



Asset Management

The general objective of asset management is to track and manage assets throughout their entire *life cycle*.

Asset management can be a complex topic to discuss. This often involves many business and governance procedures being utilized by disparate departments for different objectives. Typically a variety of related information is captured, processed and stored in order to effect operations. Often this information is somewhat redundant, or should be and is not. However, this information capture activity is necessary in order for each individual department to operate and meet its independent objective(s). The *life cycle* of an asset begins with procurement and ends with its eventual disposal.

From a central point of view, as information flows upstream from various departments/sources, and/or as information flows downstream, redundant operations are performed and inconsistencies begin to emerge. Thus highlighting the need for a central asset management program whereby the needs of the varying departments are addressed, at the same time eliminating redundant information and activity as appropriate, all the while insuring information accuracy and integrity.

Fundamentals of Asset Tracking

There are six fundamental characteristics of a successful asset management program.

I. Standards & Conventions

In order for an organization to implement an effective Asset Management Program it must adopt a common set of Standards and Conventions. Standards and Conventions are written guidelines that are shared and followed between departments. They typically govern; which assets are tracked as well as how they are tracked and identified. Standards and Conventions are employed at central points of control (*control points*) and augment and apply governance controls over procedures used at control points.

II. Accurate, Efficient Physical Accounting of Assets

This topic refers to both the manipulation of asset information (regardless of what database is being affected) and physical verification activities. Physical inventory is the mainstay for obtaining a current base of asset information as well as to verify existing asset information. Given the importance of this activity, it is critical that the methods employed for conducting an inventory are reliable. For this reason, automation is necessary. The use of automatic data capture (ADC) technologies such as; bar coding or radio frequency identification (RFID) is well suited for the purpose of enhancing the timeliness and accuracy of the data collection aspects of conducting physical inventory and cycle counting. The use of ADC technology speeds the process while insuring the accuracy and integrity of the information being collected.

Processing asset information occurs on a daily basis, and usually affects multiple, critical company databases. Integration between varying databases is critical as well as insuring that the information contained within adheres to a common set of Standards and Conventions. Paramount to the entire program is the need to insure that asset-identifying information, both physical and logical, remains consistent. To facilitate this objective, bar coded or RFID-enabled asset labels are used that typically depict the asset's identifying characteristics. These labels are affixed



physically to each asset and the identifying information found on the asset bar code must be shared electronically, between all company asset databases in order to insure alignment. This important concept also produces another critical requirement of the asset management program - *physical inventory results can be reliably compared to asset information for reconciliation purposes.*

III. Reconciliation – Asset Information/General Ledger

While physical inventory can be daunting, it is more labor intensive than it is anything else. Reconciliation, which must follow any physical inventory, refers to the act of comparing and aligning the information collected, as a result of conducting a physical inventory, to existing asset information. This is done in order to; verify information integrity, to measure the effectiveness of routine operational procedures, and to certify a component of the company's net worth. Reconciliation is not only labor intensive it also requires advanced knowledge of a variety of disciplines and demands lots of mental concentration. Consequently, reconciliation has the most room for error and is often the most procrastinated business activity.

Reconciliation requires a two-fold solution. It requires a combination of a disciplined physical process (act of bar coding assets as they are procured and sharing the bar coded data with corporate databases) and intelligent automation. In other words, the information depicted on each asset label must match the information found in the database (in order to make the comparison). The reconciliation process must be simplified for those participating in it. This can be accomplished through the use of company standards and software that electronically compares information while applying artificial intelligence to those comparisons. The results would leave only those problems the automated reconciliation could not resolve for human intellect to analyze and rectify.

IV. Automated General Ledger Adjustments

Of primary importance to the formation of an asset management program are the objectives that are trying to be achieved by the organization. The more common objective is audit or compliance related and necessitates the ability of reconciling significant (or high-value assets) assets (typically those which are listed as a portion of the organization's net worth as represented on a financial balance sheet) that reside on a financial general ledger and may depreciate in value as they are used and age. As such, they are considered critical to the value of the organization as well as its statutory ability to operate. Furthermore, in order to certify net worth and to satisfy the Internal Revenue Service (as depreciation represent a tax deduction) the organization *must be capable of reliably proving that capital assets listed on a general ledger exist.*

This is the primary reason for performing reconciliation. The most common problem the organization will experience is the difficulty aligning logical asset information with information collected as a result of conducting a physical inventory. The cause is most often as a direct result of the lack of Standard and Conventions. Information quality and disparate recording conventions contribute to the outcome which all too often results in the perception that physical assets have gone missing.

To solve these problem two things must occur. First, company standards must be established and agreed to. Second, the physical identifying asset information to collect must be based upon common standards and should appear on the asset's physical label. By now it should be clear that there are certain elements of these fundamental tasks that are more important than other elements and will dictate the degree of success of any asset management program. These more critical elements are referred to as *control points*. For example, as an asset is procured and arrives on the company shipping dock two important activities have occurred. First the organization transformed one of its assets, cash, into another form, a physical capital asset.



Second, the asset has arrived and will be integrated into the organization to perform a specific function. Where this arrival activity occurs represents a *control point*. It is at this phase of the asset life cycle that an asset will be introduced to financial ledgers and recorded on many other databases. One method with which to insure adherence to Standards and Conventions, and protect information integrity, would be to affix an asset label on the asset as it arrives on the shipping dock and before it is released into the infrastructure. The information depicted on this label should be electronically shared between other company databases, such as the general ledger. This simple act will insure that when an inventory is conducted with automated tools (bar code scanners or RFID detection and inventory software), that matching entries can be made, for each asset, with other databases.

V. Information Integration

Information may be duplicated many times within the organization by various departments for their own specific purposes. While this may be necessary in order for each department to operate within its distinct environment, it frequency presents problems when that information is shared between departments or merged at a central point. Fields of asset information may be unique to a local database yet be considered a duplicated field of data from a central point of view across multiple databases (such as serial number). For example, Finance will most likely record an asset's serial number and then store with that serial number related financial data. Purchasing would also record the serial number and store with that serial number related vendor information. The financial data is specific to Finance while the vendor information is specific to Purchasing. However the serial number is not specific to either. To expand upon this concept consider all the reasons your organization would record asset information in separate databases. To name a few: Service Contracts, Financial Records, Purchasing, Shipping & Receiving, Sales, Audits, Project Management, etc. There are two critical fundamentals that must be addressed here. First, eliminate redundancy whenever possible. Second, data fields (such as the serial number used in the example) that must be duplicated across databases must remain consistent. Errors may wreak havoc in the organization's operations. Sometimes simple errors like transposing one number (like a zero for the letter O) cause the appearance of two separate assets when in fact they are one and the same. Through the use of ADC technologies and customized software (which manages importing and exporting of duplicated data fields between varying databases) coupled with awareness training, this situation can be averted. Not only can this situation be averted, but productivity can increase and corporate reporting and management can become more effective.

VI. Control Points

Once the organization has decided to establish a formal Asset Management Program, the outcome will depend heavily upon the implementation of, and adherence to, the Standards and Conventions the program is founded upon. In order to administer a successful program, which is governed by Standards and Conventions that many varied departments and people must adhere to, the organization will need to identify means to control the program and its related life cycle activities. This includes means to implement the Standards and Conventions and to create a set of checks and balances to measure the effectiveness of the effort being expended with the results being produced. The identification and designation of control points is an effective way to accomplish this. Control points are those areas within business operations where two unique situations exist: One, where centralized control can be achieved easily and two, at the points where significant business practices (as they relate to asset management) begin and/or end. By definition a control point offers a diverse entity the ability to affect control at the point being identified. The logical places to impose standards are at the start of, and end of, business practices. Control points offer the organization a point (within an asset's life cycle) to apply control, to assign responsibility for implementing and adhering to the controls, and a point to apply checks and balances for measuring effectiveness.



Examples of common control points include: Shipping and Receiving, Purchasing, Finance and Security. If we take a moment to consider Shipping and Receiving we can easily see how this could be identified as a control point within any Asset Management Program. Because Shipping and Receiving is managed by a single department but supports all departments; it is relatively easy to implement central control within this department that impacts all other departments. Most corporate assets either enter or exit a facility at the Shipping and Receiving dock(s) allowing the corporation to apply controls to the start and/or end of a significant business practice (receiving of a new asset and/or disposing of an old asset).

An example of a crucial control to be applied at the Shipping Dock would involve the capture of asset information. A common control includes the gathering of asset-identifying information (as identified by the program's Standards and Conventions) such as an asset's serial number. The next step is to record that serial number into a database. This act would automatically produce a bar-coded or RFID-enabled asset label depicting the asset's unique serial number. The Shipping and Receiving representative would then attach the asset label to the asset prior to releasing the asset from the Shipping Dock.

To further explore this important concept, we will assume the conventions include that the information collected at the Shipping Dock (i.e. asset serial number) is also passed electronically to other important company information repositories, such as the fixed asset general ledger. This effort would ensure that the information being displayed on the asset's bar-coded label (i.e. serial number) that was collected during a future physical inventory, would match the same set of information recorded on the fixed asset general ledger when the asset was acquired. Assuming that the company utilizes bar coding technology, the effort to collect the asset's serial number is fast and accurate. The comparison between what was physically counted to another source of information can be made electronic and will produce a high degree of accuracy. As a follow-on to this train of thought, this same piece of electronic information (i.e. asset's serial number) could also be passed in a repeated fashion to multiple sources (such as the fixed asset general ledger, purchasing, accounts payable, and so on) which require similar information yet would allow the corporation to avoid redundant data entry activity that presents the opportunity for reconciliation errors.