AGENCIES SHOULD TAKE A DETAILED LOOK AT CLOUD CONTRACTING

FEDERAL AGENCIES are well on their way to implementing Cloud Smart capabilities into their data and networking infrastructures, but they may not be paying enough attention to one of the most important and effective cloud adoption tools, according to a cloud expert.

The federal government began its cloud migration efforts in 2009, moving from Cloud First efforts to the current Cloud Smart initiative. The Federal Cloud Computing Strategy drew a line between the two: where Cloud First gave agencies broad authority to adopt cloud-based solutions, Cloud Smart later focused on practical implementation that maximizes the promise and potential of cloud-based technologies, using thoughtful execution tempered by practical realities. Cloud Smart emphasizes security, procurement and workforce as pillars of cloud implementation.

The move to cloud has freed up agencies to quickly scale IT infrastructure and services based on demand, enabled remote work and collaboration, enhanced accessibility, and opened the door to analytics that can tap machine learning and artificial intelligence capabilities. Those technologies can tap into agency data and provide analysis and information that allows agency leadership to use that data in new and innovative ways.

However, in the move to expand cloud use, agencies may be overlooking a key area that allows even more efficient and cost-effective use of cloud services: contracting. Contracting sets the foundation for cloud and cloud services. It's no coincidence that procurement is one of the three pillars of Cloud Smart, policy makers understood the contracting process to be fundamental to effective cloud adoption and use.

Look short-term for long-term cloud adoption

Contracting shops are often the biggest players when it comes to effectively leveraging cloud, according to Asim Iqbal, CTO at Enquizit, a CDW company and provider of Amazon Web Services (AWS) and cloud consulting services.

Contracting for cloud, he said, often gets overlooked in the process of creating a complex technical solution because of the pursuit of a technical goal. "It's important that the contracting

shop is involved in the early technical solution development stage of a project, even before the RFI (Request for Information) goes out," he said. Without their presence, there is a danger of technical solutions becoming bogged down in less-than-ideal, time-consuming "waterfall" development, instead of a more agile and efficient iterative approach, said Iqbal.

A more effective approach to cloud adoption, he said, was to begin with small, clearly defined and measurable goals. Those shorter projects — three-to-six months — tied to clear, assessable goals, can give agencies a quick gauge on whether a particular path is economical and technically effective, according to Iqbal.

Projects that have longer timelines, measured in years, can become obsolete when the final finish line is ultimately crossed, he said. With long development cycles, agency technology developers are making promises on what is going to be valuable to citizens who may be using the service three years down the road, he said.

Shorter proof-of-concept projects by contractors can winnow out the efforts that might not be viable, allowing the most effective efforts to move ahead. "Allow those successful proof-of-concept providers to continue on in agile fashion and keep accountability for contractors," said Iqbal.

More effective data wrangling can help cloud

Finding the best path forward depends on an effective analysis of what assets are available, including data sources, applications and their life-cycle plans, and then bring it all together to get a comprehensive view of what needs to be accomplished, according to Iqbal. "Create an authorative source of truth" using those resources before moving ahead, he said. Considering how applications will fit into a larger plan is important because some of them have longer-term, or more immediate, goals. Making sense of how those applications fit into a larger plan can help illuminate the path, he added.

Before bringing in help to move applications to the cloud, agencies should have a sense of the application they want, as well as a good idea of infrastructure inventory to get the best start. Gaining an idea of the age of an existing app, as well as knowing whether there is available source code, can help speed things along as well, said Iqbal.

"Make Cloud Smart quantifiably smart," he said. Enquizit has extensive experience with that process, including with cloud applications development, migration to the cloud, disaster recovery in the cloud, the discovery process preceding those operations, as well as security and compliance.

CDW-G acquired Enquizit in 2023 to tap the company's extensive knowledge of AWS cloud services, as well as its AI-based SkyMap cloud platform. Through Enquizit, CDW-G has more access to extensive experience designing, developing, and managing mission-critical applications. SkyMap leverages AI and machine learning techniques to help organizations move more effectively to cloud environments.

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"Enquizit, along with other CDW-G capabilities, is able to look at all of those needs pragmatically and prioritize what the goals are, the budget, and project timeline," he said. The company has tools that can look at applications' source code and make an assessment about the quality of that code, as well.

Having all that experience and data helps agencies make smart decisions from the first step of migration or development, according to Iqbal. Data collected for one phase of application or operations evolution by Enquizit can be used to inform the next phase. It can also provide more options for applications down the road that the agency may need but hasn't started planning for.

Designs based on the platform can leave technological hooks developed from current data, which agencies can tap later in their process, according to Iqbal. For instance, an agency may not have yet planned to implement cloud disaster recovery applications, but Enquizit can easily leave possibilities for such capabilities, which can be tapped later as the agency moves ahead.

No matter an agency's goals or architecture, Enquizit can help with any stage of cloud adoption, including on- and off-premises applications, according to Iqbal.