

CAPITAL PROJECTS:

CASE STUDY

INFORMATION STRATEGY SUPPORTS COAST GUARD MODERNIZATION

● INDUSTRY
Government

● COUNTRY
United States

ISSUE

The Coast Guard's Shore Infrastructure Logistics Command required realignment of information-centric processes, procedures, and application portfolio to support information requirements

SERVICES DELIVERED

- Strategic Planning
- Current State Analysis
- Program Assessment and Roadmap
- Program Design and Implementation
- Data Quality
- Master Data Management

As a result of the 9/11 attacks in New York, the mission of the United States Coast Guard expanded significantly. This expansion necessitated a rapid modernization effort to its command structure, support systems, and business practices to ensure that it could continue to fulfill its traditional missions of maritime safety, search and rescue, and drug interdiction, while addressing emerging requirements such as maritime defense and port security.

In order to meet urgent priorities focused on defense and security, efforts to address support systems and business practices first focused on Coast Guard operational arms including the Surface and Aviation Forces Logistics Commands. When these efforts were substantially in place, focus shifted to mission support activities and delivery systems in support of modernizing its \$14B portfolio of shore-based assets through the stand-up of twelve "Product and Asset Lines" such as base facilities, personnel housing, and training centers. Standardizing and integrating these activities and systems would improve the Coast Guard's ability to support and fulfill its core missions, better maintain and utilize shore infrastructure assets, and apply its limited acquisition and maintenance funds most effectively.

In order to manage these assets effectively, a fundamental understanding of their inventories, current and future needs, physical conditions, ongoing costs, and maintenance requirements was required before substantive modernization efforts could proceed. Gaining this understanding would require a combination of facilities-related subject matter expertise and the ability to analyze, interpret, and synthesize information from a wide variety of Coast Guard personnel, systems, and data repositories.

The Coast Guard turned to Access Sciences, and our partner Cardno GS, to address this gap by applying both facilities and asset management experience, and the ability to leverage this experience to analyze and assess supporting information systems and repositories.

THE SOLUTION

- ☑ Strategy to realign information-centric processes, procedures, and application portfolio to support the restructured organization's information requirements
- ☑ Identified specific initiatives for improvements to the applications that support shore infrastructure assets
- ☑ Developed a Data Dictionary with more than 650 unique fields that catalog information required to support key business processes.

THE BENEFIT

The Coast Guard now possesses the information necessary to design, stand up, and operate its modernized asset management program

OUR APPROACH

Access Sciences personnel combined with Coast Guard resources to interview representatives from more than 25 units across the spectrum of shore-based Coast Guard operations. To take advantage of the successes of the previously addressed operational arms, we spoke with program managers and key data users from the Surface and Aviation Forces Logistics Commands. To ensure that we included a wide cross section of shore-based facilities and experiences, we visited a variety of Coast Guard assets across the U.S. including operational bases, office buildings, training centers, and even the Coast Guard Academy. Finally, our team spent time with the Coast Guard's IT support services group.

These activities led to development of an Information Management Strategy (IMS) and associated Data Dictionary. The strategy identified all shore infrastructure-related business requirements, business processes, specific data elements required by those processes, and industry standard classification schemes applicable to those processes. Our team then conducted a comprehensive analysis of the Coast Guard's shore infrastructure-related current (and planned) information systems and data repositories for their ability to support business processes requirements. Our job was to distill this mountain of data to identify the information needed to support shore-based assets.

As a result of this effort, our team:

Developed a strategy and program roadmap to realign information-centric processes, procedures, and the supporting application portfolio to support the restructured organization's information requirements.

Identified specific initiatives for improvements to the applications that support shore infrastructure assets including Maximo (asset / facility management), Oracle Financial Assets, GIS (ESRI), Adept (document management), and Building Information Models (BIM).

Developed a Data Dictionary with more than 650 unique fields that catalog information required to support key business processes. In addition to data field identification, this effort included data quality analysis to determine the provenance, accuracy, refresh frequency, and QA processes for each field; data deduplication to identify the single source of truth for fields that held similar data; and identification of gaps where needed data did not exist.

THE OUTCOME

Access Sciences provided strategic direction, an actionable program roadmap, and detailed information about data requirements for transforming the Coast Guard's systems and processes to support modernization of its \$14B portfolio of shore-based assets. With the completion of this foundational initiative, the Coast Guard possessed the information necessary to design and stand up its modernized asset management program.