

CMS Data Management and Data Governance

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08/24/2023 – CMS - Health Insurance Marketplace (HIM) and Financial Management Operational Analytics (FMOA) - Request for Quote (RFQ) # 230314; Volume I – Technical Quote

Appendix B Past Performance

HHSM-500-2017-000451 Data Management and Data Governance (DMDG II)	Aaron Blackshire 410-786-8204 aaron.blackshire@cms.hhs.gov	\$4,499,661.97	09/02/22 - 09/01/24	RELI is supporting CPI by providing DEVOPS support services in customization, deployment, maintenance and operational support of the ERWIN commercial off-the shelf (COTS) Metadata Management and Data Governance software solutions, ERWIN Data Intelligence (DI) and Business User Portal (BUP), as well as share responsibility for the corresponding infrastructure necessary to support this tool suite.	Y - RELI provides maintenance and operational support for the ERWIN tools suite and ensures data policy enforcement. We utilize data warehouses and analytic / business intelligence (BI) tools (e.g., SAS, IBM Cognos, Quick Sight, Databricks).	Quality: Very Good Schedule: Satisfactory Management: Satisfactory Regulatory Compliance: Satisfactory
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04/14/2023 - Centers for Medicare & Medicaid Services (CMS) Chronic Conditions Warehouse (CCW) Virtual Research Data Center (VRDC)

2. Describe your knowledge and experience with database development.

Metadata Management & Data Governance (DM/DG) COTS Software Maintenance and Support Services	
Contract Name	CMS Metadata Management & Data Governance (DM/DG) COTS Software Maintenance and Support Services
Contract #	75FCMC22F0005
Contracting Organization	Centers for Medicare & Medicaid Services (CMS)
Funding Amount	\$4,499,661.97
Prime Contractor	RELI Group, Inc.
<p>Highlights of our work: RELI provides customization, deployment, maintenance, and operational support of the Erwin commercial-off-the-shelf (COTS) tool suite as part of our CMS Center for Program Integrity (CPI) DM/DG COTS contract. RELI provides maintenance and operational support for the Erwin tools suite and ensures data policy enforcement. Our team provides database support by allocating system storage and planning storage requirements for the database system, modifying the database structure, enrolling users and maintaining system security, monitoring and optimizing the performance of the database, and planning for backup and recovery of database information.</p>	
<p>Detailed Description of Services:</p> <ul style="list-style-type: none"> ■ DMDG was developed to leverage a COTS software package called Erwin Data Intelligence (DI) Suite. The software package allows roles defined by CMS such as Data Stewards, Data Reviewers, and Data Maintainers to identify, scan and validate metadata to build a data lineage map throughout various CPI systems, providing a combined “view” of CPI system data. ■ RELI develops and maintains a Change Control process to include a comprehensive data catalog to alleviate challenges in data management and consumption in CPI data ecosystem. We utilize Erwin DI to facilitate the discovery, access, comprehension, and analysis of each application data. ■ RELI works with multiple tools, including general open-source tools stored in the Erwin DI metadata repository capable of providing general and ad-hoc reports. The Erwin Web Portal provides reporting capabilities and allows reports to be easily reused. DMDG defines, ingests, secures, and maintains CPI database metadata. 	

18. Describe your experience training users on how to use a virtual analytic environment and its various components, plus any data training you have done.

Highlights of our work: RELI provides customization, deployment, maintenance, and operational support of the erwin commercial-off-the-shelf (COTS) tool suite as part of our CMS Center for Program

Integrity (CPI) DM/DG COTS contract. RELI provides maintenance and operational support for the erwin tools suite and ensures data policy enforcement. Our team provides database support by allocating system storage and planning storage requirements for the database system, modifying the database structure, enrolling users and maintaining system security, monitoring and optimizing the performance of the database, and planning for backup and recovery of database information.

Detailed Description of Services:

- We embedded training throughout the DMDG project lifecycle. We train end users through webinar on a routine basis for new users added to the system and refreshment training to existing users.
- We also develop and implement a Knowledge Management system to serve as the repository of information for all help desk activities.
- Our team produces training materials such as user guides, videos, and recorded webinars and provide training sessions to support each software release. We also coordinate UAT with stakeholders to obtain feedback for refinement of training materials.

07/08/2022 - Help Desk/Service Desk Capability Statement

Data Management and Data Governance (DMDG) - RELI has established a Help Desk utilizing the ServiceNow (SNOW) for the DMDG system to help users onboard and ensure overall customer satisfaction. Stakeholders request application support through using the Incident Management application in SNOW. These requests are monitored and tracked to provide oversight of the support being provided. Working closely with the business and operations teams, our support team is responsible for providing guidance on utilizing the current and future features of SNOW and integrating the desired features into the supported applications.

Previous Writeup:

Data Management and Data Governance (DMDG)	
Client	CMS Center for Program Integrity
Contract Name	CMS Metadata Management & Data Governance (DM/DG) COTS Software Maintenance and Support Services
Contract Number	HHSM500201700045I / 75FCMC20F0001
Prime/Sub	Prime
Project Summary	RELI provides customization, deployment, maintenance, and operational support of the Alation commercial-off-the-shelf (COTS) tool suite as part of

	<p>our CMS Center for Program Integrity (CPI) DM/DG COTS contract. RELI provides maintenance and operational support for the Alation tools suite and ensures data policy enforcement.</p> <p>Our team provides database support by allocating system storage and planning storage requirements for the database system, modifying the database structure, enrolling users and maintaining system security, monitoring and optimizing the performance of the database, and planning for backup and recovery of database information.</p>
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Services

Data Management and Securitization: DMDG is developed to leverage a COTS software package from Erwin called Erwin Data Intelligence Suite. This software package is designed to consume metadata (schema, table, column and index information) from databases, and then storing that into the Erwin DI database. The software package allows different roles defined by CMS such as Data Stewards, Data Reviewers, and Data Maintainers to identify, scan and validate metadata to build a data lineage map throughout various CPI systems, providing a combined “view” of CPI system data.

Azure/DevOps: DMDG is mainly responsible for creating the infrastructure in CMS’ Microsoft Azure Cloud and establishing a DevOps strategy to host and maintain and support upgrades to Erwin Suite. In addition, DMDG is also responsible for training/ supporting Data Stewards in extracting the metadata from CPI Systems and migrate back to the ERWIN DI repository using API gateway, standard and smart connectors and to automate information exchange by scheduling jobs. DMDG does not store any data containing PHI/PHI information from any of the CPI Systems. As a low system, it is still required to meet all CMS’ standard Acceptable Risk Safeguards (ARS) security requirements.

Support/ Help Desk: RELI has established a Help Desk utilizing the ServiceNow (SNOW) for the DMDG system to help users onboard and ensure overall customer satisfaction. Stakeholders request application support through using the Incident Management application in SNOW. These requests are monitored and tracked to provide oversight of the support being provided. Working closely with the business and operations teams, our support team is responsible for providing guidance on utilizing the current and future features of SNOW and integrating the desired features into the supported applications.

Project Management/Agile: Our PM is accountable for the delivery of the scope of work, including day-to-day management of resources as well as activities and collaboration with CMS and other stakeholders. PM follows the RELI PMO Framework for Project Success by creating and maintaining the Project Management Plan and manages this project using Microsoft Project to develop integrated timelines, and to manage deliverables and milestones. Using a Hybrid/Agile approach, we integrate of Agile concepts into the program, managing daily/weekly activities to meet contract deliverables. Our Hybrid/Agile approach includes a dashboard that supports the breakdown of project requirements into manageable tasks organize by each release. Team members come together daily for 15 minutes to discuss any issues or risks in delivering specific tasks or artifacts. The dashboard also provides a continuous flow of development activities, enabling transparency across the team. This dashboard will show development activities and tasks that have not started, are in progress, or completed. The Hybrid/Agile approach will also bring visibility to activities that are not progressing. As part of our Hybrid Agile management approach, RELI uses a Work Breakdown Structure (WBS) to ensure all work products, artifacts, and deliverables are defined that set the foundation for Integrated Master Schedule (IMS). As a result, tasks are properly organized and delivered on-time, ensuring our robust quality assurance process has been followed

Data Management and Governance: ~~RELI manages the legacy data management and migration.~~ We also establish data management processes for maintaining, enhancing, updating, and managing the ongoing success and applicability of ERWIN DI system. These processes are consistent with mission needs, timing, and cycles. We ensure audit trails and quality assurance tests are performed on the data to routinely validate the integrity of the data and perform data refreshes when required.

- Support the Metadata management and Integration with other CMS application using the ERWIN DI system as noted in the SOW using the standard or CMS procured SMART Connectors. We will design, test, and implement processes to extract metadata using batch, real-time or web API from source applications by working with the other application maintainers
- Follow TLC documentation requirements by developing and maintaining documents such as: Interface Control Documents (ICD); conceptual, logical, and physical Entity/Relationship (ER); and data models and data dictionary for the ERWIN DI repository. document test specifications and create test plans, including applicable test cases to ensure the processes executed successfully. work with other contractors to resolve any discrepancies identified before ingestion of metadata. All changes to metadata are captured and maintained using metadata version control. work with stakeholders to gather requirement, design, and implement an operational dashboard, which include metadata ingestion reports, support to create custom ingestion reports ~~and defect tracking and resolution reports.~~

Data Governance: RELI develops and maintains a Change Control process to include a comprehensive data catalog to alleviate challenges in data management and consumption in CPI data ecosystem. Utilize ERWIN DI to facilitate the discovery, access, comprehension, and analysis of each application data. Work with business owners, users, and other contractors to capture business, technical, and operational metadata that will be curated continuously using their inputs. Data in the catalog will be governed by standard access control policies and available through ERWIN DI. follow TLC processes for successful implementation for each component to support the CMS data governance framework including new asset registration, data governance workflows, and configuration of metadata and collaboration center. start with discovery sessions and understand the requirements and identify gaps and inefficiencies in current processes, to design, develop, and test each component and finally implement the component.

- Build the catalog and other component through incremental implementation, while expanding its scope by onboarding and adopting one application at the time. We also work on automating processes to help expedite the incremental growth of the data catalog and adding the new data set.
- Establish and manage Change Control process for the business owner and provide the meeting materials to support Governance processes. Processes must be implemented to maintain fresh, current, and relevant metadata. Integral components of catalog maintenance include cataloging newly created data, removing obsolete data sets, performing updates when changes occur, and crowdsourcing of supporting business information.

Data Reporting and Analytics: RELI works with multiple tools, including general open-source tools like **XX** stored in the ERWIN DI metadata repository capable of providing general and ad-hoc reports. The ERWIN Web Portal provides reporting capabilities and allows reports to be easily reused.

Training and Coaching Services: RELI has embedded training throughout the project lifecycle and developed a training plan. We train end users through webinar on a routine basis for new users added to the system and refreshment training to existing users. Team RELI will work with the CPI MLMS to provide learning content for end user training. We also develop and implement a Knowledge Management system to serve as the repository of information for all help desk activities. This system will also serve as the system of record for all ITIL information and help to provide Help Desk training.

Commented [LH1]: Per Fozia. We don't do defect tracking and resolution.

Our team produces training materials such as user guides, videos, and recorded webinars and provide training sessions to support each software release. We also coordinate UAT with stakeholders to obtain feedback for refinement of training materials.

Technology Management Experience - Operations and Maintenance (O&M)

Managing multiple databases and database technologies (e.g., Oracle, MarkLogic, MySQL, and SAS): DMDG defines, ingests, secures, and maintains CPI database metadata.

Managing multiple analytic tools (e.g., SAS, Quick Sight, IBM Cognos, and Databricks): Data Management and Data Governance (DMDG) is a central repository to host metadata coming from different application systems. DMDG's data catalog captures metadata for data governance purposes. Application users can see how metadata is connected end to end.

Managing PHI, PII, FTI information security and privacy: The DMDG application helps support metadata sensitivity identification, by allowing users to flag PHI and PII.

Managing and tracking changes (e.g., code, DB schemas, and configurations): DMDG allows visibility into other applications to help with auditing and tracking of changes to the metadata.

Developing and implementing a Quality Assurance framework: DMDG helps ensure quality in other applications by associating metadata with CMS standard business terms, policies and rules.

~~**Problem diagnosis and resolution:** Defect tracking and support capabilities are included with the contract through SNOW.~~

General system administration: RELI, as the DMDG contractor, administers and supports the application to resolve issues and provide enhancements.

Data Management & Analysis Experience: Working with data warehouses and analytic / business intelligence (BI) tools (e.g., SAS, IBM Cognos, Quick Sight, Databricks)

Commented [LH2]: Note above: we don't do this.o