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## Gaining Business Value from Enterprise Architecture

### Enterprise Architecture is Key to Efficiency for U.S. Maritime Administration

When the U.S. Department of Transportation's Maritime Administration began planning operations and IT needs for the future, it determined that improvements in efficiency, technology, agency processes, and information sharing could provide significant benefits to constituents. Agency officials concluded that enterprise architecture was the first step to efficient operations. By accurately documenting processes and assets in a way that could easily be updated or changed as the agency mission evolved, the Maritime Administration could optimize its use of IT, meet new regulatory requirements, and share vital information. The agency turned to MEGA International to help deploy a comprehensive enterprise architecture that has provided immediate and long-term benefits.



### MARAD Manages Diverse Maritime Issues

The Maritime Administration (MARAD) improves and strengthens the marine transportation system to meet the country's economic and security needs. It focuses on port development, intermodal water and land transportation, environmental activities, maritime security, and support of the shipbuilding industry. MARAD operates the U.S. Merchant Marine Academy to educate young men and women for service in the American merchant marine, the U.S. armed forces, and in the nation's marine transportation system, and provides financial assistance to six state maritime academies. MARAD's diverse activities range from deepwater port licensing to inland waterways research to cargo handling programs, and more.

### Efficient and Updated IT Solutions Required for Agency

With MARAD's primary goals focused on commercial mobility, national security, the environment, and organizational excellence, the agency's activities evolve from year-to-year, and agency processes, job functions, and IT requirements also change. MARAD recently took a hard look at its extensive, complex IT systems.

"We concluded that the optimal way to improve our information systems and better fulfill our mission



was to deploy a comprehensive enterprise architecture solution,” explained Donna Seymour, CIO at MARAD. “We wanted to take advantage of the business value enterprise architecture provides, so that we would spend our money as wisely as possible by reusing investments to the greatest extent feasible while better positioning ourselves to provide future vital services.”

Because of the need for complete documentation of processes, policies, and activities, the EA Project would leverage existing and planned IT assets to enhance agency operations and provide a means to discover, understand, align, and control vital information across the agency.

## MEGA International is Choice for MARAD’s Enterprise Architecture Solution

The agency quickly established the criteria for the EA solution: data repository, secure model (many users, access), modeling tools, simulation, flexibility, and multiple and flexible access to data in the repository. MARAD evaluated potential solutions from various vendors.

“MEGA International was selected because it comprehensively addressed MARAD’s needs and provided the best value,” noted Jason Kruse, Stanley Associates, who supported MARAD’s IT management on this project. The MEGA Modeling Suite, the industry’s leading and most comprehensive EA software, helps organizations analyze and plan their business so they can react to changes quickly and anticipate trends in their markets. The software modules provide a complete view of the processes of the organization, and the technology that supports it. It helps companies understand the effects of change before implementation, and reduces unknowns, delays, and costs.

## Enterprise Architecture Solution Designed to Meet Diverse Needs

From the broader aim of increasing functionality, gaining efficiency, and reducing the complexity and size of the IT environment, the agency established three strategic goals for the EA initiative with MEGA International:

- implement a new organization in accordance with competitive sourcing requirements (OMB Circular A-76);
- comply with A-123 internal auditing regulations stipulated by the Office of Management and Budget (OMB); and
- implement standard processes and procedures across all IT systems.

First, the EA program would enable MARAD’s new Administrative Services Organization (ASO) to meet the federal government’s policy (OMB Circular A-76: determine whether recurring commercial activities are best provided by the private sector, government employees, or by another agency, with efficiency and cost reduction as the goals). Because the ASO was selected as the “most efficient organization”, it had to quickly map out the business processes it was responsible for, in addition to identifying areas where IT could better support its mission. The effort yielded standard operating procedures that were quickly implemented throughout the organization to standardize service delivery across a diverse customer group.

Second, it was important to insure full compliance with requirements (OMB Circular A-123) for internal control and financial reporting. The federal requirements were established after passage of the Sarbanes-Oxley Act, and were similar to those contained in Section 404 of Sarbanes-Oxley. Agencies were meeting these reporting requirements by automating procedures to document and test internal



controls and correct deficiencies and weaknesses. With the ASO already planning to model business processes, adding internal controls scope to the EA initiative through the MEGA Modeling Suite was easy.

Last, and certainly most expansive, the agency would ensure a uniform process and standards for delivering IT services, while capturing configuration of hardware and software throughout the agency, eliminating redundancies, as well as identifying software and data incompatibilities.

## MEGA Modeling Suite Delivers Knowledge and Efficiency

Initially, the MEGA Modeling Suite was deployed to model the job-level processes of the ASO. This new and detailed information identified how IT could better support the agency's missions and paved the way for a realignment to bring more efficiency.

MARAD deployed several modules of the MEGA Modeling Suite: MEGA Process for business architecture modeling, MEGA Architecture for the IT architecture modeling, MEGA Designer for data and workflow modeling, and MEGA Publisher for Word and HTML output customization. A pilot program utilized the MEGA Governance, Risk, and Compliance (GRC) Suite. (See sidebar.)

### MARAD Explores Governance, Risk, Compliance Challenges

MARAD wanted to better manage compliance with its policies, but gained so much more along the way. On the way to understanding and managing compliance, MARAD discovered risk management and control measurement. These issues, with the A-123 internal auditing regulations as the main focus, became the foundation of a pilot program that MARAD conducted with MEGA International's Governance, Risk, and Compliance (GRC) Suite.

The MEGA GRC Suite is a comprehensive enterprise-wide solution for corporate governance that meets multiple risk management and compliance needs. With GRC, organizations can manage compliance with internal policies and external regulatory requirements, using a central hub to communicate and measure risk across the entire enterprise.

First, MARAD's program goals and methodology were defined. Then, through modeling using the MEGA Modeling Suite, MARAD identified 50 sub-requirements of the A-123 regulation for Time-keeping and Acquisition, the two business processes chosen for the project. The team measured and assessed the risks, which were identified in terms of typology, frequency, and impact on the organization. Risk mitigation began by defining the treatment for operational risks, control levels, and execution

methods.

The pilot program helped MARAD understand the complexity of the A-123 regulations and convert them into controls that could be implemented. Throughout the pilot program, MARAD benefited from having business process descriptions already completed for the EA Project, saving considerable time and money on the GRC pilot program.

MARAD's pilot will provide an important advantage for other government agencies also: the A-123 requirements defined in MEGA International's regulatory framework are reusable throughout all government projects, which will shorten the discovery and early project phases on future agency-related projects. During the MARAD pilot, MEGA International created a reusable template that shows how to define a regulatory framework and provides very concrete examples on how to go about doing it. This will catapult related efforts throughout the federal government.



## The Data Repository: The Linchpin of Enterprise Architecture

To quickly realize the benefits from the MEGA Modeling Suite, the agency began by collecting existing information related to the IT system: strategic plans; technical inventories; budget documents; project plans; program documentation, configuration and build documents, test plans, QA data, network operations reports, configuration management; and more. This was easy on stakeholders and provided great insight to the EA team for next steps.

While all of this information was previously available, it was in a variety of static formats, such as Visio diagrams, PowerPoint presentations, binders, Word documents, or models that were developed using outdated methods. Moving this information into the MEGA data repository provides a consistent method to store, link, and manage MARAD's information and presents a governance process for the agency. "Data that is complete, integrated and up-to-date helps managers make good business decisions", Seymour said. MEGA International provides usable outputs across the agency.

"The existing artifacts – everything necessary to make good decisions – were used to launch our EA initiative," added Seymour. "By having these elements in the MEGA data repository, information is available in a format that is easily updated and shared throughout the organization. The MEGA Modeling Suite's graphical interface really helped us show our clients what we were doing for them."

The repository enables team collaboration, up-to-date documentation, impact analysis, and scalability. Agency information was put into a dynamic format that is easily changed, updated, expanded, and communicated throughout the organization to all stakeholders.

## MARAD Initiates EA Website to Share Information

MARAD established an Intranet Website to provide team members with access to the MEGA data repository. The projects (status, services, technological level, etc.) are listed within the dynamic database, which can generate documentation on the fly.

"As soon as a new employee arrives, we have the documentation that describes everything that he/she is supposed to do. Everything is documented within the single data repository and updated inside the model so that all agency information is absolutely current," Seymour pointed out. "Also, the documentation allows our users to validate their data with the hundreds of outside companies and government agencies that MARAD works with every year."

## Maritime Agency Benefits from Enterprise Architecture Program

Seymour explained how the EA initiative helped meet their initial goals.

"With our use of the MEGA Modeling Suite for EA, we are making sure the investments being funded are aligned with business and provide advances over existing IT solutions.

We are reusing investments and reducing our workload. We are providing services that are actually needed because we can identify where the need originated, so that the business is driving the services being developed. And, finally, we are furthering the mission and goals of the agency by modeling the business, identifying what is automated and what isn't, defining the gaps, and "understanding the value of filling the gaps in relationship to our mission and goals so that we can intelligently prioritize our work," explained Seymour.

A fully deployed EA initiative helps organizations firmly establish and understand missions and objec-



tives so that every part of the enterprise works toward the same goals. It also supports enterprise efforts to derive the maximum value from IT by providing precise information about how software applications are used, where duplications may exist, how operations costs may be reduced, and whether proposed IT investments are necessary and will provide advantages over existing IT systems.

MARAD has found that the EA project completed with MEGA International provides ongoing, daily benefits in helping the agency operate efficiently and serve its constituents, and improve the nation's marine transportation system.

## MEGA Offering

MEGA International is a global leader in enterprise architecture, offering solutions to improve company performance and ensure regulatory compliance. The company provides executives with the ability to understand, discover, align, and control information at the enterprise level through its prominent modeling software, proven methods, and expert consulting in business process analysis, operational risk management and IT alignment.

MEGA International helps executives establish the Enterprise Architecture approach necessary to manage enterprise information in a consistent way. Based on an Enterprise Repository that encompasses both business and IT architecture views, using a powerful modeling suite, MEGA Consultants provide a simple and powerful Enterprise Architecture solution to any project for driving change within your organization.