AGENCIES HAVE UNDERTAKEN a variety of initiatives to determine how artificial intelligence can help them achieve their missions in a more timely, efficient and effective manner. The White House and Congress have developed policies and initiatives to drive adoption of AI. At the heart of all those efforts is the awareness that agencies have an enormous amount of data that holds untapped potential. Agency leaders see value in using AI/machine learning to handle the most tedious aspects of managing data, freeing up human operators to address more mission-critical issues.

Agencies are facing exponential growth in the volume, velocity and variety of data they have. When people think of data, they typically think of highly structured text files, but today’s data includes unstructured text as well as audio, images and video. It’s an increasing challenge for agencies to figure out how to access and leverage that information. AI technology can help by finding and analyzing data so that people can apply those insights to the higher-value work of generating mission insights in a timely manner, improving government services and enabling customer engagement.

**Start with mature models and proven technologies**

New models and technologies are being developed at a fast pace, and it can be hard for agencies to determine the most effective approach. Leaders can benefit by looking at best-of-breed approaches to machine learning that are practical, mature and already in use.

One mature approach is optimization. For example, the free Waze app helps users navigate around traffic jams based on information shared by other users. All that collected data can tell drivers the best way to get wherever they’re going. That classic use of optimization could apply to many government needs — for example, optimizing supply chain management and delivery of materials around the world.

In addition, recommendation systems, which Amazon perfected years ago, could help government analysts find relevant information beyond the data they know to look for. A recommender engine could say “If you like this information, here is other information that might be of interest to you.” The algorithms would improve as the analysts indicate whether the recommendations are relevant or not.

By starting with technology, models and datasets that are well understood, agencies can use rapid prototypes and proofs of concept to see how AI might help them deliver on their missions and provide more impact to mission. Then they can build on those results. Given the rapid advances in AI, agencies will need more experimentation and internal implementation trials in an agile manner.

While AI offers great promise, there are challenges associated with its application. Careful, thoughtful use of data that is well managed is essential to avoid distortions...
“Agency leaders see value in using AI/machine learning to handle the most tedious aspects of managing data, freeing up human operators to address more mission-critical issues.”

of models. Determining the provenance or source of data is also important because false data can have a profound impact on what we see in models.

Find trustworthy partners
The challenges and opportunities are enormous, and the government needs trusted partners who share their concerns about data privacy and AI ethics and who keep up with the latest developments in AI.

At Salesforce, we continuously evolve our products to incorporate best-of-breed technology. Our MuleSoft capability, for example, gives agencies the ability to tap into legacy data without having to refactor applications or move data. Tableau helps data scientists and mission users apply analytics and visualization to gain deeper insights.

Ultimately, government understanding of what’s buried in all that data is essential to delivering superior services. And partnering with subject-matter experts like Salesforce helps agencies develop practical, equitable, actionable strategies as they start, refine and grow their AI practice.

Teresa Smetzer is the Vice President of National Security Programs at Salesforce.