Why Accurate Data is Crucial to **Effective Asset Management**

THE WAY

Are you making the most out of your asset management data?

All too often, asset intensive organizations spend a great deal of time and effort collecting data that is never used, or, even worse, they don't collect the data they need to make effective decisions.

In this white paper, you'll learn today's best practices for effective data collection, including applying static unique identifiers, understanding core attributes, setting update frequencies and streamlining data collection with mobile technology and apps.

Focus data collection efforts

Do you know the differences between the data required for projects and data required for making strategic decisions? Project level decisions typically require granular data, while strategic decisions are made with more generalized data.

Example

Organization 1 keeps track of detailed measurements of dimensions and materials testing reports, but they fail to accurately track assets' year of construction or procurement. While they collect an impressive amount of data, the data they lack will make it difficult to forecast rehabilitation or replacement activities at a high level.

Organization 2 collects detailed age and maintenance rehabilitation data, so they find it easy to forecast their future rehabilitation and replacement needs, but the data they lack makes it more difficult to select projects. **Both organizations can learn from each other.** While Organization 1 collects detailed data on their assets, they overlook assets' construction date. This can lead to ineffective maintenance and replacement schedules. Organization 2 tracks all maintenance and replacement data, but overlooks more in-depth asset data. This can lead to poor project selection in the future.

Today, all asset intensive organizations need to focus data collection efforts that support all levels of strategic decision-making. Take a look at the data you're currently collecting: does it support your organization in the long-term?

Assign static identifiers to assets

While it may seem self-explanatory, static unique asset identifiers are fundamental building blocks of a true asset register. A static, unique identifier is a naming convention that travels with an asset for its entire life-cycle. These 'static' identifiers help recognize potentially unforeseen uses, like asset register growth, links to other systems, file management, inclusion of other departments' assets and more.

Without static, unique identifiers for assets, organizations facing changes within their asset management system can lose the original identifying feature of their asset identifiers, resulting in time wasted on manual updating of identifiers.

Example

Organization 1 is a public works organization. Over the organization's history, each separate department developed an asset register using the next available row number as the asset identifier. This system worked well, until the organization faced new growth. As each department within Organization 1 grew, ancillary databases, spreadsheets and files were made to store condition assessments, maintenance histories and photographs. As the software changed over time, database upgrades and new file formats changed the row numbers by re-indexing. All of Organization 1's asset identifiers changed! Staff had to manually update all related references to the original asset identifiers in related databases, spreadsheets and files. **Organization 2 is also a public works organization.** They recently implemented a new enterprise asset management software system. This new system is a major change because multiple departments' assets will be stored in a single database. However, it became clear during the implementation process that some departments used similar naming conventions for their assets. Departments that used the same numbering system were then required to update asset identifiers from numbers to unique identifiers. Just like with Organization 1, staff from Organization 2 had to manually update all references to the original asset identifiers across all spreadsheets, files and other databases to match the new system.

A carefully considered asset identification scheme ensures that your asset register can accommodate organizational expansion and linkage to other systems or departments. A recommendation for static unique asset identifiers is to use an asset category or class following by a sequential number. For example, your street department can prefix all road assets with RDS, while your storm water department can use STW.



Understand core asset attributes

When developing an asset register, understanding all asset attributes should be a main priority. These attributes include:

- Asset Materials/Type
- Location

Criticality

• Age

Useful LifeEconomic Value

Condition

There are many sources of existing data, so the challenge for most organizations is locating these sources and reconciling them for logical consistency.

The above attributes support several strategic summaries and inferences critical to modern asset management.

Age, useful life and economic value are used to estimate future budgetary needs, since older assets require replacement or rehabilitation. Budget forecasts identify periods with large asset replacement or maintenance requirements, as assets constructed around the same time reach end-of-life concurrently.

Asset condition and criticality support strategic prioritization for project selection, and asset type and location data are used to begin forming tactical level project plans.

As your organization matures, additional asset attributes can be added to refine decision-making even more. These additional attributes include asset utilization, data accuracy, capacity, performance and more. These attributes support more granular level decision-making and prioritization.

Streamline data collection with mobile technology

Collecting data on paper typically doubles the workload for staff, for it eventually requires transcription into digital systems. Manual data collection and entry also results in transcription errors, non-standardized values and an overall lack of control over the data. This presents great risks and costs to organizations. According to Data Management Association (DMA), "approximately 15% of operating expenses for almost all organizations are wasted due to data quality issues."

Just a few short years ago, mobile technology for data collection was bulky and hard to use. Today, almost everyone owns a smartphone and can use basic apps with ease. Combined with extensive wireless networks, mobile devices speed up data collection, as well as the speed at which data is made available to key decision-makers within your organization. For example, <u>AssetWorks Enterprise Asset Management (EAM)</u> software allows for real-time integration with mobile modules, so issues reported in your community reach your maintenance staff quicker. This allows for correcting issues within your community sooner, or preventing them in the first place. This speed is a significant improvement over more traditional, paper-based data collection efforts.

Choose realistic update frequencies

Asset management data collection presents many challenges today. Not only is data collection expensive, but data also loses effectiveness as it ages.

It is a challenge today to find the right mix of timely information within typical budget constraints. Understanding the true cost of collecting condition data and weighing it against the benefit of more accurate forecasting is one way to begin exploring the right update cycle for your organization.

When organizations identify accurate criticality ratings, they can use this data as a means to focus efforts where they're needed most.

Ensure data integration with enterprise asset management systems

All too often, organizations today pay for an impressive data collection effort, then spend months processing the data to import it into their enterprise asset management system. Even worse, after such an expense, some agencies find that the data collection they paid for isn't even compatible with their enterprise system.

While it may seem tedious, established and documented data standards/policies can pay large dividends when organizing internal data collection efforts. Asset intensive organizations with set data standards can easily add these to contract specifications when investing in enterprise asset management software. This eliminates the need to spend extra efforts processing data into a useable format.

Promote data transparency to stakeholders

Today, there is a growing trend for organizations to be more transparent and responsive to citizen input. 311-style mobile applications give citizens the power to submit requests for maintenance within the community. Some common requests include pothole repair and repainting faded street lines. These mobile apps improve the dynamic between your organization and your community by focusing maintenance attention to actual problem areas and building trust between your staff and your constituents.



The <u>AssetWorks Citizen Engagement mobile app</u> integrates directly into AssetWorks EAM, so requests made by citizens are recorded in real-time. This allows your maintenance crews to respond to the requests in a timely manner.

For over 35 years, AssetWorks has provided software solutions that manage complex assets and infrastructure. Its mission is simple: to provide innovative and practical solutions to help organizations and the people they serve.

AssetWorks Enterprise Asset Management (EAM) software solution handles the day-to-day tasks of modern asset intensive organizations, like work order management and real-time labor tracking for preventive maintenance. EAM can also manage inspection recording and future planning, like complete life-cycle cost analyses and capital budgeting.

The EAM software solution offers robust functionality to help agencies perform asset management work in the most efficient and cost-effective manner possible.

To learn more about AssetWorks EAM, click here.