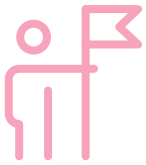
Case Study

How AmeriCorps Is Strengthening Operations Through Better Data Governance



Challenge: Breaking Through the Stovepipes

Over the past 30 years, AmeriCorps has engaged millions of members and volunteers to provide vital assistance to communities and families in need. But until recently, the agency had trouble making the best use of one of its most valuable assets: its own data.

"We are a very data-rich agency," said Andrea Gibbons, AmeriCorps' Chief Data Officer. "But the systems have been very disparate."

Three decades of providing assistance and grants to support a broad swath of projects — including an array of economic, educational and environmental programs, and other projects like disaster recovery, improving the health of vulnerable citizens, and supporting veterans and military families — had resulted in stove-piped, sometimes antiquated legacy systems.

Different program offices had different ad hoc data management processes. Getting to the data required a lot of workarounds. And quality issues also contributed to a lack of confidence in the agency's data.

Gibbons set out to make AmeriCorps a data-driven agency by re-engineering the data architecture. "**Part of what we're developing in both our data strategy and our roadmap is how we bring these disparate data sources together to really derive value from the data that we have,**" she said.

The project, which supports a broader modernization of the agency's grants management, member management and financial systems, is focused on four pillars: data use, the technology platform, a culture that includes data literacy and data governance. AmeriCorps also is aligning its data infrastructure with the mandates of the Evidence Act, which sets requirements for using data to support policy, and the Federal Data Strategy.

A notable pillar is the AmeriCorps Information Model, which enables the agency to build and automate trusted data sets, and then make them available to users. This reduces inefficiencies associated with data wrangling and persistent data quality issues. A key to making it work was adopting a technology platform that integrated with existing systems and enabled data governance, without being difficult for non-technical people to use.

"It's really about decoupling the data from the application layer, in order for us to create data that is trusted, governed and transparent," Gibbons said. "Staff can search the data catalog to better understand the assets we have, understand the nuances and put data to more effective use. This dramatically increases the value the agency can get from its data."

AmeriCorps partnered with systems integrator AEM Corporation to advise, design and support implementation of all pillars of the project, including the AmeriCorps Information Model, or AIM, which is built on a data hub architecture using Microsoft's Intelligent Data Platform. The platform enables the agency to centralize all its data and apply governance and improve data operations.

"The Microsoft Intelligent Data Platform offers a suite of tools that we're using to provide the enterprise capability and link into all of those disparate IT data systems, and then bring in the data to create a decoupled, trusted data platform," said Doug Schnelzer, lead solution architect for AEM.

Solution: Better Data Governance Through Integrated Platform, Tools

A critical first step, Gibbons said, was a comprehensive data infrastructure assessment to identify and quantify the data management pain points across the agency, which helped develop a roadmap and a scorecard for tracking progress. The goal was for people to easily and effectively use data to make decisions, rather than wresting with data accessibility and data quality issues.

AIM provides the foundation for data modernization. In fact, said Gibbons, it's the anchor of the agency's modernization efforts. Other pillars involve the processes, methods and soft skills that it takes to become data literate, and treating data as an asset.

"One of the key functions of AIM is how it works so well with data governance," Gibbons said. "And those principles have really been brought into this technology with an easy interface to access the data."

The agency's systems are connected by the AIM Data Hub, built on the Intelligent Data Platform and Microsoft tools including Purview (data governance), Azure Data Lake (scalable storage and analytics), Synapse (enterprise-wide analytics), Profisee (master data management) and Power BI (data visualization).

"All that just integrates very well," Schnelzer said. Purview, for example, gives data stewards and subject-matter experts the ability to review data and certify trusted data. Synapse enables data processing reviews, and the identification and resolution of data quality issues, while automating most of those processes. "And Power BI can tie into that whole environment," he said, noting that many federal agencies use Power BI because it comes with a Microsoft 365 subscription.

Security and cost are always top priorities for agencies, with all the Microsoft components in AmeriCorps' environment certified FedRAMP High. And because the system is cloud-based, it can be implemented quickly without much capital investment. The project recently moved from an Azure Government environment to an Azure Commercial space, which involved rebuilding AIM. "Rebuilding AIM from the ground up in the commercial environment took us under a week," Schnelzer said. And moving all data to the new environment will take less than a month.

The initiative requires a cultural change throughout the agency, so Gibbons' team developed a data literacy course to educate people on best practices, how to get value out of any kind of data project and how to increase their skills and capabilities with enterprise data management.

With the modernization project, AmeriCorps is applying data governance to solve long-standing challenges and make the best use of its data to support the agency's mission with an integrated, user-friendly system. "Overall, it really is taking a big burden off our staff," Gibbons said.

Best Practices

AmeriCorps' initiative to re-engineer its data architecture is built on four pillars. They are:

1. **Efficient data use:**

   You have to understand your data—where it is, what value it has to the agency and what data quality issues are affecting its use. Start with a complete data infrastructure assessment.

2. **A powerful technology platform:**

   Use a cloud-based, scalable platform that allows easy integration with existing systems. New tools and services provide the environment for improved data management.

3. **A data-centric culture:**

   Becoming data-driven requires top-level buy-in and a cultural change emphasizing data literacy at all levels.

4. **Responsible governance:**

   Data governance is essential to building the trust necessary for data-driven decision-making (and, eventually, responsible use of artificial intelligence).

AEM helps government leaders navigate, select, and implement the strategies and systems that maximize the value of their data. Learn more at: aemcorp.com/datastrategies