

END-USER VIEWS OF SERVICE AND ASSET MANAGEMENT

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Recently, Harbor Research interviewed asset management professionals and other executives in manufacturing and service companies for their views on asset and service management. In this paper, we will summarize key findings from end-users of these systems.

Across industries, we found that market leaders value examination of the relationships among company assets and their business impact. Progressive companies want to turn their internal asset management groups from cost-centers into value-added service providers. These successful companies require no less than executive-level support in their campaigns for optimal asset management.

Surprisingly, most companies don't understand the need to adopt better asset management processes. Asset management is done in the traditional financial sense by tagging physical assets and depreciating them on the books. Often, there is no recognition of the need to link service scheduling (e.g., work orders, spares inventory, etc.) to asset maintenance. Issues important to asset managers included:

- ▶ Lack of asset visibility
- ▶ Managing a mixture of asset types
- ▶ Integrating service and asset management is a challenge with current systems
- ▶ Linking to enterprise systems is critical to view the entire business
- ▶ Getting timely performance status information on assets managed by service providers



Asset Visibility

What you don't know *can* hurt you. Asset management has become more complex and the need for solutions has grown well beyond the capabilities of Computerized Maintenance Management Systems (CMMS) and even the so-called Enterprise Asset Management (EAM) systems. There are various issues tied to asset visibility. Different existing and internally developed legacy systems within departments provide some information, but consider these questions:

- ▶ How much of the service and asset management information is in "peoples' heads"?
 - ▶ Are we losing knowledge?
 - ▶ Do people know when to fix or repair? When not to?
 - ▶ When do we escalate? When don't we?
- ▶ How easily do the legacy asset and service management systems integrate among themselves and external service providers?
 - ▶ Are consistent business rules applied across asset classes?
 - ▶ Are service levels consistently measured?

- ▶ How much internal resource is applied to support the internally developed tools?

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The massive volume of data coming from asset and services management applications presents a significant documentation and information-management challenge. The data require warehousing, analysis, and reporting. To derive maximum strategic value from this information, it must be analyzed to measure performance and to make corrections. And the performance measurements need to go beyond a single type or class of assets.

Multiple Asset Classes

Multiple asset classes at first may seem to be important only to companies with multiple lines of business. In fact, under-utilized assets of varying types impact nearly all businesses. Many companies depend for success upon a combination of manufacturing assets, buildings, and vehicles, as well as computing systems. For

“There are many problems that arise from the sheer number of people involved in an asset’s life-cycle. We need to smooth this out.”

–Global Petro-chemical Producer

example, manufacturing companies are equally dependent on the integrity of facilities and the production equipment inside them. The reliability of trucks, trains, or ships that transport goods can be just as strategic. As a business seeks higher levels of financial performance, the interdependencies among key assets must be recognized and their relationships optimized.

Integrating Service and Asset Management

Similarly, the relationship between service management and the assets that support it needs to be addressed. While satisfied customers are a top priority, service providers must ask themselves: Have the service assets employed been managed in the most optimal manner? Linking service management and asset management offers the promise of both happy customers and investors.

Linkage is also a key factor as it relates to the interdependencies among asset management, service management and other business systems such as ERP. Well-

coordinated asset and service management will be sub-optimized if not tied into enterprise systems.

The “enterprise” continues to evolve as an increasing number of non-core assets are outsourced. As business-process outsourcing continues, it will become increasingly important to truly understand and justify the assets you own as well as external assets. This goes well beyond periodic reporting and into nearly real-time capability to determine asset status and planning as well as who is assigned what, and when work will be completed.

In addition to scheduling people and equipment, the handling of inventory for replacement parts is extremely important. As part of an integrated solution, inventory management enables users to access needed parts while dealing with cost and delivery trade-offs.

Since customers will likely have more than one outsourcing relationship, it is important that their asset and service management programs can deal with the complexities of scheduling and parts inventory. While maintenance and facility planning have existed since the days of CMMS, a state-of-the-art solution comprehensively coordinates actions among multiple equipment types and multiple facilities (versus making these types of decisions independently), as well as traditional concerns such as efficiency and uptime, environmental considerations and uptime, and safety and incident reduction.

What are the results?

Market leaders recognize that holistic asset management allows them to leverage critical assets across their business. Integrating comprehensive asset and service management with systems such as ERP offers these key benefits:

- ▶ Increased Asset Utilization
- ▶ Improved Cost Management

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“What hurts us most is when we have to replace costly equipment before it should have to be replaced. These assets are very expensive and we need to get every year we can out of them.”

—Global Automotive Manufacturer



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- ▶ Higher Service Levels
- ▶ Better Planning & Budgeting
- ▶ Lower Risk & Liability

Consider a not-uncommon situation where labor is extremely tight, uptime is paramount, and a mix of specialized equipment exists. On an ongoing basis, operating management can intelligently match labor skills and expertise to the specific requirements of different types of assets, thus balancing both long-term maintenance strategies and immediate repair requirements. This will result in better service levels for those depending on the assets.

Of course, increased visibility among the asset owner, asset operator, and asset “maintainer” improves utilization. Maximizing return on assets is viewed as a key indicator of good management practice that leads to profits. But more importantly,

“We need systems that allow us to plan ahead and know what resources are required.”

—Nationwide Property Management Company

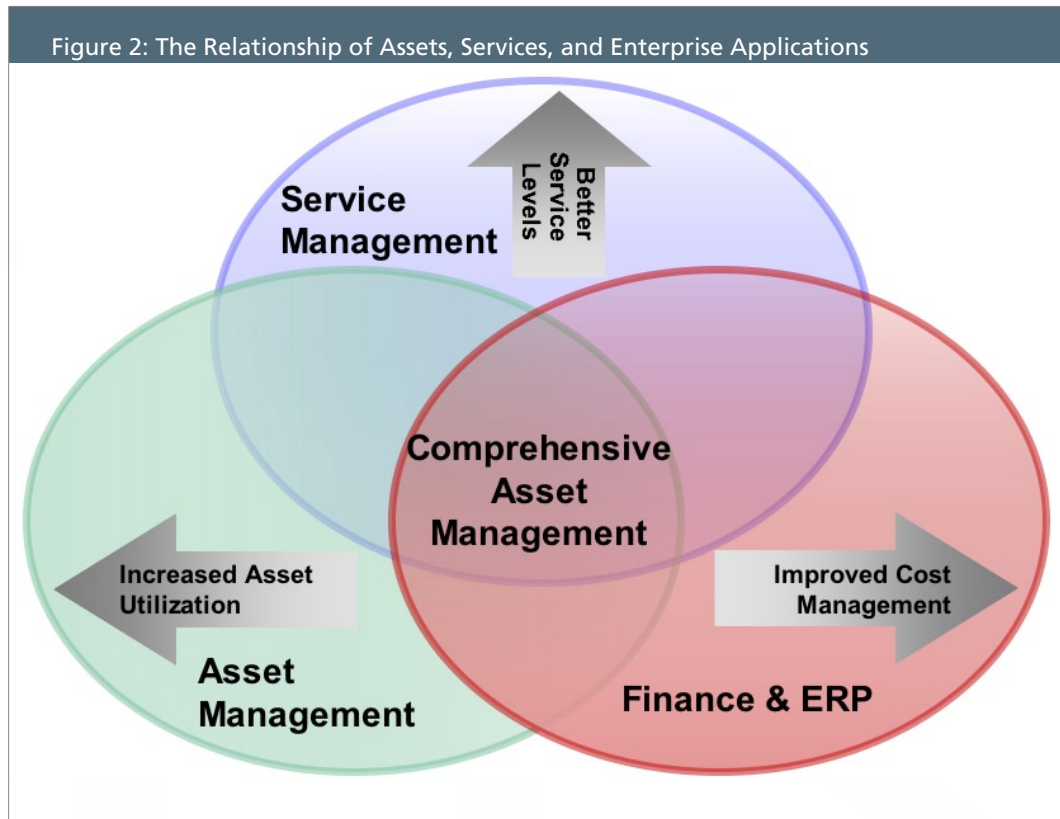
repair history and historical maintenance costs can be used to project future budget requirements. When processed by a finance/ERP system, this will improve cost management because planning for capital and human assets is based on better information. This is especially critical with specialized assets. These types of assets typically take a long time to produce. Also, there is often time required to train the

people supporting the specialized equipment.

Improved cost management is the synergistic outcome from better asset and workforce utilization and efficient spare parts inventory management. A key aspect for companies with multiple locations is enterprise-wide visibility of parts and personnel, enabling the possibility of resolving a resource need internally before looking outside. An additional cost management feature is e-procurement to pre-approved suppliers if parts cannot be located internally.

Service levels rise to internal customers, and the internal groups providing those services become “market competitive.” This allows them to demonstrate their value and minimize the chances of being outsourced.

With more complete information, companies can focus on key assets most directly tied to division or corporate objectives. Investing in the most critical assets translates into a higher return on those assets. Cost of ownership information can be used to create plans that standardize equipment and parts, improving maintenance efficiency, lowering parts inventories and increasing leverage with vendors when negotiating purchases.



Proactively managing assets and related services lowers both risks and liabilities. The end result is higher customer satisfaction, and the freeing-up of capital and lower costs. Ultimately, both the top line and bottom line improve.

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Missed opportunities for companies that have yet to implement comprehensive service and asset systems

First of all, these companies are missing an opportunity to demonstrate the value of internal asset management functions. Those functions that are truly critical could be erroneously targeted for outsourcing based upon an incorrect perception of their worth. Another impact is uneven recognition of asset impact among

“Big companies like ours get trapped in our own paradigms, thinking we have the best programs, and we often don’t. There is technology that can make us operate more efficiently and we should use it.”

—Global Semiconductor Supplier

executives—tying assets to services and to the resulting revenue streams. This is about setting asset management priorities based on understanding business impact (revenue, cost containment, legal liabilities etc.).

As mentioned earlier, a mix of different legacy systems hides cost-saving opportunities. The resulting poor availability and access to asset information makes it difficult to make informed business decisions. Overall,

information management will remain a challenge for those firms that do not implement a comprehensive service and asset management system.

Figure 3: Capabilities of Integrated Service and Asset Management Solutions	
Capability	Description
Multiple Asset Classes	Simultaneously handle asset classes such as Production Equipment, Facilities, Fleet, and IT
Asset-Centric Service Management	Service functions coordinated and tightly linked to related assets
Linkage to Enterprise Systems	Ability to easily integrate with mission-critical enterprise software such as ERP and Supply Chain systems.
Relevant Industry Experience and Functions	Implementations in the desired industry as well as functions specific to it.

Comprehensive Asset Management requires more than merely adding an asset-tracking module to an ERP, CRM, or service desk management system. A state-of-the-art solution is completely asset-centric and optimizes both asset utilization and customer service.

Summary

Leading companies are rapidly evolving their approach to service and asset management. Integration of asset and service management changes asset management departments from cost centers into value-added internal service providers, lowering costs while improving performance. In some cases this can further evolve into extending services to offer asset management to other companies, thereby generating additional revenue.

Internal customers benefit from higher service levels at lower costs. Investors see increased profitability and competitiveness based on better return on assets and overall resource utilization.

Management can handle larger and more complex businesses while at the same time improving compliance and reducing incidents.

What leading asset management professionals understand is that integrated asset and service management requires a distinct strategy, program, and tools. The resulting solution comprehensively covers multiple asset classes and service management, integrating this with financial and enterprise systems. Ultimately, new business opportunities can be developed that leverage assets and related services. ◀



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About Harbor Research, Inc.

Harbor Research Inc. has been providing strategic consulting and research services to leaders in communications, computing, control, and content since 1983. The firm has built extended relationships with larger multi-line companies including AT&T, ABB, General Electric, Danaher, Eaton, Emerson, Hewlett Packard, Honeywell, Hughes, IBM, Intel, Invensys, Lucent, Motorola, Rockwell, Siemens, and Texas Instruments, as well as focused growth companies such as EMC, Cadence Design, PRI Automation, Conexant, Qualcomm, SAP, and PTC.t

We also continue to work for a broad array of emergent start-ups and pre-IPO technology ventures. We have built relationships with a number of significant M2M / Pervasive Internet players, including Cimetrics, DataSweep, eDevice, Ember, emWare, Qestra, Wireless Innovation, and Xsilogy, to name a few.

Harbor is organized around emergent and disruptive opportunities in high technology, with a unique focus on the impact of the Pervasive Internet—the use of the Internet to accomplish global device networking that will revolutionize business by unleashing entirely new modes of system optimization, customer relationships, and service delivery.

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