

# 4.0 IT Asset Management: Bridging the Gap Between Vision and Practice

Most enterprises that systematically manage the life cycle of their IT assets can reduce cost per asset by as much as 30 percent during the first year, and between 5 percent and 10 percent annually during the next five years. However, the following factors significantly affect the amount of savings an enterprise can expect:

- The maturity of an asset management program
- The number of assets managed
- The level of complexity in the IT environment

As enterprises implement best practices and improve processes, the maturity level of their IT asset management programs will likely increase. Although some companies will begin their IT asset management programs with a software tool implementation, that is not common. The majority of enterprises start out with a program to improve the processes surrounding the life cycle of their IT assets. In those cases, much of the savings during the first year of an IT asset management program result from process improvements, such as:

- Standardizing on fewer products to streamline administrative processes related to vendors and contracts
- Reconciling invoices and examining contracts to ensure that the enterprise realizes negotiated cost savings
- Understanding how procurement affects each phase of the IT asset life cycle and taking appropriate action — for example, planning for disposal at the time of purchase will help an enterprise to:
  - Obtain warranties that don't last longer than the period during which the enterprise uses the asset
  - Match software application and operating-system rollouts and upgrades to negotiated enterprise license agreements
  - Deploy appropriately configured equipment rather than face ad-hoc upgrades or unplanned write-offs

- Determine the appropriate service levels required to support the IT environment, and plan for technology updates

Savings obtained after the first year will stem mostly from continually fine-tuning the IT asset portfolio and its related business processes.

Although many enterprises have made significant progress in their IT asset management programs, some still haven't bridged the gap between a vision of IT asset management and their established IT asset management practices. In other enterprises, these gaps have stalled IT asset management implementations.

Sometimes poor vision creates the gaps. Other times, they result from faulty implementations or a lack of clear, concise direction for the program. This chapter focuses on practical ways an enterprise can create a definitive plan for building an interconnected IT asset management program.

The following Key Issues frame the analysis in this chapter:

- What building blocks do enterprises need to close the gap between IT asset management vision and implementation?
- How does one demonstrate the value of setting up and maintaining an IT asset management program?
- What practices do market leaders use to reshape their IT asset management programs to meet evolving business requirements?

### 4.1 Toward Making IT Asset Management a Reality

**Key Issue: What building blocks do enterprises need to close the gap between IT asset management vision and implementation?**

#### 4.1.1 Identifying the Gaps

IT asset management represents the entire system of integrated management processes, strategies and technologies, implemented in a phased approach so that an enterprise gains control over its IT assets throughout

their life cycle. An effective IT asset management program enables the enterprise to track the physical, financial and contractual aspects of its IT assets.

Gap analysis for IT asset management programs should start at the bottom — investigating the components of the program and integrating that data to detect:

- Relevant patterns of behavior
- Interrelated processes
- Data interdependencies

Because the IT asset management team needs to know what interdependencies exist among equipment, software and services, an IT asset management program must pool requirements from multiple groups — for example:

- The IS organization can't plan resource requirements without information from business units and human resources, nor can it operate without budget information from the finance department.
- The purchasing organization needs data that accurately reflects the assets installed throughout the enterprise — as well as information on how those assets are used.
- The group responsible for strategic sourcing needs information to deal effectively with vendors.
- The legal department needs certain information to assess and limit risks.

When the enterprise ensures that its multiple constituencies share a vision, IT asset management has a greater chance of long-term success.

Gap analysis aims to provide focus and direction for proactive (at a minimum) — rather than reactive — IT asset management programs. By clearly documenting all processes related to planning, requisition, procurement, deployment, maintenance and retirement, the enterprise can map the interdependencies, and identify gaps and opportunities to streamline processes.

The IT asset manager must identify any gap that exists, regardless of its size or scope — even if doing so would prove to be “politically incorrect.” Armed with this baseline, the IT asset manager can assess the maturity of the

enterprise's IT asset management program, and begin developing realistic and systematic plans for closing the gaps during the next 12 to 24 months. It is important to recognize, however, that although IT asset management can decrease the size of some gaps, it may never eliminate them all.

### 4.1.2 Gartner's IT Asset Management Maturity Model

#### *Tactical Guidelines:*

- *Companies that don't understand their current state are unprepared to define a target state.*
- *Insight gained through analysis of processes will help the enterprise prioritize and validate a plan for implementing IT asset management best practices.*

Gartner has developed a business process maturity model for IT asset management. Based on the Software Engineering Institute's Capability Maturity Model — which describes the stages through which software development organizations evolve as they define, implement, measure, control and improve their processes — Gartner's model provides a guide for selecting process improvement strategies to advance IT asset management efforts by:

- Determining the viability of established processes
- Identifying the issues most critical to IT asset management quality and process improvement

When looking at IT asset management programs, many enterprises may perceive themselves to be operating at any of five levels:

- *Chaotic (Level 1)* — This level is characterized by little process maturity and a lack of adequate tools to track or manage assets, resulting in a chaotic environment in which the organization does not know what it owns, where it is located and who is using it. Unused hardware assets are often kept in a storage room with no control mechanisms or accountability by designated employees.
- *Reactive (Level 2)* — At this level, the IT asset management program is focused on counting assets,

and involves annual physical inventories to identify and catalog all of the PC equipment. An autodiscovery tool is typically used to supplement this data; however, installation, move, add and change processes are not consistently followed, thereby reducing the accuracy of the data.

- *Proactive (Level 3)* — As enterprises move into Level 3, they move into proactive management, where processes are implemented to manage the assets throughout the life cycle from requisition to deployment to retirement. Inventory data is linked with financial and contractual data to create a centralized view in an IT asset management repository of how the asset is performing within the enterprise.
- *Service-oriented (Level 4)* — At this level, metrics are in place to measure the program's value, and service levels are created to meet broader business or IT goals. Reports are run frequently, and opportunities for savings are identified and communicated to business units on a monthly basis. Inventory levels are tracked, and requisition processes are automated and tightly integrated with purchasing and enterprise resource planning (ERP) systems.
- *Value creation (Level 5)* — Level 5 is characterized by a mature program, with the implementation of repository, autodiscovery and software usage tools, and seamless integration with ERP and other strategic systems. Asset management is a means of managing the infrastructure of all an enterprise's workplace assets and providing easily quantifiable monetary value back to the enterprise.

In reality, enterprises usually operate at multiple levels, depending on the asset. For example, at the same time, an enterprise could have:

- A Level 5 data center (a level that suggests industry best practices)
- Level 3 PC hardware practices
- Level 2 PC software practices

Therefore, an enterprise must examine its gap analysis results and make a realistic assessment of its current state of maturity for each class of IT assets.

Next, an enterprise needs to identify goals for the next 12 to 24 months. With these goals, the IT asset manager can create:

- A detailed plan for how to take IT asset management to the next level
- Key metrics to measure against during the implementation

On an ongoing basis — at least every three to six months — the IT asset manager needs to compare the benefits derived with the challenges met, and determine whether any goals or timelines need to be revised.

### 4.1.3 The Building Blocks of IT Asset Management

**Tactical Guideline:** Companies must focus asset management efforts on collectively implementing process, people and technology improvements to achieve optimal total cost of ownership (TCO), service levels and asset utilization.

Implementing an IT asset management program represents a complex and arduous task. To best address these challenges, an enterprise needs to base its IT asset

management policies and processes on industry best practices — but only if these best practices fit with the enterprise’s culture, meet financial requirements and support business goals.

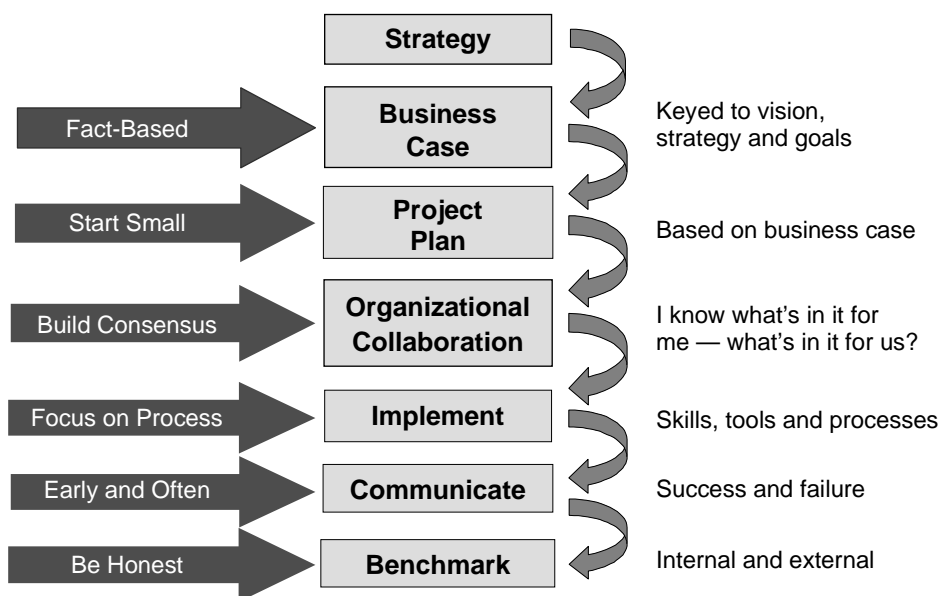
Best-practice policies and processes provide an IT asset management program with several advantages by:

- Supplying a consistent framework for action
- Establishing responsibility and accountability
- Streamlining and enhancing the effectiveness of IT asset management
- Allowing the IT asset management team to make quality, fact-based decisions
- Helping build consensus on IT asset management throughout the enterprise

A review of successful IT asset management programs reveals a common set of building blocks used to design and implement these programs (see Figure 4-1):

- A clearly defined IT asset management business strategy
- A comprehensive, credible business case

**Figure 4-1: The Building Blocks of IT Asset Management**



Source: Gartner

- A clear and concise project plan
- Organizational collaboration
- Implementation tactics that focus on skills, tools and processes
- Ongoing communication and marketing
- Internal and external benchmarking

Success is built block by block. Taking shortcuts by eliminating some of these elements will create serious problems when implementing an IT asset management program.

### 4.1.4 Building a Solid Business Case

**Strategic Planning Assumption:** *Through 2006, more than 50 percent of enterprises will fail to take advantage of IT asset management opportunities due to the lack of well-defined business cases (0.7 probability).*

An IT asset management business plan is a detailed document that:

- Describes the project
- Establishes its objectives and goals
- Details the strategies, methods and processes to follow to achieve the stated objectives and goals

Although this seems relatively simple, many IT asset management projects fail because of faulty business cases that:

- Promise more than they can deliver
- Underestimate costs or implementation times
- Spout consultant opinions that don't reflect business and cultural realities within the enterprise

Sound IT asset management business cases are fact-based, objective, fair and thorough in terms of costs, benefits, risks, dependencies and contingencies. Essential elements of sound business cases include:

- *Executive summary* — Make this short, simple and visual. This section may be the only part of the business case that some people read.

- *Purpose* — Show how IT asset management will add business value and appeal to constituents. Indicate why the enterprise needs to act now rather than wait.
- *Assumptions* — These must be documented, credible and provable. Be prepared to justify them.
- *Scenarios* — Four are needed:
  - Best case
  - Worst case
  - Most likely case
  - What happens if the enterprise does nothing
- *Financial and sensitivity analysis* — This includes identification of dependencies and contingencies.
- *Conclusion and recommendations*

Quantified justification of a business case for IT asset management usually doesn't work using traditional means. One cannot simply state that IT asset management will provide the enterprise with a certain percentage of return on its investment.

IT asset management benefits often deliver value indirectly through avoiding risks, seizing opportunities or using resources more effectively. To quantify these benefits, the enterprise must become comfortable with:

- Defining and articulating "soft" cost savings using risk-reward rationales, and probabilities of success
- Justifying action because it's more efficient

To support quantification efforts, metrics — as a measurement of results on a continuous basis — will prove critical. They provide the record that an enterprise can use to compare initiatives.

### 4.1.5 Quick Successes Help Prove the Business Value

**Tactical Guideline:** *Take advantage of tactical, high-visibility projects to implement strategic IT asset management initiatives that will deliver immediate savings and create an infrastructure for providing long-term business benefits.*

Most enterprises have many opportunities to demonstrate value from IT asset management programs. Frequently, however, these programs try to do everything at once. IT asset managers and their executive sponsors must understand that a robust IT asset management implementation takes two or more years to develop and mature. The implementation should be divided into a series of synchronized, short-term initiatives that focus on specific benefits or risks, such as:

- *Tangible savings*, achieved by:
  - Eliminating consulting or maintenance fees
  - Reducing head count, per-transaction costs or shipping costs
  - No longer paying for unused assets
- *Intangible savings*, gained from:
  - Automation of inventory
  - Cost efficiencies
  - Faster problem identification and resolution
  - Improved employee and customer satisfaction
  - Reduced procurement cycles
- *Cost and risk avoidance*, achieved by:
  - Averting audits
  - Achieving compliance
  - Practicing end-of-life asset management

IT asset management teams need to work closely with those in the lines of business to link IT and business objectives, to identify shortcomings in the IT environment, and to prioritize activities and expenditures. Establishing a link between the IS organization and the lines of business will prove critical to:

- Building consensus
- Facilitating implementations
- Surviving any dissatisfaction expressed by senior management
- Sustaining IT asset management initiatives

**Action Item:** Ensure that the IT asset management program quickly reinforces its business justification by delivering short-term benefits. From there, IT asset management team must promptly follow up with long-term strategic plans for saving money and improving operational efficiency.

### 4.1.6 The IT Asset Management Implementation Plan

**Tactical Guideline:** *Developing an IT asset management implementation plan entails:*

- *Determining key, strategic business needs*
- *Identifying opportunities*
- *Selecting projects that link to key business metrics*

Just as the business case builds on the IT asset management strategy, the implementation plan builds on the business case. When creating this plan, the IT asset management team should:

- Restate the problem and opportunities.
- Produce a mission statement for the IT asset management program that outlines high-level goals and expectations.
- Align this mission statement with the timelines developed from gap analysis of IT asset management processes, and assessments of the different maturity levels of IT asset management within the enterprise.
- List all costs and resources required.
- Create a long-term strategic plan that:
  - Includes clear goals and objectives
  - Defines practical implementation methodologies for each goal
  - Documents a plan for each specific goal (working from the current state to the desired end state)
  - Breaks down this long-term strategic plan into smaller, short-term projects
- Determine which projects to address and fund first.

- Build a road map that outlines realistic activities for achieving short- and long-term goals.
- Develop key metrics that:
  - Focus on quality, cost reductions, performance improvements and customer satisfaction
  - Define target performance levels
  - Map to project timelines (to help set realistic goals)
- Devise a way to track and report on metrics that deviate from their targets.

**Action Item:** Identify and map key business processes, and quantify their intangible benefits.

### 4.2 Proving IT Asset Management's Value

**Key Issue:** How does one demonstrate the value of setting up and maintaining an IT asset management program?

**Tactical Guideline:** *Proposals for IT asset management programs that can't prove benefits to the enterprise or lines of business will prove extremely difficult to approve.*

The early stages of IT asset management programs often start by tracking assets, a process that focuses on:

- Capturing physical and configuration data
- Presenting a historical view of asset changes
- Benefits to the IS organization

Benefits associated with asset tracking generally go to the IS organization. Such benefits include:

- Improved infrastructure performance
- Providing better service
- IT considered as a business enabler
- Improved employee morale

However, many senior executives don't care how many seconds it takes the help desk to answer a call or how long on average it takes this same group to resolve an end-user's problem. On the other hand, showing how a

proposed action provides a business benefit increases the chance of selling the business case for IT asset management.

For example, presenting the IT asset management requirement of accurate physical and configuration data as the foundation of an enterprisewide security program — and not just better asset tracking — has a better chance of gaining management approval. Other areas in which to demonstrate the value of IT asset management to business operations include:

- Better use of IT assets
- Improved cost control
- Meeting regulatory and compliance requirements
- Increased productivity
- Preservation of brand
- Enhanced customer service

IT asset management requires a high degree of collaboration among business units and departments. By showing how the benefits derived from true asset management accrue to the business, IT asset management can be more easily understood — and more readily funded.

#### 4.2.1 Using a Staged Approach

**Tactical Guideline:** *IT asset management teams need to identify, prioritize and target areas for improvement that link directly to strategic business goals.*

Successful IT asset management programs use a staged approach, with each stage focusing on strategic areas for change and process improvement. Between each project, the team should allow time for:

- Evaluating effectiveness
- Compiling lessons learned (good and bad)
- Integrating process improvements into the environment
- Measuring successes against the key metrics it developed to determine whether it's time to start the next project

The IT asset management team needs to evaluate each project before spending on technologies and expending resources. Evaluation criteria and timelines must reflect business priorities, and balance financial and nonfinancial measures. Typically, an enterprise will have several IT asset management priorities (see Figure 4-2) — for example, compliance, software audits or vendor consolidation — each with different:

- Timelines to completion
- Desired values and benefits
- Probabilities of achieving success and delivering value

The continuous nature of IT asset management enables enterprises to evaluate performance and adjust goals and plans to reflect more-realistic accomplishments.

### 4.2.2 The Inevitable Rise of New Gaps

**Tactical Guideline:** Gap analysis represents an ongoing, iterative process. IT asset management teams must review and revamp their initiatives periodically to ensure that their programs can meet changing business requirements.

The law of unintended consequences — which says that almost all actions have at least one unintended consequence — applies to those trying to improve IT asset management programs. Frequently, new processes or software tools implemented to support an IT asset

management program will create problems or bottlenecks (that is, gaps) elsewhere. For example:

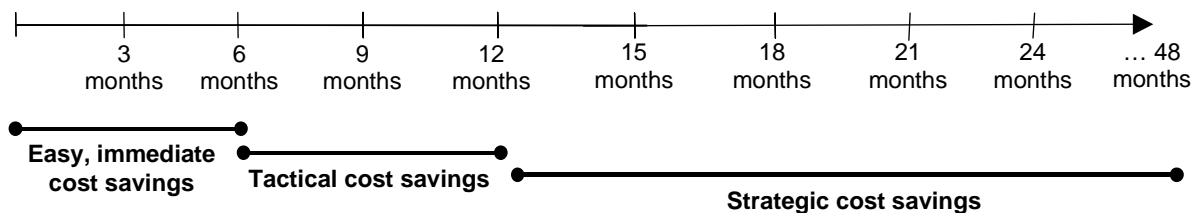
- Tools that automatically discover configurations will increase the accuracy of inventory information; however, if they discover data too frequently, they may also choke server bandwidth.
- Although just-in-time purchasing of PCs will reduce inventory levels, the process could significantly increase expedited freight charges.

Often, new gaps also arise from:

- *The creation of new incentives* — for example:
  - A procurement manager compensated to get the best price or obtain the biggest discount could take actions detrimental to business operations.
  - A technical-support team compensated to resolve incidents quickly might close support requests before actually resolving the end-users' problems.
- *Staffing issues* — for example, new hires and natural attrition demand that training occurs continually.
- *Using consultants to implement an IT asset management program* — for example, once the program has been established and the consultants are gone, employees are left to perform the tasks and run the systems on their own.

**Action Item:** Periodically re-evaluate the IT asset management program to address the new gaps that inevitably will arise.

**Figure 4-2: Developing Timelines to Value**



Source: Gartner

### 4.2.3 Comparing Goals and Performance

**Tactical Guideline:** Managers must consciously and continually sell IT asset management to the rest of the enterprise. Ongoing success and funding of an IT asset management initiative requires communicating early, skillfully and often.

Effective IT asset management programs provide management with a decision framework that:

- Ensures high-quality, cost-effective solutions
- Helps determine whether to continue or abandon a program

When implementing an IT asset management project, an enterprise must reappraise its initial decision, determining whether:

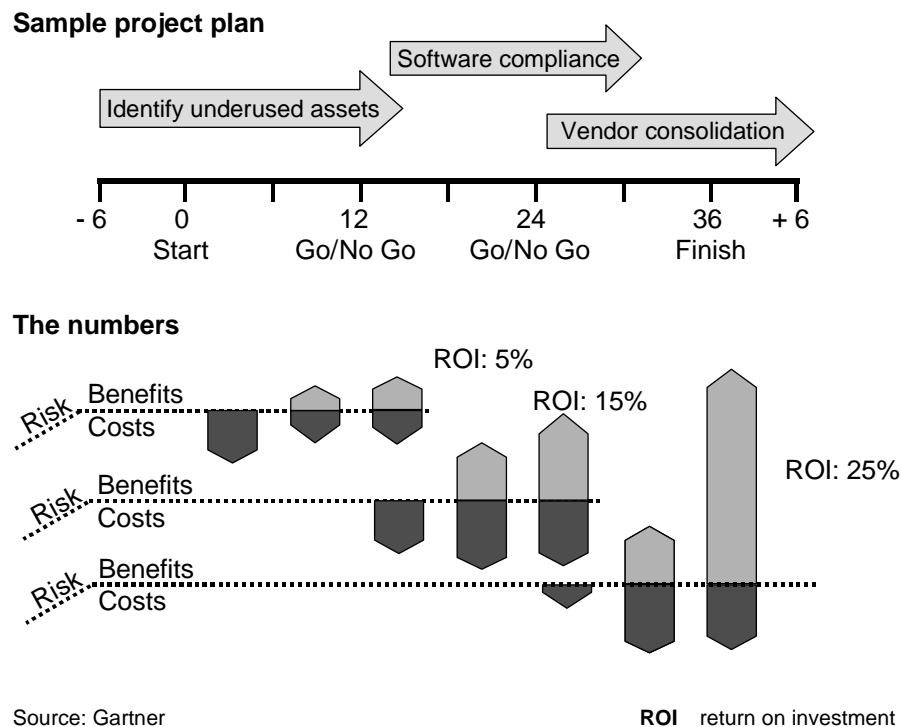
- Costs and benefits are tracking according to plan

- Expected benefits and return on investment were achieved
- The enterprise has reached its goals of:
  - Maximizing the effectiveness of the IT infrastructure, and the productivity of IT assets
  - Minimizing total cost of ownership

To determine success, IT asset management teams must honestly compare actual performance against goals and established metrics (see Figure 4-3). If IT asset management didn't reach a goal or missed a milestone, the team must analyze the information to determine the root causes. For example, spending more than expected on a project could stem from:

- Failing to closely monitor costs
- Increasing the scope of the project without modifying the plan
- Understating the project's costs in the initial plan

**Figure 4-3: Evaluating Performance Against Timelines**



#### 4.2.4 The Need for Regular Program Reviews

*Tactical Guideline: Fair and accurate reporting of successes, failures and required corrections to strategic and project plans will earn the IT asset management team the right to continue with the program.*

IT asset managers should closely monitor project plans — and the management of assets within each project — so the IT asset management team can assess business and IT alignment at every milestone on a project's timeline.

Enterprises need regular reviews of IT asset management programs in order to:

- Cancel seriously underperforming initiatives early
- Delay or accelerate initiatives to respond to internal or external changes (such as a merger or acquisition)
- Redefine scope to reduce risk and cost

Enterprises should accelerate projects that continue to align with business value and abandon those that fall short of expectations. For example, if the tool or consultant selected to help with a software license compliance program proves to be an inappropriate choice after a certain time, the IT asset manager should consider another approach to this issue (instead of spending more money on the failed initiative). The difference between such acceleration and abandonment could mean a career boost or challenge.

For IT asset management processes, enterprises should establish metrics that measure IT asset management activities and their effect on end-user services. This link helps IT asset managers predict the effects that their decisions will have on support services. Creating this link may require refining the metrics for IT asset management and support services until the link becomes predictable.

Proper procedures for reporting on progress — and thereby earning the right to continue an IT asset management program — include:

- Making monthly reports part of the standard accounting process
- Keeping reports in a format that businesspeople can understand

- Creating brief and visual reports to upper management
- Measuring performance against all key metrics
- Analyzing variances to determine their root causes
- Including tangible and intangible cost savings
- Reporting failures as well as successes

#### 4.3 IT Asset Management Best Practices

**Key Issue: What practices do market leaders use to reshape their IT asset management programs to meet evolving business requirements?**

A best-of-breed IT asset management and implementation strategy increasingly will hinge on how well that strategy integrates with business processes across the enterprise, and less on technology selection.

When all enterprises can access the same set of best practices and IT resources, different levels of IT asset management success and economic benefits to the enterprise arise from differences in processes and management. Best-in-class enterprises use IT asset data as a methodology to develop an organizational discipline for facilitating technology implementations and change management (which is particularly valuable for diverse, global enterprises).

A key challenge stems from determining the level of integration among people, processes and technology. More-mature IT asset management programs will include steps for:

- Reconciling, entering and analyzing the data captured
- Using the information for planning and procurement (which will yield significant results)

As programs mature, the value proposition for IT asset management is only beginning. Data should increase in size and scope, and be offered to the change management and help desk functions to optimize their organizations.

Signs of mature asset management programs include:

- Becoming a part — not a consequence — of decision-making processes

- Enabling top management to make more-effective, proactive decisions during a time of significant business change
- Giving the board of directors the ability to quickly assess the business risks and benefits of the decisions they're making
- Positioning the CIO to be a detail-oriented business partner in the enterprise's leadership team
- Asset trending and analysis becoming a routine practice before negotiations
- Codified and automated business rules
- Integrated network and service desk strategies

### 4.3.1 Planning for Change

Most enterprises that have achieved success in their IT asset management programs have implemented methodologies for capturing change in their environment.

Change will occur in all three areas of asset management:

- *Physical*
  - Emerging technologies
  - New uses of technology
  - Methods of distribution
- *Financial*
  - Accounting and tax
  - Government regulation
  - Mergers and acquisitions
  - Vendor health
  - Enterprise health
- *Contractual*
  - Licensing models
  - License types
  - Intellectual property
  - Pricing models
  - Service offerings

From the physical side of IT asset management, asset managers will be expected to track and manage new technologies not yet in the mainstream. Therefore, they must look to the future to anticipate new technologies, determine which of these technologies will matter from an IT asset management perspective, and assess whether their asset management systems are flexible enough to handle them.

This includes consideration of how new vendor technology offerings will affect IT asset management:

- Processes
- Skills
- Infrastructure
- Costs
- Staffing needs

From the contractual side of IT asset management, managers must continually evaluate how new licensing and pricing models, as well as new vendor service offerings, will impact the way assets are tracked and managed.

Finally, from the financial side of IT asset management, managers must vigilantly monitor the health both of the enterprise's vendors and of the enterprise itself. They must also evaluate how new and differing government regulations, legislation, and tax and accounting rules will affect the IT asset management program.

**Action Item:** Evaluate how new technologies, licensing models, and financial-reporting and governmental regulations will affect processes, infrastructure and staffing, and allocate resources accordingly.

### 4.3.2 IT Asset Management as a Service

**Tactical Guideline:** *IS organizations that implement service reporting as a collection of metrics won't realize the full benefits of this approach unless they link these metrics to customer satisfaction.*

Establishing a service-oriented IT asset management program represents a considerable accomplishment.

Reaching that point is several times more difficult than having a proactive IT asset management program, and requires different skills and resources.

To provide asset management as a service, IT asset managers must continue to improve their programs based on business goals. This, in turn, requires:

- Additional resources
- Resetting expectations about costs and benefits
- A complete evaluation of the skills available (as compared to the skills required)
- A higher degree of collaboration among business units and departments
- Integrated systems
- Predefined metrics
- Managed and measured performance

Factors that can inhibit providing IT asset management as a service include:

- The need for:
  - Continued executive sponsorship
  - Additional funding
  - Different skills
- Limited success stories and literature to draw from

### 4.3.3 Driving Business Value With IT Asset Management

**Strategic Planning Assumption:** *Through 2010, 80 percent of enterprises that demonstrate business value from their IT asset management programs will sustain successful initiatives (0.7 probability).*

IT asset management remains critical to enabling an IT infrastructure that efficiently and effectively supports

business operations. It provides a platform for creating and maintaining sources of competitive advantage.

To meet evolving business requirements, mature IT asset management programs have embedded chargeback systems that accurately identify costs and technology use. Benefits of this approach include:

- More-accurate budgeting
- Budgeting on a business-by-business basis

Chargeback systems also help to:

- Ensure that IT assets have cost justification and cost avoidance visibility, and a standard, accepted life cycle value
- Minimize deviance from enterprise standards, so that IT costs and value are clearer to everyone

For more information on chargeback, see Chapter 9.0.

## 4.4 Recommendations

- Address processes and skills before trying to advance an IT asset management program.
- Know and continually evaluate the business value of IT.
- Set realistic goals and timelines for the next 12 to 24 months.
- Constantly improve IT asset management skills and seek outside help as needed.
- For any new project, continually assess opportunities against the risk being assumed.
- Compare and report on successes — and failures.
- Where possible, benchmark against other comparable enterprises.
- Start (or restart) an IT asset management program now — don't wait until it's too late.