

TOTAL ASSET MANAGEMENT

BENEFIT ANALYSIS AND IMPLEMENTATION GUIDE

A Management White Paper by:

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ABSTRACT

This paper presents an argument for the adoption of a total asset management program as the only logical method to effectively manage today's large distributed corporate information infrastructure. It references a well-known study which offers compelling dollars and cents rationale for implementing asset management, but goes further to suggest that there are even greater risks to operating such a diverse infrastructure without an effective management system. It draws an analogy of operating a large distributed information infrastructure without asset management to trying to run a business without accounting. This paper goes on to suggest that since asset management is not yet fully understood and defined, it has not yet been embraced as an enabling discipline and is still largely viewed as a means of collecting a PC inventory. Finally, this paper presents some terms and concepts of asset management, followed by a step by step implementation recommendation.

THE IMPORTANT QUESTION

If for example your company has 1000 employees and each employee has a personal computer, that means you have an acquisition investment (minimally) of over \$5 M in PC computers and associated software. What's more, your recurring annual cost to continue to "own" that asset base has been estimated at \$8 M.¹ *What is your return on that investment?*

Hard to quantify, but here's an acid test. Ask yourself the following question (be honest) - What is the general feeling within the company at large towards my Information Services (IS) organization? Is it one of respect and admiration, or is it one of frustration and contempt? If you are inside the IS organization and have trouble objectively answering that question, ask yourself this - Is my organization progressing proactively toward a strategic goal or are we reacting day to day to too many fires for the size of the current staff?

If your answer leaned toward the less than desirable of the two, you're not alone. As a matter of fact, you're in the majority. It means, however, that before you even begin to attempt to quantify your position, you already know that you are not operating efficiently and are therefore not reaping the desired ROI. It means that your computing infrastructure, as defined by the myriad of hardware and software platforms currently in service, is bottlenecking your company, causing your IS organization to constantly react to an environment which contains far too many variables to effectively support. The result, frustration within IS, and within the user base due to perceived ineffective support, which ultimately leads to mutual resentment.

¹GartnerGroup, Study #R-824-107, originally published March 24, 1993.

If you are like most, you know that your information systems are of the utmost strategic importance to your organization as you continue to prepare to compete in an ever changing market. How much is it costing you today, and more importantly, *tomorrow*, to have your IS organization buried in the task of trying to maintain a potentially unnecessarily complex computing environment? Your competition may have a better handle on developing internal systems, and can gain significant competitive advantage over time due to higher efficiencies gained through better internal infrastructure. What's more, how much is it costing you today, and tomorrow, to have your user base frustrated with the computing environment and its support? Due to the perception of IS that exists within the user base at large, they may resist new IS initiatives aimed at improving and keeping current the computing environment.

Don't read this the wrong way. It's not an indictment of your IS department. If you're like most companies, your IS department has inherited this computing environment which grew happenstance over time through a high degree of decentralized purchasing practices and/or mergers and acquisitions. In many large organizations the PC and all of its associated technology was not seen as a strategic purchase, was permitted to be purchased at a local level, and the thought of enforcing standards had not occurred. Over time, this technology grew to the point where it is now the strategic platform of the organization with no effective means of managing it. To introduce standardization at this point generally requires very high level mandates and commitment to stick to those mandates, but it's pointless to proceed along those lines before you have quantified what you already have. At present, most IS organizations have control of the corporation's server and telecom infrastructure, but the desktop is still highly uncontrolled and unmanaged, and that's where most of your costs are.

“What are you doing today to identify and eliminate ... unnecessary costs?”

If any of this hits home, then your gut probably tells you the cost is significant - and you're right. Not counting the future impact to your company due to infrastructure and support bottlenecks, your current costs have been estimated at up to 45% (.8 probability) of the annual cost of ownership². To a 1000 employee company, that translates to \$3 M annual potentially quantifiable and unnecessary costs of ownership due to inefficient deployment and use. What are you doing today to identify and eliminate these unnecessary costs?

Although there are significant potential costs of ownership that can be identified and eliminated, the highest risk is the evolution of a sense of distrust of technology within your company that can slow your absorption rate of new technology and threaten your future. You really must focus on helping your IS organization create a highly standard and supportable environment so that you may leverage technology to its fullest advantage. What are you doing today to remove the barriers to your firm's assimilating new technology at a rate ahead of your competition?

Effective asset management is the answer.

ASSET MANAGEMENT - AN ESSENTIAL DISCIPLINE

Asset management is *not* a PC inventory. It is *not* a software package nor is it implemented by installing a software package. Asset management is a *business discipline*.

²GartnerGroup, Study #R-824-107, originally published March 24, 1993.

The best analogy to draw is to compare asset management to accounting. Accounting is *not* a general ledger and it is *not* a software package. Accounting is a business discipline in which all monetary transactions are recorded so that future summary level views may be created and the company's health and welfare assessed. Furthermore, with standardization of accounting practice and reporting, it allows comparisons to be made against other companies of similar size, to offer yet another measure of the company's success and continued viability. It would be unthinkable to begin a business today without subscribing to the discipline called accounting.

Asset management is to managing your strategic information infrastructure what accounting is to managing your business - a required discipline. Like accounting, asset management strives to accurately depict and represent the technology base in which you have invested. Once an accurate representation has been established, you can then begin to extract standard reports that can provide the feedback necessary to "close the loop". Without asset management you cannot effectively manage your information infrastructure for the same reason you cannot effectively manage your business without accounting - you have no way of objectively quantifying your current position, uncovering problem areas, or measuring progress toward one or more strategic goals.

THE CHALLENGE

If the cost of ineffectively managing the corporate information infrastructure is significant, and if asset management is the discipline required to begin to effectively manage that infrastructure, why then haven't all companies subscribed to the asset management discipline? There are a number of reasons.

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By far the most prevalent reason is the immaturity of asset management. It has only recently been given prime attention and its deliverables are still unclear. This creates a "cart and horse" problem. That is, companies are reluctant to commit to something whose benefit is hard to quantify, especially considering the deliverables of asset management are still in a definition phase. Unfortunately, the deliverables cannot be determined without actually going through a live implementation, since so much of asset management is discipline, which requires different implementation tactics in each company. This gives rise to another question - Will asset management be a custom solution for every company? If the answer is "yes", this implies a high cost and a degree of risk with each new company. The true answer is "yes" and "no". "Yes" in the near term as the deliverables are defined and a standard methodology derived, giving rise to "no" in the long term. To check the validity of this statement, consider again the accounting analogy. Is accounting implemented differently in each company? The answer is, without question, "yes". However, so much of accounting has been standardized and there are so many resources from which to draw, the cost to customize the accounting discipline for your company is minimal.

Another reason is again, due to asset management's immaturity. Because asset management is a concept for which there is no clearly defined set of deliverables today, there are many vendors in the marketplace claiming they have the solution. Having a tough time sorting the chaff from the wheat, some companies place their confidence in following industry leaders. So, in their estimation, they have

committed to asset management and are following the solution provided by the “big name” vendor. Some of these companies are now starting to realize there is far more to the solution than just a software package.

THE PARADIGM SHIFT

To be effective asset management must first be embraced by a company as an *enabling* discipline whose benefit is derived by the development of and adherence to a set of practices and procedures. This requires a “paradigm shift”. At present, asset management is still viewed largely as a PC inventory that will produce some reports which can be used to answer questions that are often asked. “How many 486’s do we have?” “How many copies of Word 6 are installed in our field offices?” “What’s it going to cost us to upgrade our equipment to run Windows 95?” It is not yet viewed as an essential discipline - a primary tool for monitoring and uncovering infrastructure and support inefficiencies and bottlenecks. The current paradigm causes many companies to commit to the baseline inventory, but no further.

As an example, a typical company will fund a PC inventory effort for a number of reasons. As the effort draws near, or even after the effort is complete, some afterthought occurs about how to keep the new inventory up to date. As they begin to think it through, they realize they have just uncovered the tip of a large iceberg, and the next phase of asset management, the perpetual inventory phase, is never entered due to time and manpower constraints.

As asset management matures, the current paradigm will begin to shift and companies will embrace asset management as an essential practice, committing the necessary resources to extract the real value.

ASSET MANAGEMENT TERMS

Baseline Inventory - The step required to initially load the asset management system. It is the first inventory used to gather information necessary to place an asset under Asset Management. It necessarily requires the visiting of each and every asset to be placed under Asset Management, to assign a unique barcoded tracking number, and to collect information such as manufacturer, model, serial number, and other important demographic information. Such information can only be reliably collected by physically visiting the asset, yet it only needs to be collected once.

Catch Point - A definable function, department, or existing process within a company whereby change to the asset inventory can be reliably “caught” and recorded in the primary asset tracking database.

Corporate Labeling - A labeling methodology which enables future physical to perpetual reconciliation via barcode scanning within the site. At minimum, employee name plates are barcoded with the employee number to facilitate using hand held barcode scanners to easily link employees with their assets.

Managed Asset - An asset which is currently under Asset Management control. It is identified via its unique asset number.

Move/Add/Change (MAC) - The physical addition, movement, or change in status of an asset. Typically, a MAC constitutes a change in associated demographic information about the asset, such as department, location, person it is assigned to, etc. Many customers are particularly interested in keeping accurate account of the cost center to which the asset is currently assigned.

Perpetual Inventory - A collection of procedures and tools that strive to maintain an ongoing accurate representation of the actual physical inventory by some means of record keeping. Usually the means of record keeping is an electronic database. It is important to note that perpetual inventory depends on procedures to be followed in keeping the database current and accurate.

Physical Inventory - Follow-up inventory to a baseline inventory. During physical inventory, hand held scanners are typically used to re-synchronize the physical inventory with the electronic database representation. It requires visiting each and every asset again, however far less time is required at each asset and the use of hand held scanners makes the process non-disruptive.

Rogue Asset - An unmanaged asset which appears amidst a population of “managed” assets. This happens frequently, usually as the result of a merger, departmental consolidation, the general movement of people from other sites, or the local purchasing of equipment without complying with the corporate policies concerning asset control and tagging. A process is required to identify and handle rogue assets as they appear.

Traceability - A key element necessary to effectively perform asset management. Traceability is a record keeping discipline whereby the current state of the record keeping system can be “traced” backward in time to determine how that state came into being. It is similar to the use of journalling and ledgers in accounting systems. Without traceability, you are not managing the asset - you are merely taking inventory and reporting on a snap-shot in time. Bear in mind that traceability requires a consistent and highly reliable identification system. Usually a barcoded numbering system is used.

INITIAL IMPLEMENTATION

Figure 1.0 depicts the phases of implementing an asset management program. Notice that asset management does not begin with the baseline inventory effort. The real value of asset management is in the ability to extract information in the form of standard reports on an ongoing basis. Such reports are most meaningful when, over time, they begin to show trends that, in turn, give way to obvious courses of corrective action. To enable such reporting and feedback requires an effective perpetual inventory. An effective perpetual inventory requires practices and procedures as well as the “buy-in” of all functions that serve as “catch points”. Therefore, there is a degree of work required prior to baseline inventory to develop the new “catch point” procedures and to solicit the necessary buy-in. It is only through the initial procedure development phase that the resources required to implement perpetual inventory will be identified and the decision to move ahead made. Performing initial baseline inventory prior to this point is premature, as the perpetual phase must be entered immediately after the baseline has been established to preserve the integrity of the system.

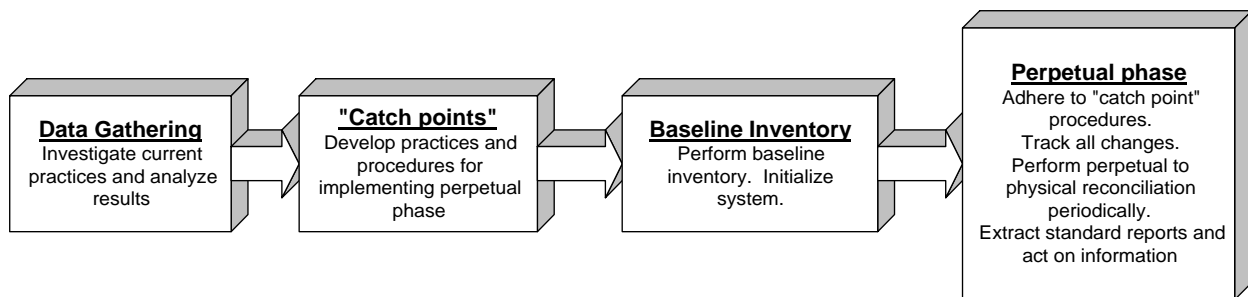


Figure 1.0 Asset Management Phases

“CATCH POINTS”

The secret behind an effective perpetual inventory is proper definition of catch points, along with appropriate procedures to be followed at each catch point identified. A catch point is a definable function, procedure, or point in the current flow of information and/or material goods where a change in status to an asset is sure to be “caught”. Once caught, the change must be recorded in the asset management system. Figure 2.0 shows a typical perpetual inventory implementation with main catch points identified.

The primary catch point is the Help Desk. There are several reasons why. First, the Help Desk can track MACs with little or no additional cost. When a client calls in for assistance, the Help Desk usually asks for their name and a building location, in case a second level resource must be dispatched to address the problem. If the asset management system is integrated tightly with the Help Desk system, and if the asset number is requested as part of the initial information given by the client, then any demographic changes to the asset can be recorded in the asset management system as the trouble call is being logged. This process should be taken one step further and all calls should be logged against an asset number. When this system is adopted, some of the valuable information provided by an asset management system, such as number of calls logged against a certain product, or manufacturer, will be available.

Depending on the asset management system implemented, the Help Desk will most likely participate in the support of the automated inventory capability, as clients call in with troubles, etc. Therefore, there are several procedures which need to be written and training required for the Help Desk.

Other catch points are more obvious. How incoming (new) hardware is handled and distributed should be studied to identify the appropriate catch point in that process. How assets are taken out of service should be studied, and how maintenance actions can potentially affect managed assets should be scrutinized. Procedures to handle all of these potential impacts to managed assets must be developed and responsibility assigned.

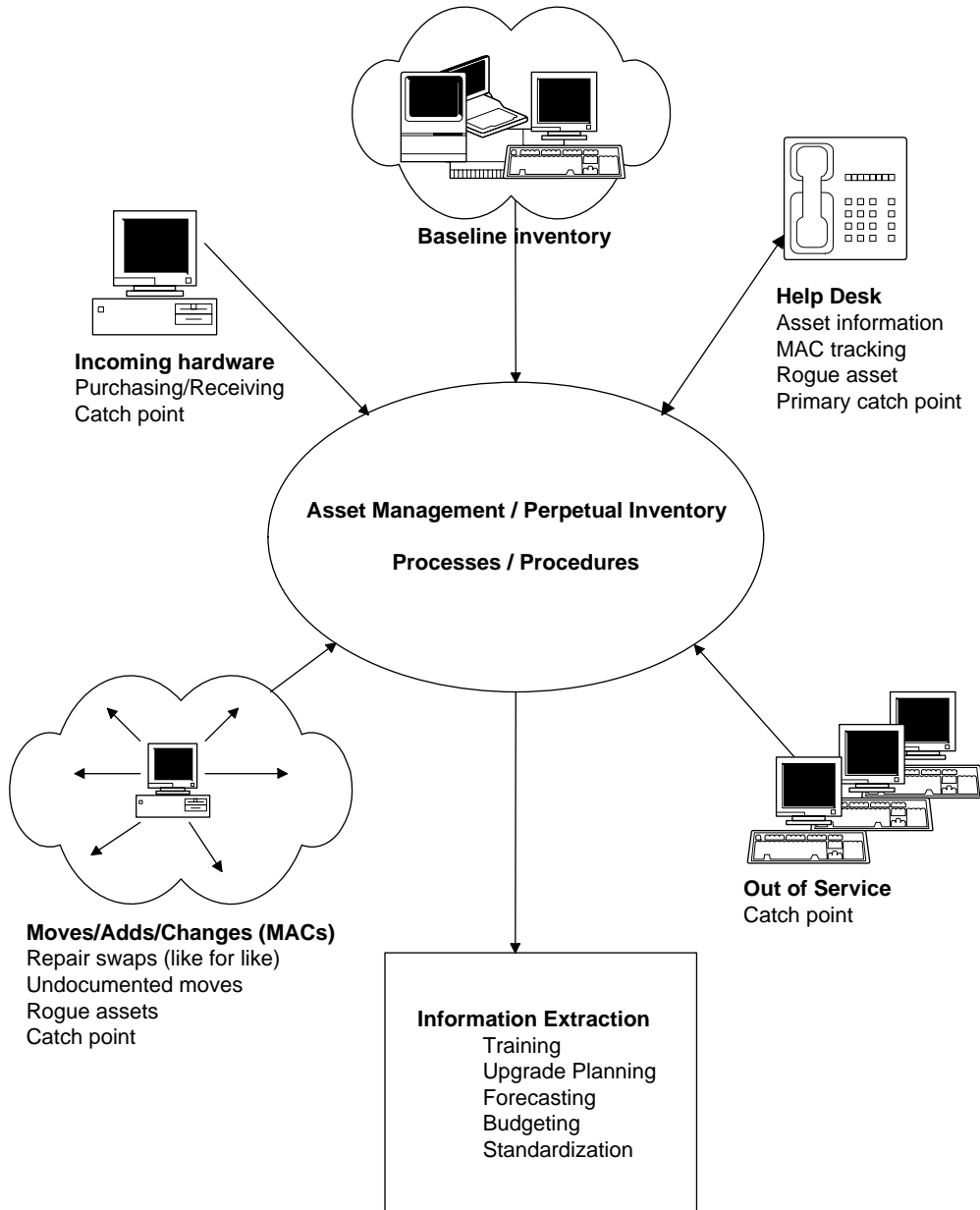


Figure 2.0 Perpetual Inventory Implementation

As with any internal process, there should be a method for verifying that all responsible parties are adhering to the agreed upon procedures. There must be resources assigned to the asset management function to ensure the proper degree of focus.

WHERE TO CENTER RESPONSIBILITY

One of the questions you may be asking yourself is where to center the responsibility for asset management. It sounds a lot like accounting, so why not center it there? Be careful, it is analogous to accounting in so much as it is a discipline that is every bit as essential as accounting, but the needs of asset management go beyond the standard skills of your accounting department. Asset management goes deeper than accounting in that asset management attempts to quantify the level of technology and its rate of absorption into your company. This demands a more technical skill set. Asset management responsibility should be centered with someone who can work effectively across departmental boundaries with the backing of the CEO/President.

OUTSOURCING

Total asset management is a natural to be outsourced. Most IS staffs do not have an asset management specialist and such a position is not forecasted in the foreseeable future. However, if some degree of focus is not placed on the asset management system, the perpetual inventory procedures begin to fall apart rapidly, and the value of the system decays. A reputable service provider should be sought to aid in the development of catch point procedures, then the monitoring of the implemented system on a regular basis.

Although asset management is a natural for outsourcing, it does not mean that you do not have to commit some degree of internal resources as well. The success of an asset management program depends strongly on the internal adherence to procedures that will invariably benefit all. Be prepared to work issues that are brought to your attention by the asset management contractor. You should view your relationship with the asset management contractor as a partnership, since a contribution from both parties is required for the ultimate success of the system.

RECOMMENDATION

Today's strategic information infrastructure consists of a large distributed multi-vendor collection of focused solutions. Asset management is the only way to effectively manage this large and critical investment. It's not just about getting your hands around what you have - it's also about setting up a definitive set of metrics that can begin to tell you how to systematically increase both your efficiency as a company, and the rate at which your company can absorb technology. That's where the real benefit to asset management lies. To get at that benefit means an ongoing commitment to keeping the measurement system going - which means effective perpetual inventory. Since the metrics for your company have yet to be defined, you must forge ahead with building the platform which will ultimately deliver those metrics before expecting to see actual benefits. You must get the foundation right before you can build the house.

Step 1

You should expect to take asset management in phases. Your first investment should be in setting up the perpetual inventory engine. Expect the initial analysis to take from 90-180 days, depending on the size of your organization and its complexity. Bring in an outside specialist but plan to participate heavily in this phase. Since it will impact the procedures, you should determine the software solution(s) you will use to facilitate the perpetual phase.

Step 2

Once the procedures have been drafted, perform a baseline inventory. Perform the inventory in as little elapsed time as possible, since you are interested in initializing the system with as accurate a starting snapshot as possible. If possible, have the entire inventory performed over one weekend, before anything has a chance to change. Immediately begin the perpetual phase upon completion of the baseline inventory.

Step 3

Monitor the perpetual inventory system and continue to make adjustments as necessary. The monitoring function may be outsourced, or it may be performed in-house. If performed in-house, make sure that “asset management” is the job description of the resource(s) assigned to monitor the system. Do not assign the responsibility as an additional duty to an already overworked employee.

Step 4

Form views of the data being maintained by the perpetual inventory system and begin to determine the most meaningful metrics for your company. Once standard metrics are formed, begin to plot trends. From these views and the trending information, begin to draft your action plans. Enact the plans then use the metrics to determine the effect, positive or negative, your actions had on the primary indicators. You now have a meaningful and objective measurement system in place which will allow you to actually begin to manage your information infrastructure.

About the Author

Brett Husselbaugh has over 20 years of experience primarily in the IT industry. He has consulted with over 25 of the leading Fortune 500 companies on strategies for optimizing the IT investment. With experience as both a CIO and a CEO, Brett brings a unique and practical perspective to IT management, promoting the concept of operating as a "business within a business" to deliver measurable value. Brett is a proven business leader, an innovative thinker, a highly effective writer, and an enthusiastic and motivational public speaker.

Brett has experience as founder and CEO of TOBEK Technical Services, an IT Asset Management firm which he started with no outside investment and grew to 80 people in three years. He then positioned the firm and sold it to Inacom, a Fortune 500 company. He then founded eTelligent Solutions, a highly regarded ITAM consulting firm. In 2007, he co-founded Veriam to deliver Value-Focused Asset Management to clients as a managed service. Brett also has experience as a CIO, Managing Partner for Managed Services, VP of Strategic Development, VP of Services R&D, Principal Consultant, Industry Analyst, and Program Manager.

Brett has published several magazine articles as well as over 50 industry white and position papers. He has spoken on numerous occasions to audiences of senior and executive management teams on optimizing IT investment, developing strategy, and effective IT management.

Brett holds a Masters of Science in Electrical Engineering from the University of Texas at Arlington and a Bachelors of Science in Electrical Engineering from the University of Maryland at College Park. He is currently a member of American Mensa.

Other Papers by the Author in This Series

- 2001, "Total Asset Management. Value Model and Comparative Value Propositions"
- 2000, "Total Asset Management. Implementation Best Practices"
- 1998, "Total Asset Management. Phase III Metrics – Definition and Usage"
- 1997, "Total Asset Management. Phase II (Perpetual Inventory) Implementation Guide"

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