



AberdeenGroup

Capital Asset Life Cycle
Management:
Optimizing Enterprise
Performance through
Better Asset Intelligence

An Executive White Paper

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Capital Asset Life Cycle Management: Optimizing Enterprise Performance through Better Asset Intelligence

Executive Summary

Capital assets include facilities, machinery, information technology (IT) infrastructure, and other major items that form the foundation of any company. Such assets are major items on every corporate balance sheet, driving a company's operational performance and its financial health. In this era of economic uncertainty and financial accountability, a company's success will be dictated largely by how well it utilizes, maintains, finances, and develops its capital assets.

Because of the market volatility in today's business environment and the renewed emphasis on enterprisewide accountability, capital asset portfolio managers must be more accountable for the performance, compliance, and overall effectiveness of corporate facilities and assets.

Unfortunately, asset optimization remains an elusive goal for most enterprises, which must maintain and manage hundreds (if not thousands) of assets at any given time. The chief hindrance to effective asset management: most asset managers lack knowledge of, control over, and visibility into the structure, viability, and location of their company's capital assets.

In general, data on capital assets is dispersed among multiple, disparate systems throughout an enterprise, if it exists at all. Data management challenges continue to frustrate organizations and constrain the optimal use of an enterprise's asset base, resulting in a continuing, growing demand for new solutions that address this growing asset management challenge directly.

Fortunately, with the emergence of more flexible IT solution architectures — component-based Web solutions — organizations now have a much-needed hedge against the growing volatility of today's market. In a Web services environment, individual business components communicate with other components by exchanging messages that are located on the same memory space or distributed across a network. Each component is self-identifying and self-contained and is wrapped with communications, data validation, event handling, and relationship management services. Functions, data, or objects located within one component can be accessed and reused by another. Companies can link these solutions with their other internal processes, as well as those of their trading partners.

This Aberdeen *Executive White Paper* examines the current business environment facing professional capital asset management disciplines and real estate, facility, asset, and project managers as they respond to today's dynamic market and the growing data management challenges related to controlling "asset intelligence." It will introduce the sponsor of this research, TRIRIGA, an enterprise software company that is leading the way in delivering component-based capital asset life cycle

management solutions. TRIRIGA's flexible Web-based facilities and project management solutions help organizations automate, integrate, and manage the full array of Design-through-Operation™ (DTO™) processes, from real estate transactions, through construction and capital improvement, on to facility management and operations. Built on a single Web-based platform that allows users to tailor their solutions to mirror existing processes, TRIRIGA's solutions offer expansive functionality and flexibility for complete capital asset life cycle management.

Data Management and the 21st Century Capital Asset Manager

Capital assets, the lifeblood of industry, consist of mission-critical items, such as real estate, facilities, machinery, computer networks, and other major equipment, and form the infrastructure of any company. Less tangible assets — licenses, contracts, intellectual property, etc. — are also important to many companies, especially in the information age. In most cases, capital assets are second only to labor/human assets as the most costly assets of an organization.

Likewise, capital assets are a major item on every corporate balance sheet and are responsible for driving both operational performance and the financial health of an enterprise. A company's productivity and financial success are largely determined by the development, utilization, maintenance, financing, and retirement of capital assets.

In a June 2003 study of Aberdeen Group's Supply Chain Access community — which includes supply chain, procurement, logistics, asset management, engineering, and finance professionals — 78% of these constituents viewed asset management as very important or critical to their company's overall success¹. Not surprisingly, this research also revealed that enterprise usage of asset management solutions will increase significantly in the next 18 months.

Although the value of asset optimization is clear, the journey to accomplishing this goal will not be easy. Because of their size, complexity, and critical impact on corporate success, capital assets are among the most challenging assets for a company to manage. In controlling and driving optimal performance of capital assets, companies must manage an array of activities, from asset development or acquisition to maintenance and repair, to redeployment and financial management issues. Data — ranging from specifications, warranties, and leases to repair histories, costs, and schedules — must be obtained, maintained, tracked, and shared throughout the asset life cycle and across departmental, project, and geographic borders.

¹ *Got Your Assets Covered?* (Boston: Aberdeen Group, June 2003)

This need for comprehensive capital asset life cycle data management has been clear for many years, but never more so than today. Numerous economic and business drivers prevalent in today’s marketplace continue to boost the demand for more sophisticated and more effective approaches to the management of capital assets’ underlying data.

Market Volatility

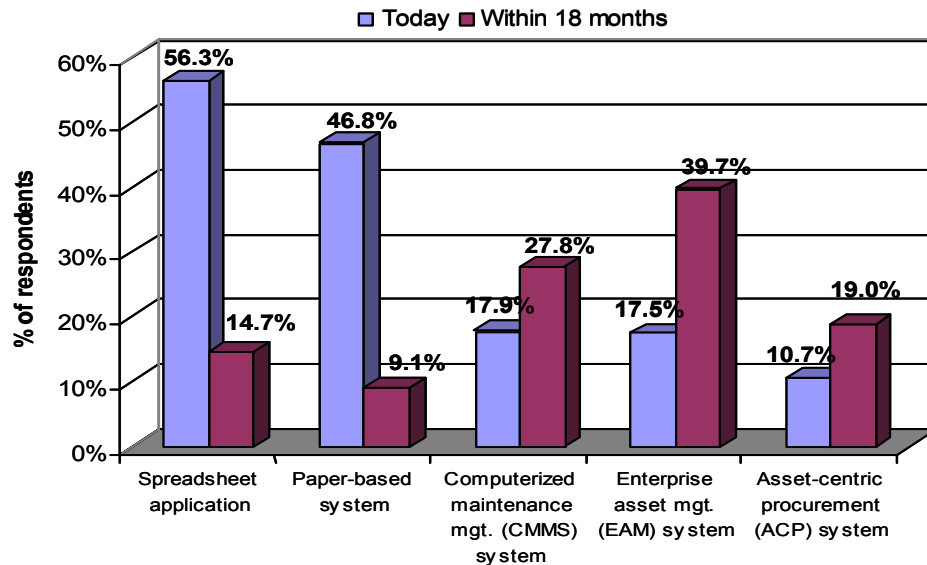
Shifts in economic cycles are more profound than ever before. Such market volatility presents opportunities and constraints that influence the traditional roles of those in capital asset life cycle management. Access to information gives members of an organization’s workforce more freedom of mobility, which in turn makes the workforce more diverse, complex, and geographically dispersed.

Organizations are faced with the need to continually revisit the evolving relationship between assets such as office space and corporate communication networks and remote employees and other staff and consultants who populate an increasingly dynamic mobile workforce.

New Technologies

When controlled effectively, IT innovation can act as a bridge between both new opportunities and accompanying constraints. As new communication systems allow organizations to distribute information more effectively, organizations are forced to revisit the traditional ways that they allocate resources. Figure 1 tracks

Figure 1: Asset Management Tool Usage — 18-Month Outlook



Source: Aberdeen Group, January 2004

the use of asset management tools among enterprises now and within the next 18 months. To drive smart growth strategies, organizations must deploy new information technologies in lockstep with new space planning processes. One planner whom Aberdeen interviewed put it succinctly: "In today's information-driven economy, the workload is increasing, and we must use technology not only to keep up but also to continue moving forward."

Accountability and Increased Regulatory Activity

Increased fiscal and operational accountability, the latest derivative of the information age to affect the day-to-day capital asset life cycle management activities of capital asset managers, represents another layer in the continuing evolution of how the business environment can influence physical changes in the workplace.

The era of accountability will produce even more such legislation. To comply, companies will, in turn, continue to consume asset management-related resources.

Capital assets are a major financial liability that, if not managed properly, can negatively affect a company's financial performance.

Capital assets are a major financial liability that, if not managed properly, can negatively affect a company's financial performance. Financial liability issues have risen to the forefront in recent months with the implementation of the Sarbanes-Oxley Act. Under Sarbanes-Oxley, the Securities Exchange Commission (SEC) is creating rules that make the senior management of publicly traded companies responsible for "establishing and maintaining adequate internal control structure and procedures for financial reporting."

Senior management is also required to certify to the SEC that it has evaluated the effectiveness of the "internal control structure and procedures." They must report any deficiencies in internal controls to the company's audit committee on a "rapid and current basis." These new rules will force CEOs and CFOs (and, by extrapolation, asset managers) to reexamine their asset-tracking systems and policies and to update those systems to more accurately track and account for capital assets.

CFOs and CEOs will be required to sign off on the validity of the financial data and to validate that their companies have appropriate procedures in place for monitoring and tracking this information. Executives convicted of signing off on misleading or inaccurate financial statements will be subject to fines of up to \$5 million and a prison sentence of up to 20 years. Additionally, the Government Accounting Standards Board (GASB) Statement 34 requires cities to essentially inventory and conduct a value assessment of their public works infrastructure. Clearly, those in

capital asset management will be held accountable by senior management to provide the data that delivers this information.

Mergers and Acquisitions

Mergers and acquisitions (M&As) occur during good times and bad in the corporate world. However, the need to accelerate the processes required to unite separate operations into one integrated organization requires companies to optimize their capital asset management practices. In many cases, M&As fail to create expected value in a timely fashion because enterprises fail to adequately manage the consolidation-related processes that are necessary to translate M&A activity into operations that are more effectively unified. The merging companies also typically do not bring respective enterprisewide data to the deal.

It's All About the Data

Crucial to managing these activities is having timely access to information on the location, utilization, vitality, and financial and regulatory requirements of capital assets. Increasingly, those in capital asset management need to view a chief part of their jobs as managers of information, tasked with improving the accuracy and accessibility of mission-critical data.

Facility, asset, and project managers are the developers and keepers of "asset intelligence," and by doing so, they keep their fingers on the pulse of the enterprise. They drive the actions necessary for public and private organizations to manage the increasingly complex interrelation between enterprise assets and the changing business environment.

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From the creation of capital asset-related information from unstructured data until the end of the asset's life cycle, organizations must organize data continuously so that stakeholders can access and create value using this information. At the same time, they need to make sure that key data, facts, and plans about the asset reach the right person at the right time, and in a format that is easily digested by the audience.

Whether or not the job is oriented toward operations or maintenance, one concept rings true throughout the capital asset life cycle. Although information is constantly changing, the end goal remains the same: ensuring that facilities and/or assets are worth more money when an organization parts with them than when it developed/acquired them — or, at least, to ensure that the assets have created the required amount of consumable value by the end of their life cycle.

The Problem: Solving Complex Asset Data Challenges with Limited IT Tools

Aberdeen typically finds that many of today's data management challenges are created by the existence of information silos. These silos are very prevalent in the capital asset management world. Crucial forms and documents, spreadsheets, and databases cannot be efficiently shared because they reside in different applications, off-site storage facilities, hard drives, or even file cabinets.

Unfortunately, the large majority of companies still attempt to consolidate, manage, and analyze this information using basic productivity tools that are, frankly, not up to the task. The June study of Aberdeen's Supply Chain Access members found that 55% use basic spreadsheet applications to manage asset utilization, repair, and maintenance. Although these applications allow users to manually input and track basic information, they do not provide effective data analysis tools, thus limiting data visibility, trend identification, and analysis, as well as effective cost tracking and management.

Early attempts by organizations to synthesize asset data using IT-based automation have often increased the difficulty of accessing the data required for more effective capital asset management.

Nearly 40% of respondents to the Aberdeen survey said their companies share capital asset information by sharing paper reports. Such rudimentary data tracking, reporting, and sharing severely limit a firm's ability to understand and analyze the operational and financial performance and risk of its capital assets.

Early attempts by organizations to synthesize asset data using IT-based automation have often increased the difficulty of accessing the data required for more effective capital asset management. Witness the proliferation of multiple, disparate enterprise resource planning (ERP) systems within many large enterprises today. Even companies that have "standardized" on an ERP system from a single vendor have often customized each instance of this system to the unique requirements and structures of individual locations or separate business divisions. As a result, although data is contained within systems from a single vendor, this information is structured and accessed differently across different sites, limiting an organization's ability to access and share data across the complete capital asset life cycle.

Efforts to better structure and organize capital asset data represent a good starting point to address this challenge. However, most organizations understand that a truly holistic solution requires more than simply collecting and aggregating data files into a shared digital folder.

“We Need More Than a Smart Manager Walking Around the Floor”

In many cases, capital asset life cycle management still involves predominantly manual processes — practices that are typically supported by the aforementioned silos of data stored in spreadsheets and paper ledgers. These manual processes, coupled with organizational and global silos, create even more silos. To optimize these inefficient processes, companies are implementing innovative technologies that offer a more end-to-end approach to data management challenges throughout the life cycle. Aberdeen predicts that the new requirements for corporate governance and financial accountability will encourage executives to take an even stronger interest in capital asset life cycle management solutions.

Utilizing IT to Optimize Capital Asset Management Disciplines

Aberdeen has identified the following practices that organizations should set in place as they leverage IT innovations to optimize existing business processes:

1. *Streamline and automate lease management processes across the enterprise.* Capital assets are spread throughout an enterprise, and there must be new processes that optimize the management of these assets across increasingly diverse and geographically distributed projects, departments, and locations. By eliminating enterprisewide “information barriers” that constrain access to, or degrade the distribution of, asset-specific information, organizations can overcome significant time and cost constraints.
2. *Automate traditionally manual processes to keep projects on time and on budget.* The distribution of asset-related data, requests for information, change orders, and other capital asset management-related data has been a traditionally paperbound process, dependent on file cabinets, faxes, and repeated phone calls. This process is plagued not only by delays and errors but also by redundant activities that sap company-wide productivity. New technology platforms that offer all stakeholders access to locally relevant data in a uniform fashion can help reduce project-related delays and cost overruns, especially when coupled with a corporatewide willingness to transform existing asset management practices.
3. *Manage and track changes in the asset portfolio to minimize risks.* The present call for greater enterprisewide accountability has directed renewed attention to the need to track data flows at a more granular level than ever before, causing organizations to focus more sharply on traditionally low-profile operations such as facilities management and maintenance. Although the capture, organization, and analysis of data helps organizations optimize their business processes, today a growing num-

ber of organizations are also heeding the call for tighter data management as a way to mitigate regulatory and financial risk. A singular solution for complete capital asset management allows for centralized control and improved data integrity.

4. *Centrally manage and control project budgets, schedules, participants, and data.* Every department is affected by and effects change on an organization's capital assets. Only by centrally managing asset-related budgets, schedules, participants, and so on can organizations gain a clear, real-time understanding of their assets and the management strategies needed to optimize their utilization and value over time.
5. *Understand the influence that workflows have on process optimization.* During the interview process in support of an Aberdeen white paper, *Quantifying the Vision: Building the Case for Project Collaboration in the Construction Industry* (December 2002), a recurring theme emerged: a customizable workflow engine is the key functionality to seek from any project management-related solution. Reductions in a range of project management cycle times routinely numbered between 30% and 50%. Workflows can also play a key role in improving the effectiveness of a capital asset life cycle management solution. In general terms, a flexible workflow engine provides the following benefits:
 - Automation of manual processes typically associated with common business transactions
 - Escalation of tasks or reviews to role-based destinations in order to accelerate process cycle times
 - Reduction of time spent looking for data sources and/or documents required to complete specific tasks
 - Elimination of errors inherent to traditional multiple data handoffs
 - The ability to monitor the performance of relevant processes and related tasks and personnel
 - The provision of automated procedural guidelines in an orderly and timely process
 - "At bat" inbox techniques that allow responsible parties to quickly assess items requiring action
6. *Extend application functionality to stakeholders via the Web.* By providing access to a workflow-driven capital asset data repository via the Web, organizations can maintain highly synchronized global operations by enabling any authorized stakeholder to utilize the asset management applications from anywhere, at anytime, and from any time zone.

Component-Based Web Services Architectures

Adopting a component-based asset life cycle management solution can allow companies to overcome the catch-22 that has plagued the IT world for decades: how to access best in class, business-process-specific application functionality without being overburdened with integration challenges and costs.

Caught Between a Rock and a Hard Place: Best of Breed vs the Integrated Suite

Under intense pressure to increase the velocity of project design, construction, and facility management cycles, the large majority of IT managers who support professionals throughout the capital asset management life cycle have been forced to deal with the following trade-off between two extremes: best of breed and the integrated suite.

The best-of-breed approach has organizations aggressively pursuing IT strategies designed to deploy the best capital asset life cycle management business processes available to optimize operations. This approach usually demands accessing best-in-class application functionality from multiple vendors and then having to contend with the need for systems integration. Best-of-breed suppliers offer process-specific applications that generally lead in the areas of time-to-market and functionality breadth and depth, especially where vertical industry-specific processes are concerned.

However, there is a downside to this strategy. Enterprises that have deployed best-in-class applications from multiple vendors have generally experienced significant integration costs primarily because line-of-business managers make purchases with little thought about the fit between the new application technology and existing IT infrastructure. The process of maintaining and upgrading integrated application suites is typically time-consuming and costly. Because these suite applications are highly engineered and intricately intertwined, even minor upgrades can be major events that require major planning efforts and significant IT staffing resources.

A second approach — to standardize on a single vendor's application suite and settle for process functionality that lags the market both in sophistication and availability — is more cautious. Typically, enterprises would select a fully integrated application suite from a single vendor, acknowledging that implementation delays and integration costs can negate much of the potential upside associated with best-of-breed strategies. Proponents of the single-vendor suite approach are primarily motivated by cost and risk avoidance, believing that delivered integration and a single set of IT skills outweigh trade-offs in the timing, breadth, and depth of business process functionality.

Aberdeen research suggests that vendor-based standardization is often short-sighted, especially in companies that must manage large capital asset portfolios. Generally, a single application suite rarely meets 100% of a company's functionality

requirements. In addition, despite vendor claims to the contrary, large application suites can turn out to be quite difficult — and expensive — to implement and support. Industry research indicates that an ERP implementation requires an extremely high ratio of consulting services to software license fees, somewhere between 5 to 1 and 10 to 1. Although this might be a configuration expense rather than integration cost, it is an IT management burden made worse by the specialized, vendor-specific IT skills that are required to execute it and to support it.

Understanding these two trade-offs, and balancing them successfully, requires planning and commitment. In a worst-case scenario, companies careen from one policy to the other. In a best-case scenario, companies move forward and consider another approach: the component-based architecture.

A Better Approach: Component-Based Web Services Architectures

Aberdeen's research suggests that an enterprise can defuse the functionality-versus-integration debate by pursuing a technology framework in which all applications adhere to common standards. In a Web services environment, individual business components communicate with other components by exchanging messages that are located on the same memory space or distributed across a network. Each component is self-identifying and self-contained and is wrapped with communications, data validation, event-handling, and relationship management services.

Functions, data, or objects located within one component can be accessed and reused by another, provided they speak the "same language." Components share a common dictionary that serves as a foundation for this shared language. In IT parlance, they adhere to similar messaging standards and to similar means of invoking their methods or support interoperability through two-way bridges.

For IT managers, Web-services-based componentization also enhances a platform's ability to extend or modify certain business functionality without disrupting the rest of the application's data structures and process workflows. By eliminating direct interaction with data elements, component-based solutions make it easier for companies to link with their other internal processes, as well as those of their trading partners.

For capital asset managers, component-based capital asset life cycle solutions improve asset utilization, performance, and reuse; streamline budgeting and planning; boost equipment uptime while also providing faster repair cycles; increase inventory turns and reduce stock-outs; and increase overall profitability. By using a standards-based architecture, companies can more effectively meet rapidly changing business requirements caused by growth, process changes, and mergers and acquisitions.

An object-oriented capital asset life cycle solution can:

- Speed time-to-deployment of new application functionality
- Quickly develop and maintain business processes that support an evolving workforce and the workplace in which they perform
- Balance the cost and complexity of IT solutions effectively

A leading provider of component-based capital asset life cycle management solutions is TRIRIGA, the sponsor of this research initiative.

TRIRIGA Builds a New Platform for Capital Asset Life Cycle Management

TRIRIGA is an enterprise software company that provides Web-based facilities and project management solutions. These solutions automate, integrate, and manage the full array of Design-through-Operation (DTO) processes, from real estate transactions through construction and capital improvement, on to facility management and operations. Built on the TRIRIGA Intelligent Business System® platform, an object-oriented, Web-based platform, TRIRIGA's applications provide a complete capital asset life cycle management solution with the flexibility, accessibility, and scalability of a component-based solution.

The Company

TRIRIGA emerged from Marnell Corrao Associates (MCA). Started in 1976, MCA has become one of the preeminent design-build firms in the United States specializing in the hotel, resort, and casino industries. An impressive number of clients have entrusted MCA with designing and/or building some of the most acclaimed, challenging, and recognized buildings in the United States. A few of the most notable projects include the Bellagio, Mirage Hotel, New York-New York, Rio Suite Hotel & Casino, Treasure Island, Borgata Resort, and Caesar's Palace Forum Shops. Additionally, the founders of TRIRIGA owned and operated RIO Suite Hotel & Casino, as well as Class A office space.

The firm's owner/operator experience in addition to large-scale design and construction projects directed its management's attentions to the need for an end-to-end technology solution that would combine all aspects of the creation, renovation, operation, and maintenance processes into an automated system that would streamline information flow and companywide communications.

In 2000, TRIRIGA was formed to deliver on this end-to-end vision. The industry experts and technical leaders that constitute TRIRIGA's management team created a project management solution that can address the diverse design and construction needs of owners and contractors. TRIRIGA's Projects™ is a powerful Web-based solution that enables organizations throughout the design-build space to

centralize, automate, and streamline processes from program and project development through design and construction management.

Incorporating the latest technological advances, Projects was built on the TRIRIGA Intelligent Business System (IBS) platform, a state-of-the-art three-tiered Web platform. Users can control and personalize data structure, business processes, and presentation through an easy-to-use GUI. Everything from workflows to field names can be configured to fit a company's existing processes. The platform provides nontechnical business personnel with the ability to change the business rules, logic, and display of enterprise software without requiring software code developers.

In August 2002, TRIRIGA took the next logical step: applying its knowledge and technology to the complete building life cycle through a facilities management system. TRIRIGA purchased the proven industry-leading FacilityCenter® facilities management product line from Peregrine Systems, Inc. Most of FacilityCenter's leadership, development, quality assurance, engineering, professional services, and support personnel came with the acquisition as well.

Immediately after the purchase, TRIRIGA began working to move the functionality contained within these solutions, functionality that had been built and tested over 15 years, to the TRIRIGA IBS Platform. In January 2003, TRIRIGA released FacilityCenter 8i, the first tailorable Web-based solution available to the facilities management industry, while continuing to support and expand the FacilityCenter client/server solution.

Interviews with users of FacilityCenter revealed that a degree of initial skepticism existed about the future commitment to the client/server platform — especially as TRIRIGA poured significant resources into developing its new platform — but those fears have subsided.

TRIRIGA's DTO solution combines FacilityCenter and Projects 8i applications into one solution built on the same IBS Platform. The solution was designed for the complete capital asset life cycle — from construction and capital improvement to facilities, real estate, and maintenance management. By doing so, the company offers capital asset managers a solution that addresses the capital asset life cycle requirements established above.

Although the company can be expected to encourage its 700-plus strong user base (including many Fortune 500 companies) to migrate to the new platform, it acknowledges that some customers will not migrate to the component-based platform. In fact, most TRIRIGA customers continue to utilize the FacilityCenter 7.x series and can be expected to embrace 7.4, which will include significant new functionality.

Given TRIRIGA's refreshing candor and its demonstrated commitment to its customer base, it is no surprise to learn that it is financially healthy. TRIRIGA is also one of the better capitalized companies in the capital asset life cycle industry — not surprising, given its heritage and proven commitment from its parent company, Marnell Corrao Associates. As a result, the company has grown rapidly, having boosted its headcount significantly in 2003.

TRIRIGA FacilityCenter and Projects 8i

TRIRIGA has breathed new life into FacilityCenter. In the words of one customer that Aberdeen interviewed, "TRIRIGA has done more with this software in the last six months than Peregrine had done in the last three years."

In addition to its commitment to continue enhancing the existing client-server based FacilityCenter suite, TRIRIGA has introduced Projects 8i and its new version of FacilityCenter, FacilityCenter 8i. Both solutions were developed on the component-based TRIRIGA Intelligent Business System platform. The component-based architecture is enabling TRIRIGA's installed base to integrate with other systems (including PeopleSoft, Oracle Financials, and other ERP solutions as well as mobile computing platforms) during the initial project implementation, which is significant because with other products this integration can often be deferred repeatedly owing to complexity and budget constraints.

Accessible via a Web browser, the new solutions provide a central source for capital-asset-related data and documents, such as real estate lease transactions; floor plans for space allocation; project schedules and design reviews; finance and project cost data; asset specifications and warranty documents; and other crucial information that drives the execution of business process flows throughout the capital asset life cycle. This repository serves as a digital system of record that offers organizations a single version of the truth.

Projects 8i

As the global business environment becomes increasingly project focused, Projects 8i is attracting solid demand among both Fortune 500 companies and institutional IT buyers. As new TRIRIGA customers embrace 8i and more existing customers migrate from the client/server-based 7.x series to the component-based Web services architecture of 8i, the prepackaged integration between Projects 8i and FacilityCenter 8i will offer them a more flexible capital asset life cycle management infrastructure.

Advanced functionality within Projects 8i and FacilityCenter 8i includes the following:

- A flexible workflow engine

- Configurable “C-level dashboard” functionality spanning project development through project delivery
- Program and project development
- Design management
- Risk management
- Cost management
- Change management
- Schedule management
- Document management

Aberdeen Conclusions

The call for greater corporate performance and accountability is clear. Stakeholders are demanding that companies deploy new practices designed specifically to meet these objectives. The push to meet this requirement is defining the most recent epoch of the information age.

Whether because of the stakeholder call for better performance and greater accountability or simply owing to smart management, TRIRIGA appears to have institutionalized a lesson that many larger software suppliers are still struggling to learn — listening to the customer makes a lot of sense these days.

The users of TRIRIGA’s software — designers, facility planners, and other capital asset managers — tend to be very straightforward about their respective needs. In the past 18 months, those needs have included both better solutions documentation and better designed training. TRIRIGA has responded by improving on both fronts. By doing so in a timely fashion, the company appears to realize another lesson that still eludes others in the software industry — understanding one’s weaknesses is often the key to gaining a better understanding of one’s strengths.

One of these strengths is TRIRIGA’s new component-based platform, which has already garnered a lot of attention among its more innovative customer segments. Yet the new platform could also be considered a weakness of sorts in that its state-of-the-art design offers TRIRIGA an opportunity to become much more than a supplier of real estate, facilities, operations, maintenance, and facilities and project management solutions. As TRIRIGA’s CTO explained, “At the core, we care most about managing our customer’s data and building workflow-driven repositories of common data that are secure yet easily accessible over the Web.”

TRIRIGA has built its reputation as a facilities and project management software company, and now its new open standards platform offers it a bigger opportunity. However, the company appears to understand that losing its current focus on ena-

bling more effective capital asset life cycle processes is a potential weakness. This awareness should provide TRIRIGA with the necessary management fortitude to stay the present course.

When the current phase of ERP consolidation shakes out, the survivors will be looking for new markets. Much in the same way that ERP suppliers have integrated human capital management application functionality into their solution sets, this focus will likely widen to include capital asset life cycle. This eventual development will offer TRIRIGA opportunities and challenges.

It must be stressed that TRIRIGA would be wise to stay its present course. The company appears to have earned the trust and loyalty of a customer base populated with both Fortune 500 companies and many in the government sector. New Fortune 500 and industry-leading organizations continue to be drawn to TRIRIGA's innovative solutions. As government institutions at the local, state, and federal levels increasingly embrace IT innovations such as those represented by the company's new platform, this segment will position TRIRIGA for a period of solid growth opportunities. It may also attract other IT suppliers that have, to date, missed an opportunity to build relationships with municipalities.

TRIRIGA customers whom Aberdeen interviewed appreciate the software company's investment in their organizations. TRIRIGA's directors and senior management team are experienced in the business processes that its software has been designed to make more efficient, and its technology team has a strong understanding of the direction in which its research and development must evolve. Thus, the entire management team is well grounded in the new realities of enterprise software, where customer-centricity and a dedication to open standards and Web services will continue to be key drivers of success for both IT suppliers and end-users.

To provide us with your feedback on this research, please go to www.aberdeen.com/feedback.

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Based on a comprehensive analytical framework, Aberdeen provides fresh insights into the future of computing and networking and the implications for users and the industry.

Aberdeen Group performs projects for a select group of domestic and international clients requiring strategic and tactical advice and hard answers on how to manage computer and communications technology. This document is the result of research performed by Aberdeen Group that was underwritten by TRIRIGA. Aberdeen Group believes its findings are objective and represent the best analysis available at the time of publication.