards for "products, services, and systems, to ensure quality, safety, and efficiency."



GETTING A BIGGER PICTURE: ASSET VALUE

A TALE OF ONE TRUCK: BETTER INSIGHT THROUGH ALIGNMENT

A comprehensive analysis of the organizational value of a specific vehicle requires asking the following:

Asset Acquisition Costs: Are costs to acquire and place a vehicle in service in line with budgets?

Finance Department The Financial Lens

Asset Maintenance Costs: Are there cost outliers for this vehicle compared to peer assets?

Asset Usage Costs: Is the vehicle used enough to support recovering costs?

Asset Book Value: *Is the value of the vehicle adequately tracked over time?*

IN ISOLATION, this lens fails to consider operational issues related to vehicle condition, maintenance history, and availability.

Asset Maintenance: Are guidelines being followed to maximize the vehicle's lifespan?

The Operational Lens

Asset Condition: *Is the vehicle in good working order?*

Asset Downtime & Failure Tracking: Is the vehicle ready when needed? If not, why is it failing?

Asset Availability: *Is the vehicle needed to support services? Are more vehicles needed?*

IN ISOLATION, this lens fails to consider financial costs related to maintenance, depreciation, and procurement.



Combining Lenses

Combining operational and financial views provides a more accurate picture of the actual value of the vehicle, allowing a balanced look at how the vehicle is being used and the impact of the vehicle's current and trending value on the organization overall.



WHAT'S THE TRUE VALUE OF AN ASSET?

Sound asset management requires a complete view of an asset from operational and financial perspectives. Making decisions based on only one perspective can produce flawed results.

For example, a public works manager can practice sound asset management techniques from a maintenance perspective and still fail overall as an asset manager. A public works manager could successfully execute all preventive fleet maintenance work for a given asset, but if that asset is underused, the maintenance costs may be too high to justify continued service.

On the other hand, a city's finance manager could ensure that all new asset acquisitions are staying below budget, but if asset rental costs are ballooning operational budgets, has the organization really practiced sound asset management?

The best way to gauge an asset's value is to employ both operational and financial lenses, made possible by integrated software and uniform staff processes. As illustrated in the example of the truck on the preceding page, the only way to evaluate that asset's true value is to consider all the relevant data. Now consider the benefit of being able to have a big-picture view of the value of a fleet of trucks or other vehicles. The value of fully informed appraisal becomes abundantly clear.

Alignment Benefit: Looks at all data to provide an accurate measurement of an asset's true value and helps to identify potential blind spots.



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PROJECT MANAGEMENT

BRIDGE BUILDING: ALIGNING OPERATIONS & FINANCE FOR PROJECT MANAGEMENT



Combining Lenses

Management of construction projects creates data used across departments. Successful data integration gives managers and finance officers an up-to-date project view. Effective oversight of a major project such as a bridge requires big-picture analysis of both public works and finance information.

BETTER PROJECT MANAGEMENT

Large infrastructure projects, such as the example of a bridge project above, are extraordinarily complex. Determining whether a project is truly on budget requires evaluation of data from multiple records: work orders, inventory requisitions, and asset maintenance for starters. However, a project's cost only starts with its creation. It is vital to look at the entire lifecycle of a bridge, which includes operational and financial considerations.

As the ISO committee notes in its report overview, alignment "maximizes the value realized from assets by the organization and its stakeholders with a balance of risks, performance, and costs." This benefit is necessary for optimizing the life cycle of assets, and in planning and executing new construction or replacement projects. Achieving alignment requires the collaboration of staff to make sure they are "speaking the same language" when discussing systems and processes and also requires data systems that connect departments, eliminating data silos.

For example, an infrastructure project to replace a bridge would need to look at maintenance costs across its projected lifespan as well as project replacement costs. Ascertaining the timing of replacement to maximize the value of an existing bridge and its replacement requires careful data analysis of operational costs and budget projections.

Collaboration is made possible, in part, via data systems that seamlessly share information throughout the local government.

Alignment Benefit: Provides an improved view of all costs, including operational and financial, through an asset's life cycle.



WORK ORDERS

ALIGNMENT IN THE FIELD: HOW WORK ORDERS CAN CONNECT DEPARTMENTS AND PROCESSES

Determining the true cost of a work order is easiest and most accurate in an ERP system that features seamless data integration between operational and finance systems. A work order in an integrated system makes the following possible:



GETTING THE MOST FROM WORK ORDERS

Organizations seeking to improve their asset value analysis can gain insight and improve efficiency by integrating work orders into overall data systems, both operational and financial. As the illustration above indicates, a work order can generate valuable information that touches both public works and finance, providing up-to-date numbers and insight into the true costs of an asset by looking at direct and indirect costs related to maintenance.

If the data is integrated throughout the organization, the finance director no longer needs to make a call to the public works director to find out information about worker costs related to particular projects. Real-time information provides accurate, easily accessed numbers. An added benefit of an integrated system extends beyond information analysis. Work orders can also tie supply costs directly to known vendors in an ERP system and automatically record inventory data.

Integrated work order systems add no extra duties for employees in the field. Information such as supply use and asset condition pulls automatically from the work orders via on-site mobile devices, updating systems throughout the organizations. The result is automated data sharing that improves oversight and increases efficiency throughout an organization, with no extra work for employees on the job site.

Alignment Benefit: Allows the finance side of an organization access to the latest information about direct and indirect costs tied to specific projects.

STEPS TOWARD ALIGNMENT

AN INTEGRATED SYSTEM: HOW OPERATIONS AND FINANCE SYSTEMS CONNECT

The components of an integrated asset management/ERP system that provides a comprehensive understanding of assets, fostering better-informed decisions:



BUILDING A FOUNDATION FOR ALIGNMENT

As illustrated above, there are many components in an aligned asset management/ERP system. Data and information generated by each of these components must be captured and then flow seamlessly throughout an organization. To achieve data alignment throughout an organization requires an integrated software system and collaboration of staff to ensure uniform procedures.

To align data, organizations need:

- Common asset hierarchies and definitions for databases
- Unified databases to eliminate redundant data entry
- Consistent terminology and data standards
 across systems

The combination of asset management software that integrates with a robust ERP product would be an ideal way to achieve these tasks. Such a system would ensure that information flows horizontally between departments and vertically within departments, allowing decision-makers to make informed decisions within and across departments with current information.

In the end, the principle of alignment is simple. A successful system will allow the flow of key information to the people who need it by breaking down barriers. Deploying a software solution that enables data integration is the foundation of an aligned system that will allow an organization to get the most value from its assets.

This is achieved by employing software and information systems that can capture and share relevant data, bridging the gap between the operational and the financial.





FIVE STEPS TOWARD ALIGNING OPERATIONAL AND FINANCIAL SYSTEMS





Maintain uniform data standards across all systems.



Identify a single source for specific data elements that need to be shared.



Make sure stakeholders agree on processes and use common definitions.

Ensure that databases use common asset hierarchies across the organization.

A successful EAM system allows the flow of key information to the people who need it by breaking down barriers. Deploying a software solution that enables data integration is the foundation of an aligned system that helps an organization get the most value from its assets.



SOFTWARE THAT THINKS LIKE YOU DO.

Tyler Technologies (NYSE: TYL) provides integrated software and technology services to the public sector. Tyler's end-to-end solutions empower local, state, and federal government entities to operate more efficiently and connect more transparently with their constituents and with each other.

By connecting data and processes across disparate systems, Tyler's solutions are transforming how clients gain actionable insights that solve problems in their communities. Tyler has more than 26,000 successful installations across more than 10,000 sites, with clients in all 50 states, Canada, the Caribbean, Australia, and other international locations.

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