

# Making Every Asset Count: A Lean IT Best Practice

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# Executive Summary

## Challenge

IT organizations today are challenged to achieve results with increasingly limited resources. This presents a paradox when considering the volume of change that must be supported to preserve business advantages. To bridge the gap, the organization must optimize the capacity of existing resources. This means understanding how assets contribute to the cost effectiveness of services and support, or in other words, how they are managed by a lean IT provider. The challenge of getting lean, instead of just getting less, is to approach the assets in terms of a value perspective.

## Opportunity

Addressing the challenge can help to open up specific opportunities for improving IT management, and as a result, deliver business benefits. The most important difference obtained is improved consistency in the alignment of asset investments to the success factors of live business operations. Transforming to greater alignment calls for a framework for identifying the rationales of management change. The ability to make that change without disruption is a highly appropriate response to the business request that it improves how IT supports the business.

## Benefits

With a lean approach to service and support, the IT organization has a more active pursuit of ROI, while cost-reduction means that current (retained) processes and commitments should be met for a longer span of time going forward. In particular, more capacity also comes from leveraging existing levels of resource to generate increased levels of benefit. More capacity means that the business is better able to respond to upward changes in the level of demand. Or, it can mean that capacity is more readily shifted when necessary to take new positions for the business - especially with customers, partners, and regulations. The ability to get more from less becomes a capability, not just an event, enabling the business greater agility to pursue its goals.



# Driving Asset Value through the Division of Labor

From an economic point of view, markets effectively drive industry trends, which in turn drive individual corporate preferences. Any organization that takes seriously the measurement of performance therefore focuses its effort on quantifying the gap between their production capabilities and customer preferences, in a manner that indicates what actionable strategies can be executed quickly with measurable success. Because businesses are especially sensitive to speed and impact, stakeholders of the business often interpret those measures of success as an immediate snapshot of the quality of work that was done.

This is not to suggest or recommend that stakeholders play a passive role. Rather, in modern businesses, stakeholders create relationships that frame the day-to-day character of the company, and these various kinds of relationships ultimately divide up the work of the company. It's therefore not just positioning and production alone that reflects the market identity and attractiveness of a firm, but also the manner in which management describes, distributes and resources the coordination of work effort through the definition of roles.

For example:

- Customers and marketers together define requirements.
- Suppliers and resource planners together build and move capacity.
- Line managers and employees have a relationship to administer production.

By actively filling certain roles, Stakeholders in the business impact certain relationships, which in turn have the responsibility for generating the effects that add up to the performance of the business. Ultimately, requirements, capacity and production blend to generate revenue-capturing opportunities and events.

For that division of work to be productive, however, the ground-level tasks and policies must be supported with resources that encourage and defend their compliance to identified activities that ultimately meet customer preferences (or expectations as they are generally known at this point).

This means that the items that make up the supporting environment for tasks and policies - namely, the related tools and materials - provide the foundation for necessary productivity levels, and it is that responsibility that defines their value.

Consequently, managing the company's collection of those items - in other words, managing its assets - is a critical success factor of business performance. Lean IT is the goal of these business operations and increasingly management's key focus



## Cultivating Lean IT with Asset Management

The essence of management is to design and control events and impacts in the performance period (or even entire lifecycle) of a process, item, or entity. In asset management, this applies to how assets are defined, acquired, distributed and utilized in alignment with requirements of the business model — or in other words, aligned within the processes that drive the business.

Enterprise-wide asset management is explicitly organized and strategically practiced to fiscally protect and enhance the business model, not just parts of the business. Lean IT is an approach to process improvement that can help deliver the most value to the customers of the business. Its central concern is the elimination of waste — work that doesn't add value to a product or service.

To directly address this alignment of assets, work and business processes, business management proactively publishes business requirements into the asset management process. Enterprise asset management can find these requirements represented in the form of business processes that are the “clients” of associated assets. Assets must support the ability of the business process to meet its own objectives. To accomplish this, assets must perform as resources for the work constituting the processes.

In practice, assets will be managed so that their supply will align with this enterprise demand and enable an explicitly prioritized fulfillment of it. Readers of this paper will see a survey of tactical issues and concepts that predetermine an organization's ability to adapt its asset management practice for Lean IT. Along the way, a related critical success factor will become clearer: the identification, resolution and prevention of waste.

## The Need for Proactive Asset Management


On a day-to-day basis, it makes no more sense for a company to run without asset management than it does to run without an accounting system. The difference is in the initiatives that need to succeed today to fully incorporate asset management, as has already been achieved with accounting. In that sense, asset management comes forward as both an enterprise issue and as a strategic one.

Almost by definition, a managed asset makes for a better, more productive resource than an unmanaged asset. This is the fundamental assumption underlying all processes, objectives, metrics and expectations that asset management offers.

Yet often, the notion of “benefits” from asset management is oversimplified to a form of arithmetic, in which the net costs of many different events are simply summed against income to present an aggregate gain or loss. This notion probably makes sense if the primary objective is actually to dispose of the business and keep only the gain.

But for most employees of the business, that is an extreme way to think about business performance. It has little to do with why their job descriptions and performance reviews tend to look the way that they do.

For those who are charged with keeping the business alive and making it better, life is more complex. The results of many different events affect each other; they are multiplied and divided by each other, not just summed, and the whole is greater than the sum of its parts.



A key tenet of strong asset management presumes that assets intentionally have impact on business processes, and that the asset's impact results in those processes impacting the business environment positively for the company. Meanwhile, the uncertainty of how time impacts the coincidence of events can make the true benefit of a specific asset initially indeterminate. With the volume of assets and activities that a business maintains, this uncertainty amounts to complexity, which greatly increases the chance of inefficiency and waste.

In this context, proactive asset management becomes a necessity, not just an advantage.

## Envisioning Efficiency for Value

At the highest level, asset management equates an asset's "value" with its "importance". It asks not only the question, "What do I have?" - but also the question, "So why is it important?"

When the inevitable follow-up questions occur, "What is it doing? And why?" most stakeholders in the business want answers to be actively generated and necessary adjustments to be actively made. Better still if these adjustments are part of an identified strategy.

All this begs the question, "Why do processes need assets?" The simple answer is analogous to cars needing fuel and buildings needing bricks. Assets are consumables or structural materials. By analogy, providing energy and strength to processes is a pretty solid business justification for assets. It helps to enable processes to do the kind and amount of work that the business needs them to do.

By managing the way that assets impact processes, and furthermore by managing the way that assets become available, asset management creates a reliable foundation for planning and enforcing performance — management decisions about optimizing process capacity. (Capacity is key: it is one major part of the answer to the crucial question, "how much can the business produce and deliver, under current conditions?")

To investigate optimization, a first step is to identify how assets become related to the activity that constitutes the value to the business. In this way, the connection between investing in assets and benefiting from them can be rationally described. This relationship between investment and value represents a critical area where it is said IT continues to fall short over the years, but can improve.

Most companies who initiate comprehensive asset management need to look first at the operational level on which decisions are made about selecting, acquiring, deploying and utilizing assets in response to business-user demand. At this level in the company, the overall demand for assets is segmented by the way the user community is organized (such as by departments, projects, or a job's assigned taskload). Responses to that demand are typically segmented as well, reflecting an "asset supply" being consumed by a continuous stream of incidental demand.

But awareness of this overall asset supply is often post-facto because the motivation and authorization for acquiring assets is also largely incidental. For this reason, the changes to the overall supply may not be considered significant on the whole. Looking at patterns of asset-consumption will usually be very revealing in essentially the same way that looking at patterns of spending helps manage the corporate budget.



For example, synchronizing the timing of demand from different quarters, and purchasing popular assets in volume, can provide for suitable supply at lower cost. When a business is able to determine that more economy can be added to operations by managing the overall supply, it is working in a proactive mode of value-generation.

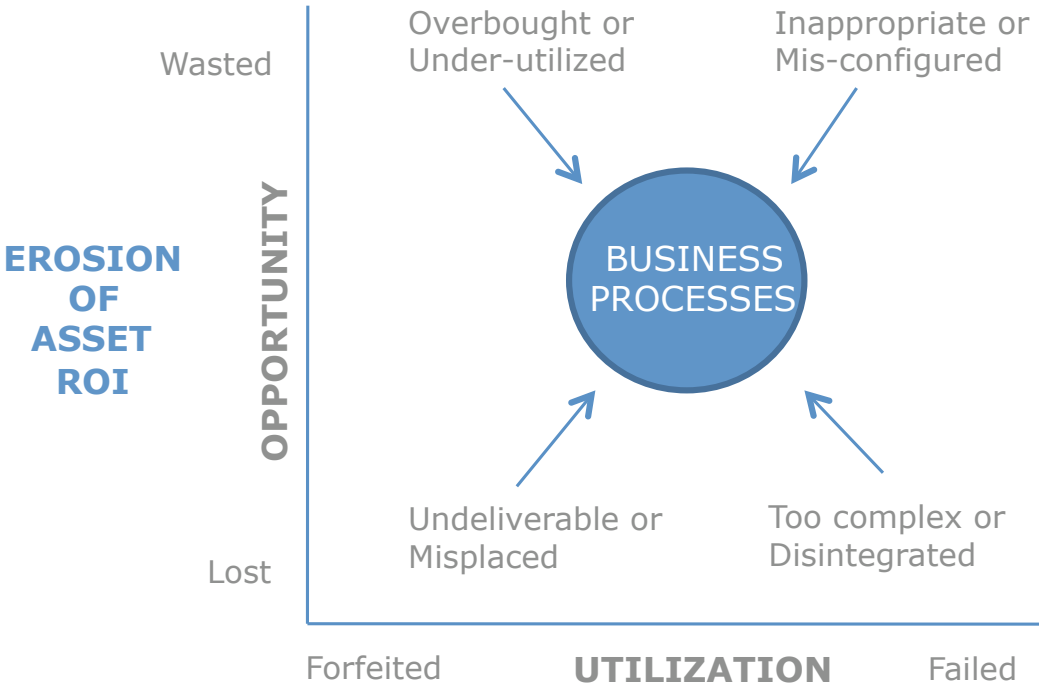
However, to realize the full value, the company must overcome basic challenges to the effective use of the assets by aligning business processes. Otherwise, additional value developed at the acquisition step can easily be lost on the way to ultimately impacting processes.

Effective process-support will require some basic asset management successes:

- Manage access to the asset to resolve competition for use
- Optimize availability by ensuring appropriate asset location
- Define primary functional purposes for the asset to optimize utilization

Managers must look for the actual results of efforts that were taken to address that competition, availability and utilization. Differences between the actual and the planned outcomes are the evidence of erosion in the potential value of the assets – in other words, prevention of ROI.

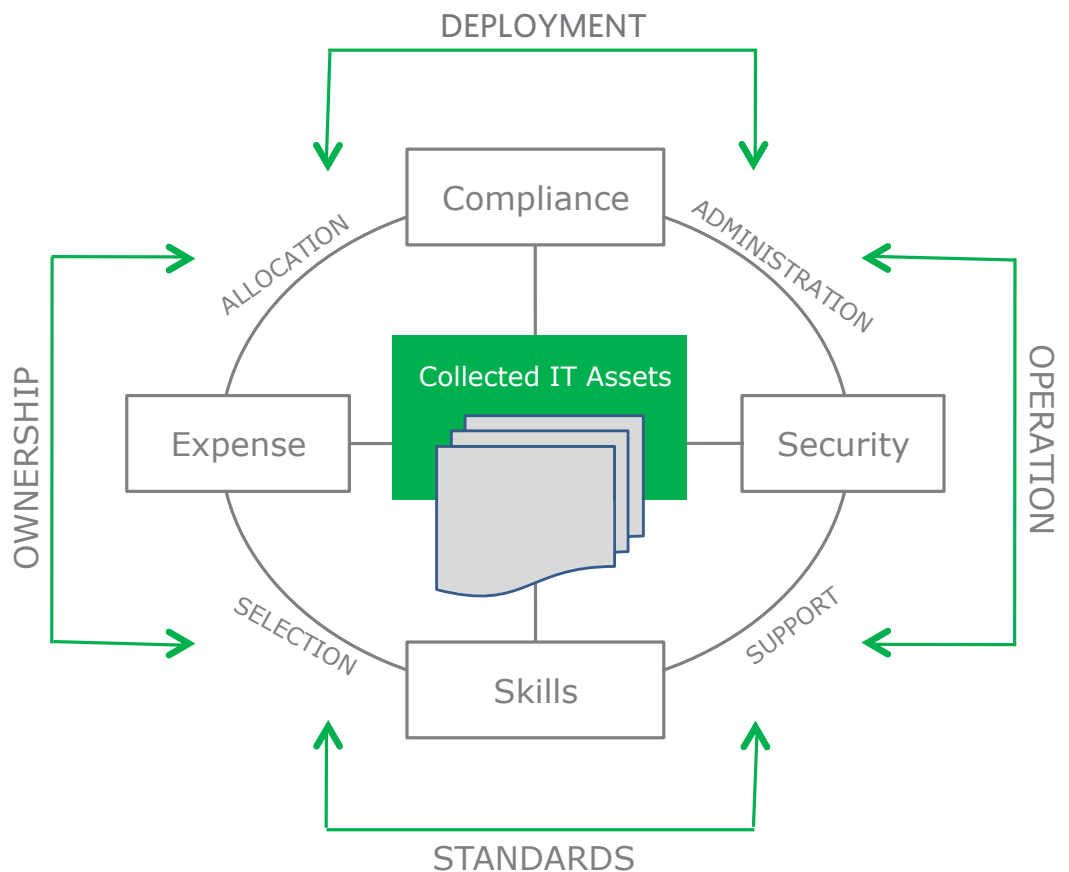
This erosion must be systemically minimized, or the natural forces of internal demand will continually recreate it. The systemic approach involves prioritizing organizational awareness for process support.



# Mapping Your Organization to the Asset Management Discipline

By definition, a “practice” combines expertise and policies, to apply managed processes to business objectives. Additionally, practices interact with each other, for better or worse. As a result, business “practices” can be seen on a level of their own, different from “processes”, where it is important to pursue improvement and maturity.

## PRACTICES FOR ALIGNING ASSETS TO BUSINESS



Four important types of business practices are accountable for relating assets to the business: ownership, deployment, operation, and standards.

The quality and continuity of these practices predetermine how assets can actually relate to the business. Each practice has certain associated fiscal, physical and logical aspects that help to characterize how assets are actually relating to the business, compared to expectations or intentions.



Ownership minimizes the risk that competitive demand for the asset by other parties will affect the asset owner's access to the asset. Here, access considerations include:

- price levels;
- physical presence or proximity; and
- purpose

Deployment places the asset in locations and configurations calculated to maximize the efficiency and purpose of the asset's availability. Asset availability considerations include:

- economy of scale;
- logistics; and
- regulation of its users and usage situations.

Operation maintains the application of those asset features that are critical to meeting required business functions. Application considerations include:

- runtime (consumption and refresh) costs;
- versions (properties and specifications); and
- procedures for utilization.

Standards maximize the efficiency with which "critical" features of the asset can be identified and related to known risks to operational performance levels. Risk considerations include:

- enforcement and recovery costs;
- quality assurance (required degree of match to specification); and
- approval of changes and variances.

Taken together, the practices help identify opportunities to spot and reduce waste, progressively achieving Lean IT.

### **MANAGING THE KEY PRACTICES**

When companies try to measure those four practices, it is important to know whether the objective of the particular measurement is to determine an environmental state or to track a process that created the state. But what do these look like?

Often, those fiscal, physical and logical issues associated with the practices are issues that already fall under the direction of some form of management process - as is suggested in the table below. However, these issues generally label the outcomes of the management processes. There may be more than one process involved in covering a given issue. Moreover, from one time to the next, the outcomes may vary for each process involved. There are no guarantees. Thus, balancing the multiple outcomes is important.



Measurements of the issues will likely concentrate on whether they represent an acceptable overall state by staying individually and collectively within certain tolerances. This kind of analytical assessment is represented by a left-to-right reading of each row in the table, and the far right asks for an aggregated assessment of the issues within the tolerance.

Tolerances	Owership	Deployment	Operation	Standards	Overall State
Fiscal	Price Levels	Economy of scale	Runtime (consumption and refresh costs)	Enforcment and recovery costs	Acceptable?
Physical	Physical presence proximity	Logistics	Versions (properties and specifications)	Quality assurance (required degree of match to specification)	Acceptable?
Logical	Choice of what to use it for	Regulation of its users and usage situations	Procedures	Approval of changes and variances	Acceptable?

Hypothetically, enough management diligence could result in having all issues in the table fall within preferred tolerances. If that happened, it might also then be said that each major practice was in good shape, by default.

But because we want to know that it is meaningful to directly manage the major practices, there should be another practical perspective of equal importance.

This other perspective looks at how the effectiveness of the four major practices is sustainable. Instead of looking into the overall acceptability of the current fiscal, or physical or logical issues, it anticipates what is necessary to keep a beneficial state alive over time.

In particular, the alternative view looks for what factor(s) might strongly impact or constrain all the issues within a given major condition. In the table above, a major condition would be one of the columns instead of a row. For example, while fiscal conditions might be tolerable overall, deployment overall might be a big mess.


### INFLUENCING THE “ACTUAL” VERSUS THE “PLANNED”

Each major practice’s effectiveness is constrained by at least one critical dependency, for which there must be a related corrective competency applied that supports the continuity and quality of the practice.

In our model, the effectiveness of ownership is critically dependent on the ability to manage expenses (controlling planned spending by type and purpose). In terms of handling asset items, strategic availability of funds affects the ability to deal with prices, location costs (including the related storage, shipping and installment issues), and options for usage (including amounts, duration and scope - such as with licenses). That is, the fiscal, physical and logical aspects of handling the asset are all impacted by expenses.

Effectiveness in the other practices also relies on managing the related constraints:

- Deployment depends on compliance (to policies, rules, requirements, etc.);
- Operation depends on security (protecting the deployments underlying execution); and
- Standards depend on skills (to select and enforce them).



We readily recognize that expenses, compliance, security and skills are essential enablers or building blocks of business — so their involvement here is an indication of the level at which assets and business become rationally related to each other. Ideally, the competencies for managing those constraints provide a way to promote and protect maximum effectiveness in making an asset truly manageable by the business.

### **DEVELOPING A PROFILE OF ASSETS**

As the asset accumulates a history through its involvement with each of the four competencies, the impact of the competencies on the asset become key “attributes” of the asset. These attributes can be expressed as the asset’s degree of resistance to the influence of the competencies, or likewise its degree of acceptance for them. A historical view and/or a current view of these attributes could be compiled.

This offers a way to classify the asset’s particular status, distinguished from that of other assets. That classification is particularly useful when correlated with business successes or failures that occurred at the same point in time of the asset’s particular status. Over time, the correlation reveals whether a particular status of assets is an indicator of likely success or likely failure in a business process.

The group of attributes with which the status is measured is the profile of the asset. An asset may have a very similar profile to many others of its type, or on the other hand it could be unique. Cost-effectiveness in the business handling of assets then ranges from the economies of scale offered by large numbers of similar assets to the value of precision when unique assets are optimally managed.

Such a profile, however, or a consolidated picture of a given asset’s status, is often not available in the company or perhaps cannot be confirmed. The main reason for this is that a large number of separate processes independently handle or impact the asset for their own relatively special purposes. (Our table of Practices and their related issues illustrates this.) Attributes can frequently change, without synchronization.

One key question remains: What would motivate a company to consolidate the record of these numerous impacts on an asset? The answer is the benefit of correlating asset status to business success, as described above.


### **LEVERAGING OTHER PRACTICES FOR BUSINESS PROCESS ENABLEMENT**

The enablement of a business process calls for action that drives investments appropriate for asset management.

Generally, process-enablement means that resources must be selected, allocated and administered to provide continuous and high quality support of the process.

Our model shows this enablement activity as a sequence of vigilant decision-making efforts to control the flow and impact of resources against process demand. These decisions ideally move the right resources into the right positions to power operations — effectively creating the infrastructure for business.

The decision-making activities are vital to enabling business processes. Further, they already demand and drive the same constraint-mitigating competencies that critically impact business practices for asset management.



For example, to distribute an “appropriate” asset within cost justifications, allocation decisions must routinely observe and balance expense issues and compliance issues. This activates expense and compliance processes, making them available. So the idea is to leverage those processes for promoting continuity and quality in ownership and deployment — major practices for asset management.

Our model allows that:

- In addressing such things as asset supply agreements, terms of use, or user-entitlements, administration decisions strategically link issues of compliance and security.
- In tackling maintenance and change management of assets, support decisions link security and skills.
- In assessing the cost-effectiveness of having full responsibility for the asset, selection decisions link skills and expense.

As arranged by our model:

- Selection decisions focus on identifying the types of resources most appropriate for the prevailing business conditions, which connects standards to ownership in terms of both planning (pre-acquisition) and enforcement (post-acquisition).
- Allocation decisions prepare the purposeful move of resources from just the “owned” condition to the “deployed” condition.
- Administration decisions regulate resource movement from deployment to operations.
- Support decisions calibrate the levels of resource-usage to the types of usage recommended, thereby bridging operations and standards.

It is easy to discuss “assets” and “resources” synonymously, but to manage assets there needs to be a more specific distinction.

*The most important distinction is that an asset only becomes a resource when it has an expected assignment and delivery to a given usage.*

*In that light, enabling business processes has a general requirement of converting assets into resources. Consequently, this conversion capability becomes a fundamental of business performance.*

## Capabilities for Asset Assignment and Delivery

### EXECUTING AND SUPPORTING THE ASSET CONVERSION

Because it addresses requirements for business performance, the conversion of assets into resources can drive most of the ground-level decision-making about “managing” assets.

Basic management decisions about assets are generally about determining which assets should be acquired and distributed, or kept or discarded. But for asset management to deliver the full value that it can to business performance, specific emphasis must go beyond inventory and ownership; it must be put on how the assets are used, and on what kind of assets can and should there be involved at any point in time.

Assignment and delivery of assets to business processes sounds straightforward, but it is multi-dimensional; the tasks must not be confused with the decision and the capability that precede them.



The decisions to assign and deliver must take into account the means by which that conversion from asset to resource is maintained, not just executed. Direct attention is needed on each of these three supporting elements of conversion:

- Asset items themselves
- Custodians of those assets, who have responsibilities for their current and future condition
- Methods of custodianship

Without such consideration, any business performance benefits generated might be countered or even negated by deficits or risks also generated. For example, a given IT asset item may present such issues as the following, with each issue carrying some form of risk to timely, sustainable process-enablement:

- licensing costs
- installations, maintenance and security
- functions and integrations

As a result, the best actionable decisions build on some due diligence of the capability to sustain them. The table below shows that the three supporting elements of conversion can impact each other in important ways. The table provides an expanded view of what this can look like to capability managers. Within each cell of bullets it shows impacts in fiscal, physical or logical terms, respectively. A company can expect that coordinating these kinds of lower-level impacts will determine the company’s type and level of success in converting assets into resources.

	<b>Asset Item</b>	<b>Custodians</b>	<b>Method of Custodianship</b>
Asset Item	<ul style="list-style-type: none"> <li>•Relative % of Budget</li> <li>•Integration</li> <li>•Functional Compatibility</li> </ul>	<ul style="list-style-type: none"> <li>•Cost of Related Skills</li> <li>•Operational Method</li> <li>•Required Expertise</li> </ul>	<ul style="list-style-type: none"> <li>•Paid Maintenance Frequency</li> <li>•Monitoring Difficulty</li> <li>•Location Convenience</li> </ul>
Custodians	<ul style="list-style-type: none"> <li>•Financing Method</li> <li>•Configuration</li> <li>•Supervision</li> </ul>	<ul style="list-style-type: none"> <li>•Division of Assignments</li> <li>•Schedules/Shifts</li> <li>•Supervision</li> </ul>	<ul style="list-style-type: none"> <li>•Timing</li> <li>•Efficiency</li> <li>•Procedural Quality</li> </ul>
Method of Custodianship	<ul style="list-style-type: none"> <li>•Inventory Cost</li> <li>•Maintenance Level</li> <li>•Audits</li> </ul>	<ul style="list-style-type: none"> <li>•Pay Rate</li> <li>•Techniques/Tools</li> <li>•Procedural Competency</li> </ul>	<ul style="list-style-type: none"> <li>•Relative % of Budget</li> <li>•Scope</li> <li>•Workflow</li> </ul>



## KEY INSTRUMENTS FOR COORDINATION

In the current economy, a new strategic concern has strongly emerged: “How much cost reduction is safe before I cut my capacity below effective levels?”

This is becoming a strong driver of the conversion-related view of assets. After all, conversion is about leveraging assets.

Consequently, several disciplines are enjoying stronger new roles in asset management, reflecting a focus on the main elements (assets, custodians and methods) of asset-to-resource conversion. These include Portfolio Management, Scorecarding, and Continuous Improvement. Used as instruments, they act and interact as follows:

- Within the concern of the asset items themselves, Portfolio Management tackles the financial range of issues. We’ve seen (in the table above) that this means factoring in assets both as causing impacts and as being impacted. Therefore, the issues include fiscal impacts in budget, skills, maintenance, financing and inventory.
- In the custodianship arena, IT Balanced Scorecards try to relate the performance of management in several areas, notably management of resources that are created from dollars, knowledge and people. This is joined by a resurgence of Governance work that is focused on aligning organizations and business policy. They provide models of cross-departmental and cross-functional effectiveness, changing the way custodial decisions are evaluated, including budgets.
- And in the area of custodial methods, numerous approaches to process improvement are reaching mainstream management acceptance, such as Six Sigma and ITIL®. Cost reduction through improved efficiency and risk management of existing resources is an important objective.

Naturally, information systems vendors and corporate IS departments are developing automation solutions that pertain to each of the above. These solutions help to corral the vast range of data, sustain frequent monitoring, regulate procedural complexity, and assure appropriate communication.

Depending on how any given solution emphasizes certain data and certain types of assistance (functions), it will provide more or less support to each discipline above. Integration of multiple solutions is likely to become common.

# Performance Improvement of Asset Conversion

## CONVERSION TARGETS

Failure to successfully convert assets into resources means that work is inefficiently supported and thus loses potential effectiveness to power the business. Consequently, the strongest measure of an asset's "value" is recognized in its support of work.

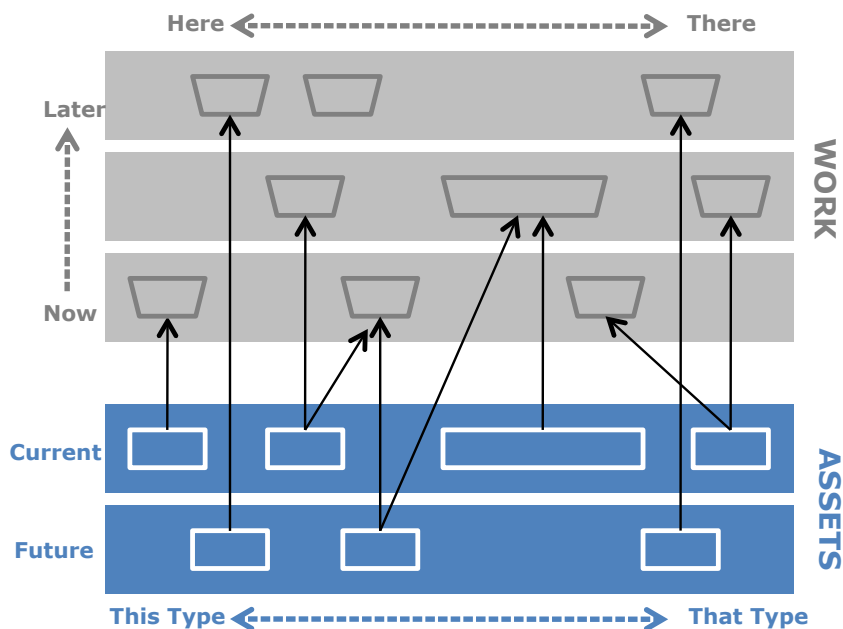
To provide truly supporting resources, decisions must be made and enforced for how company assets should be allocated for distribution within the timing and locations dictated by work.


For example: What if a customer is willing to pay more for something now, but the resources needed for fulfillment are unavailable for the time and place of the fulfillment process? The customer decides to go elsewhere and the business loses the opportunity and the revenue. How is it that the resources were unavailable? This situation might result if, for example, the necessary tools or materials were not available to apply to a function or staff role for assembling or shipping - a task that was a key aspect of the process. Perhaps the tools or materials were unanticipated, busy elsewhere, too costly, damaged, or lost.

To properly support work, conversion of assets into resources must be able to bring the right assets into alignment with the right purposes. The conversion process has a few basic but tough pre-requisites.

First, it requires information or analysis to ensure a strong understanding about the type of resource needed. Along with that, the conversion process itself must be very good at identifying what kinds of assets it can use to produce the needed resources, particularly for the time and place that makes the desired difference.

User needs, asset selection, and the process itself are all variables in executing the conversion. With that, things are already complicated, but routines can be developed for predictable circumstances.





However, constant change in the business environment means that conversions, in order to be effective, must succeed on demand continually and repeatedly, but also with flexibility. The process must accommodate options that reflect contingencies and futures.

### **OPERATIONS IMPROVEMENT VERSUS ONGOING CHANGE**

Actual business activities vary even more by type than do the assets. So maintaining the balance of supply and demand is a continuous effort to align and re-align what matters the most. This complex battle is persistent and intense, with perceived wins possibly being short-lived.

But a “win” is not a matter of having an asset stay in one place. Instead, it is a matter of the asset bringing the right benefit to the business activity, on time. Operations budgets must anticipate this need to continually respond effectively to change.

How can the cost/benefit balance be made visible enough in real-time to inform decisions about what to change for driving the balance of supply and demand in the right direction?

#### **Visibility of Cost / Benefit**

Clear overall visibility results from addressing all three dimensions of asset deployments:

- Diversity — a variety of types and versions of assets are simultaneously in demand and used
- Distribution — the physical range and reach that is covered by the delivery and placement of the assets
- Disposition — the state of the asset, as required for handling the load and type of demand it will face

Management decisions will be based on a clear picture of an asset’s type, location, and the condition it is in relative to its assigned purpose. In each dimension, managers will need to identify and track the related costs incurred and benefits derived. This data are part of the asset’s profile.

Seen as “resources for processes”, all types of assets would be similarly profiled. Then, correlation of asset profiles with processes helps to determine whether observable states of processes are causally related to certain asset types.

For example, is a certain procedure under-performing because it is starved for resources? Are certain tasks mysteriously ineffective in some locations but not in others? Do certain categories of assets produce unexpected problems more than others? The larger the number of assets profiled, the more likely that patterns of their influences may be observed.

Adequate visibility allows managers to answer several questions that are even more basic, such as:

- How did the asset come to be in the place and state that it is?
- Is the asset’s handling procedure and its current condition desirable?
- And, do the ongoing expectations about the asset usage require that it be changed, or instead be left as is?



The most important decisions dictate actions that will help business process performance but must also offer an acceptable balance of cost, risk and timing - factors that will interrelate in various ways. Furthermore, some actions are interdependent with other actions, and therefore bring other assets and influences into the situation. This type of logical relationship between actions can dictate the cost/benefit balances that realistically can be achieved at any given time.

Consequently, in defining an acceptable cost/benefit balance, chances are that either urgency or large amounts of data will call for using a pre-designed model of analysis that consistently relates such factors. Also in this management model, tolerances and benchmarks provide reference to what has proved to be valuable, or at least necessary, in the past.

**Four areas of conversion competency**

An important function of a management process should then be to coordinate action and information in a way that is directly comparable to the model.

What are the main elements of the asset to resource conversion process?

1. Identification of assets that can be properly converted
2. Appropriating the identified assets from their points of origin
3. Management of the distribution function
4. Quality assurance of the involved assets


Accordingly, developing a competency in each of those four areas, and blending the competencies into an integrated, effective operation, are the major objectives for improving the process.

**Three measurable conversion performance constraints**

Managers must understand the difference between the opportunity, competency and goal that exists for each of the four elements of the asset-to-resource conversion process.

These differences show up as distinctive responsibilities, such as those shown in the table below. Managers must work towards strong consistency within each element (column) and logical connections across all elements (row). Meeting this objective depends, of course, on very good information.

	Identification	Appropriation	Distribution	Quality Assurance
Opportunity	Research	Budgets	Authorizations	Testing
Competency	Evaluation	Procurement	Logistics	Policy
Goal	Classification	Price	Assignment	Support



Each of these responsibilities has associated actions that can promote the appropriate asset towards a business process. To recap, their actions help provide answers or adjustments to the following concerns:

- How did the asset come to be in the place and state that it is?
- Is the asset's handling procedure and its current condition desirable?
- And, do the ongoing expectations about the asset usage require that it be changed, or instead be left as is?

In doing that, the execution of each action affects the actual cost, risk, and timing associated with the asset's intended impact on the process.

However, each action also has cost, risk and timing challenges of its own, according to how well it is prepared. Real-time coordination of the various actions must accommodate the actual readiness-levels that they have achieved against their own challenges. This is another area where integrated information systems provide invaluable automation to the diligence and adjustments required.

## The Lean IT Payoff: More Sustainable Capacity in the Business Process

A company can work on either side of the cost/benefit ratio to achieve business process improvement. The flip-side of the cost reduction concern is capacity increase in the business process.

Cost-reduction means that current (retained) processes and commitments should be met for a longer span of time going forward.

But more capacity also comes from leveraging existing levels of resource to generate increased levels of benefit. More capacity means that the business is better able to respond to upward changes in the level of demand. Or, it can mean that capacity is more readily shifted when necessary to take new positions for the business - especially with customers, partners, and regulations. Needless to say, for some companies, a change in direction is exactly the way to generate more demand of the type that it wants, so shifting capacity is a major strategic decision.

While proactive asset management does help to lower unnecessary costs, it can be strategically oriented to work on the benefit side by improving business process alignment. It is a management process that significantly eases the company's effort to improve its performance that way, but most importantly it provides the mechanism to sustain improved performance levels through enterprise-wide process support.

For that reason, Asset Management must be a major item on the agenda for every CIO and CFO, who together wish to see IT reduce waste on the way to releasing higher productivity.



## About the Authors

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