



# Getting More from SCADA

*Using SCADA software to Enhance Asset Management in an Organization*

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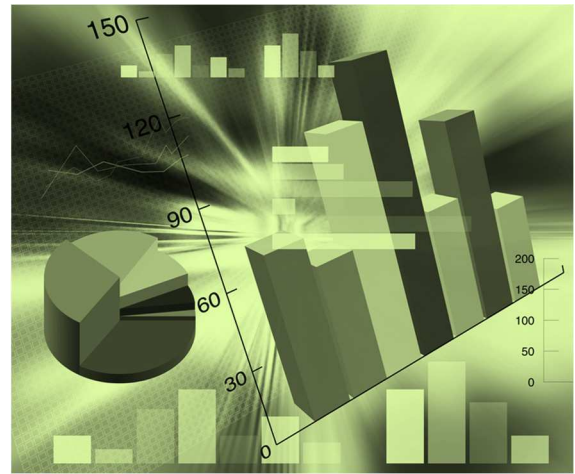
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# What is Asset Management?

In general, asset management is a systematic process of monitoring and maintaining assets for the purpose of receiving the greatest possible performance in terms of longevity and efficiency.

Assets can be physical (buildings and equipment) or non-physical (intellectual property). In short, any “thing” of value to an organization is an asset, and the processes employed to maximize that value can be referred to as asset management.



*Asset Management is a critical part of success in today's information driven enterprise*

## Why is Asset Management Important?

There are a number of reasons an organization may be inclined to employ asset management tools of some kind. Obviously, getting more efficiency and a longer lifetime from an asset will ultimately improve an organization’s bottom line. Less money spent on maintaining or replacing assets means a greater ROI. Additionally, maximizing the efficiency of an asset means it is more productive and, therefore, profitable.

Increased profitability is reason enough, but there are additional benefits. Properly managed assets are also safer, reducing the potential for accidents and/or unplanned downtime. It can also provide key information about the overall viability of a particular asset, which should lead to much more informed and confident decisions about whether to repair, replace or upgrade a particular asset when the time comes.

## Who Uses It?

Asset management has become a popular topic in recent years, as all sorts of organizations are compiling more and more data about their operations. As a result, numerous sub-categories have emerged. Private organizations, public organizations, non-profit and commercial organizations large and small are all finding value in incorporating asset management processes of one type or another.

Asset management occurs at every level of an organization and for every type of asset. The following table outlines some of the different categories of asset management that occur in all types of organizations.

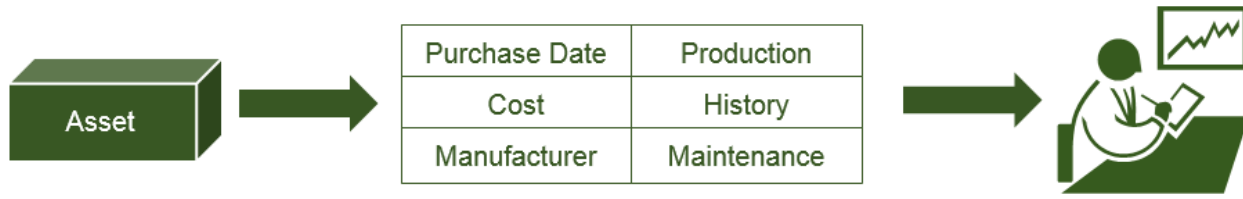
Asset Management Type	Description	Agent(s)
<b>Financial Asset Management</b>	Management of investment schemes and individual client accounts	<i>Financial Officers, Account Executives</i>
<b>Fixed Assets Management</b>	Subset of financial asset management as it relates to fixed assets for accounting	<i>Accountants</i>
<b>Physical Asset Management</b>	Management of full life cycles of physical assets (structures, equipment, etc.)	<i>Managers, Facility Operators</i>
<b>Infrastructure Asset Management</b>	Physical asset management related to infrastructure assets (utilities, communication networks, transport systems, etc.)	<i>Executive Officers, Engineers</i>
<b>IT Asset Management</b>	Management of Information Technology Resources	<i>Technical Officers, IT Directors</i>
<b>Digital Asset Management</b>	Management of electronic media and other digital assets.	<i>Content Managers, General Managers</i>

*Asset Management occurs at every level of an organization*

## How is it Done?

In a very general way, asset management processes involve a number of activities that revolve around tracking and recording any and all information related to the life cycle of any asset (design, creation, operation, maintenance, disposal, etc.). This typically involves the use of some type of asset registry where this information is catalogued.

The information is linked to the appropriate assets, and is used to make decisions regarding the acquisition, operation, maintenance, and decommissioning of the assets.



*Asset Management involves tracking and recording all information related to a specific asset*

There are numerous tools employed for the various asset management processes. The majority are software tools, and each type of tool provides functions specific to its purpose. Frequently, asset management processes integrate a combination of these tools:

- **EAM (Enterprise Asset Management)**  
EAM tools are designed for managing the complete life cycle of all of an organization’s physical assets. It is typically used in conjunction with an asset registry and a CMMS.
- **ERP (Enterprise Resource Planning)**  
ERP software is intended to integrate real-time data from all of a company’s assets – including intellectual and financial assets – into a homogeneous system to aid strategic planning.
- **CMMS (Computerized Maintenance Management System)**  
CMMS Software is used to maintain a database of information related to an organization’s maintenance activity. It is intended to help maintenance workers perform more efficiently, and is frequently used in conjunction with other asset management tools.

By leveraging the power of one or more of these tools, organizations are able to increase efficiency, improve safety, reduce unscheduled downtime, and ultimately increase overall productivity.

In truth, asset management has been a part of management processes for many years. The modern model of whole life planning was born from the traditional historical reactive model that has been employed for decades in industries like manufacturing. With the emergence of new technologies, and the abundance of data that can now be quickly and easily retrieved from all corners of an organization, there has been a growing interest in maximizing asset performance.

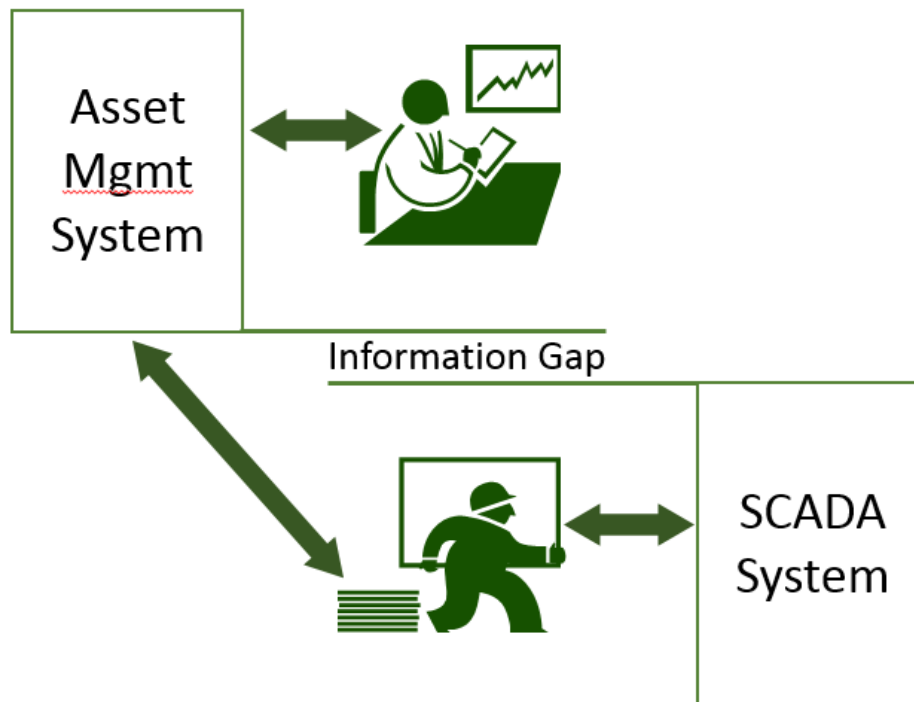
There is no question about the value of asset management. It is something that is done by any organization that has any type of assets. Decisions must be made about purchasing, creating, repairing or replacing assets even if there is not a defined management strategy in place. It is simply a question of how informed these decisions will be.

## How Does a SCADA System Differ from an Asset Management System?

A traditional SCADA system is used to monitor and/or control industrial processes, and is completely separate from asset management processes. There may be some crossover, in that the processes being monitored are composed of assets that are managed by the asset management system, but very rarely will these systems be integrated.

SCADA is an acronym for Supervisory Control and Data Acquisition, and that is precisely what it does. A SCADA system allows operating personnel to visualize the real-time data involved in whatever process is being monitored, and to use that data to ensure that everything is functioning correctly, to identify and react to abnormal conditions, and to maximize the productivity of that particular process.

There is a distinct gap between the operators on the production level of the enterprise and the decision makers on the managerial level.



*An information gap exists between production and management*

This arrangement was not intentional. SCADA processes and asset management processes evolved separately on different timelines. Both processes were born from a time when data was not so readily available. There was one set of data related to assets and another set related to processes. These were unrelated sets of data that did not need to be integrated.

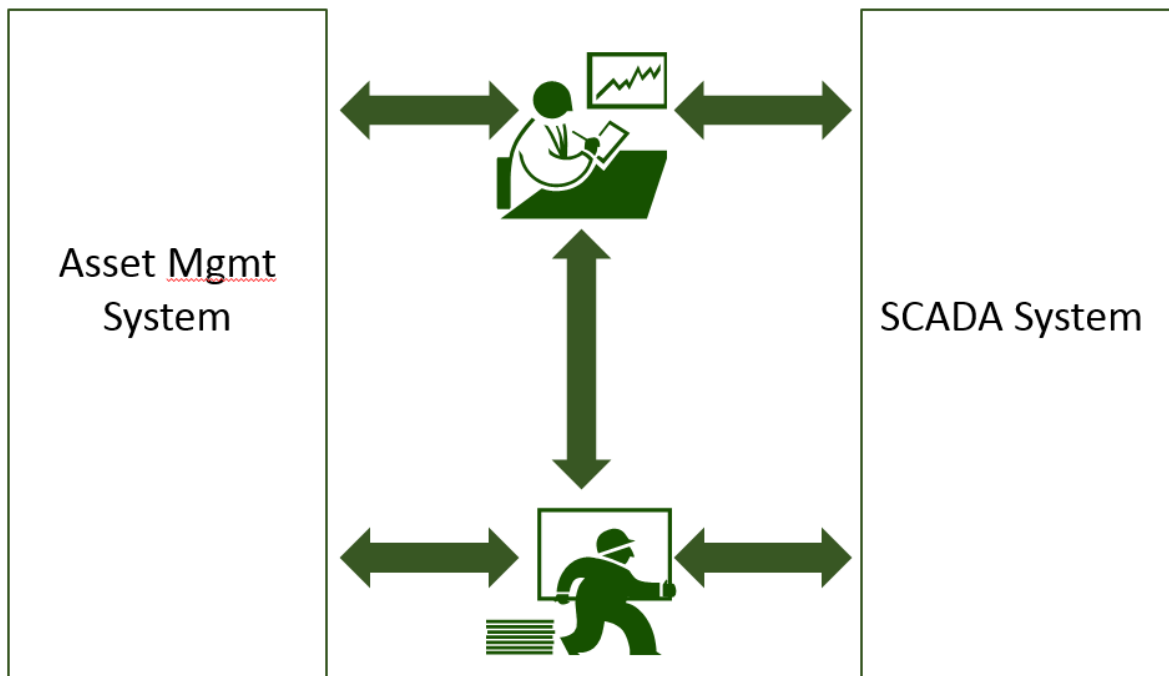
Since then, both systems have evolved higher levels of sophistication, as has the technology used in them. With greater types and quantities of data available for both systems, there is some overlap. Some of the data used to manage assets is the same data used to control processes, and vice-versa.

The workplace is changing, and there is growing interest in more holistic systems of data management that incorporate and integrate all available information.

## How Can SCADA Help?

A modern SCADA system can offer additional functionality to enhance an Asset Management system. Implementing a new SCADA system that allows the linking of assets with all available information can create a more intelligent and agile situation. In addition to information about production – values of properties like speed, temperature, volume, etc. – the targeted asset can also be linked with real time information drawn from inspections, maintenance records, service requests, historical logs, etc. HMI screens can be designed to display any or all of this information in real time.

While operators are monitoring the information they need to ensure production runs smoothly, managers can use the same system to view the information they need to make decisions about how to improve production and maximize asset value. As information from one system changes or updates, that same information can be simultaneously updated in the other system. The information gap is eliminated.



*A more intelligent SCADA system makes the entire organization more intelligent*

A more intelligent SCADA system means more informed workers making better decisions. There is no longer a separation between operation and optimization. Operational data pulled from assets can be linked to asset management data, and the results of optimization efforts can be measured in real time.

Research indicates that today’s businesses are swimming in useful data that is not used in a way that allows it to be properly distilled and analyzed to improve strategic planning. More data does not necessarily equal more intelligence. Intelligence comes from turning that data into actionable information.

## What Does it All Mean?

Using a SCADA system to supplement asset management efforts can mean a great deal for any organization looking to improve efficiency and accelerate decision-making. Imagine if your asset management data was constantly updated in real time as the asset is being used. Imagine seeing not only historical information, but information gathered right now. Imagine facility operators and managers having access to the same information at the same time. As repairs or upgrades are made, asset performance can be measured immediately, making it possible to fine tune every asset to its absolute maximum value.

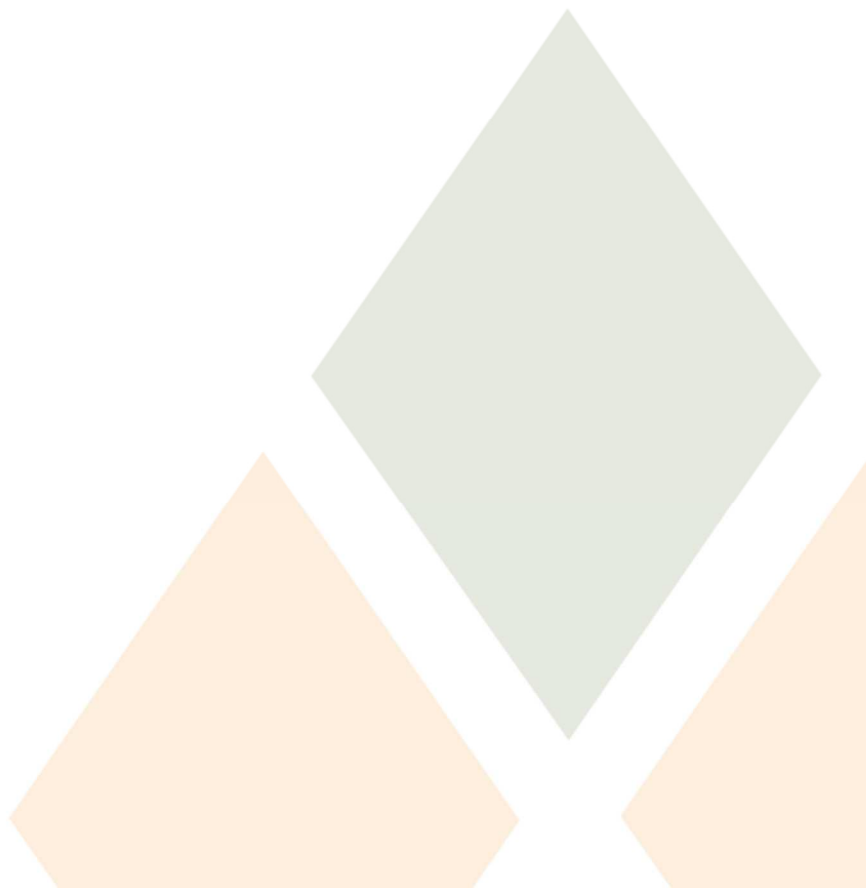
Asset management should encompass all assets – tangible and intangible. Data is an asset and should be optimized accordingly. Your SCADA system is also an asset, an extremely important and valuable asset. For all of the effort put into reaching for every possible increase in performance and efficiency, it would be a drastic oversight to neglect the improvements that could be made to your supervisory control and data acquisition system.

If every piece of information could be accessed even a few seconds faster, if every decision could be made just a bit more quickly and with a bit more confidence, imagine the effect that could have on your bottom line. Every month. Every quarter. Every year.

It is a simple matter of fact that any organization interested in asset management and planning should be thinking about how their SCADA system can be integrated into that process. And if the SCADA system does not fit into the overall asset management strategy, it is time for a new SCADA system.

A smarter, more efficient organization with more confident, informed decision makers is not only possible – it is becoming more and more necessary in order to maintain a competitive edge in today's economy.

The time has come to expect more from SCADA.



*B-Scada specializes in the development of high quality HMI and SCADA software solutions for industrial process control, enterprise data management, and anywhere there is a need for compelling, high performance visualization of real-time operational and business data.*

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