Blockchain has the potential to help government to reduce fraud, errors, and the cost of paper-intensive processes, while enabling collaboration across multiple divisions and agencies to provide more efficient and effective services to citizens. The adoption of blockchain may also enable government agencies to provide new value-added services to businesses and others, which can generate new sources of revenue for these agencies. But how can agencies turn that potential into reality?

The ACT-IAC Emerging Technology Community of Interest (COI) launched the Blockchain Working Group in May 2017 based on the request of the General Services Administration (GSA) to provide an authoritative resource for government agencies trying to understand and incorporate blockchain functionality into their organizations. Volunteers representing more than one dozen federal agencies and a variety of industry partners published the blockchain primer white paper in October 2017 to provide the government workforce with an introduction to blockchain and its related technologies, as well as its use cases within the United States federal government.

For agencies looking to embark on the blockchain journey, it is important to follow the necessary steps:

1. Understand the foundational elements of blockchain using the blockchain primer white paper.
2. Research the government use cases to ensure best fit.
3. Consult this blockchain playbook to understand the steps and technology required.
4. Tailor an agency-specific plan using plays from this playbook.

Whether you are interested in leveraging blockchain technology as a tool to support your immediate work, as a standalone agency project or program you manage, or as a shared service, the best practices presented as part of this playbook’s guided process are intended to help you with successful implantation of the right technology to achieve the goals of your mission set.

Launch of this playbook will happen in two stages. Realizing the high level of government interest and desire to begin deploying blockchain solutions, the ACT-IAC Blockchain Working Group wanted to ensure the right level of support at the right time. Work on the next launch stage will begin in April 2018 and is estimated to launch in late 2018 in order to continue supporting these efforts as they evolve.

Further applying the blockchain concept of sharing, this playbook is intended to be an interactive living document. As government efforts move through implementation of this new and rapidly developing technology, contributions of additional best practices, lessons learned, and other information are appreciated to ensure this resource is current, comprehensive, and effective in meeting the needs of government.

Additionally, the distributed structure and decentralized components of blockchain technology make it a good match for applying the GSA Modernization and Migration Management (M3) unified shared services framework. Blockchain deployment will involve both the modernization of information systems, as well as the migration of data and/or other capabilities. The M3 framework is designed to help the government achieve successful outcomes and reduce risk during administrative system and/or service modernizations and migrations. M3 leverages a six-phase approach that includes key activities and outcomes for each phase:

1. Assessment: Build a vision and business case.
2. Readiness: Prepare the customer organization for the effort and define business, functional, and technical requirements.
3. Selection: Conduct due diligence to select the provider based on business requirements and desired target end state.
4. Engagement: Conduct detailed planning through a fit-gap analysis and finalize the migration and O&M approach and costs.
5. Migration: Configure, test, and deploy the new system, concept of operations, and workforce design.
6. Operations: Deliver services and conduct continuous process improvement.

It is important to follow the process. Deploying a mismatched solution or poorly executing the deployment of the perfect solution can be costly in terms of time, money, and other resources. There are many aspects to consider with blockchain technology deployment, such as procurement strategies to attract start-up companies, interoperability with legacy systems, planning for any necessary data migrations, and defining measures of success. The progression of this framework will ensure you have the optimal tools and information at the right time in order to successfully deploy the perfect solution.