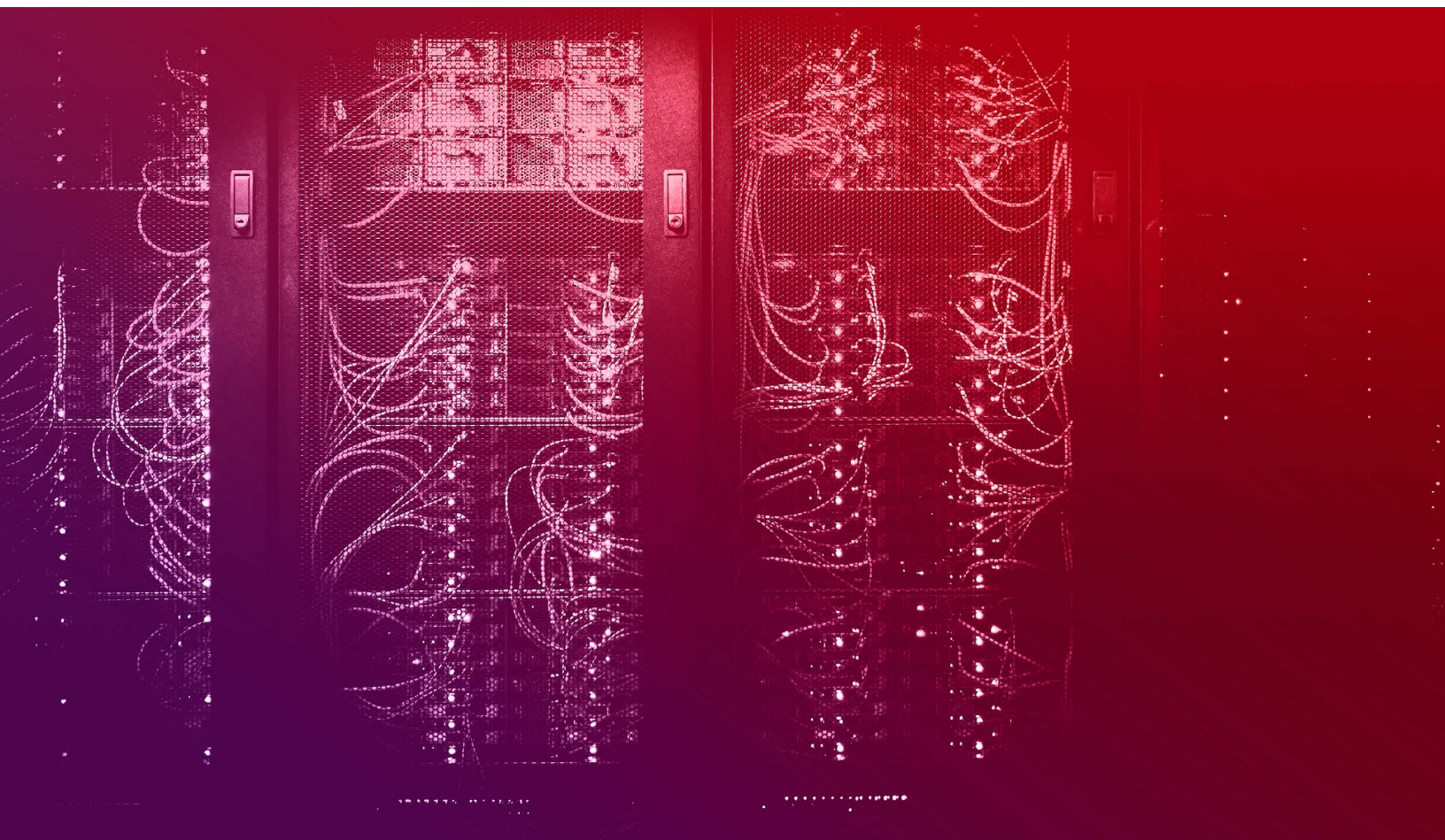


Best Practices for Government Procurement of Data- Driven Technologies

A Short Guidance for Key
Stages of Government
Technology Procurement



Rashida Richardson

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Best Practices for Government Procurement of Data-Driven Technologies

A Short Guidance for Key Stages of Government Technology Procurement

Though governments have been consumers of technology products for decades, new data-driven technologies (e.g. data analytics, surveillance technologies, database management systems) present new challenges and legal concerns that were not contemplated when most relevant procurement laws or policies were developed. This guidance offers high-level considerations and recommendations that can improve transparency, accountability, oversight and public trust in government technology procurement without legislative or regulatory reform (though modernization of procurement laws and policies is highly encouraged). The guidance focuses on best practices government officials can employ prior to a technology being used or formally implemented, and it includes an appendix that summarizes additional procurement resources and reports. This guidance can also be useful to advocates seeking to understand and engage in government technology procurement.

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Best Practices and Considerations for Key Stages of the Procurement Process

Defining the Problem or Government Needs & Soliciting the Solution

Identifying a technological solution to address a community or government need should be a deliberative process but this part of procurement is often rushed so many key considerations are overlooked and some alternative approaches are not pursued. This section highlights key considerations and recommendations for evaluating technological needs and approaches to solicitation.

Document your pre-solicitation technology assessment

Those tasked with executing procurement are not always included in discussions or decisions regarding technological needs. Yet, it is during this stage that many key questions that later become the source of concern go unanswered. By asking and documenting the answers to the following recommended questions, procurement officials can be better informed when selecting or drafting solicitations. This documentation can also be a helpful resource in procurement processes that include participatory or oversight components. Questions for relevant agency or office staff that should be addressed before selecting or drafting a solicitation:

Questions	Why am I asking this?
What is the need or problem that requires a technological approach or solution?	This is a simple question that often goes unasked. If you are dealing with an agency or office that has been pitched by a technology vendor's sales or marketing team, they may seek to purchase a technology without fully considering its purpose or value in advancing the organizational mission, priorities, or policies.
What part of the agency or office mission, priorities, or policies does this technology advance or address?	The answer to this question can help you assess the relevance and urgency of this procurement request.
Is the agency or office seeking an immediate or long-term technological solution?	The answer to this question can help you determine whether to explore experimental solicitations (e.g. a pilot or trial).
Does the agency or office currently use a technology or service that may be duplicated if this request is fulfilled?	The answer to this question can help you determine whether a request is necessary. It can also help you determine whether there are other ways to achieve a particular need.
What, if any, market research was performed to identify this particular need or technology request?	The answer to this question can inform: (1) decisions regarding the type of solicitation to pursue, (2) the type of information to seek in a solicitation proposal, or (3) additional research to perform before key decisions

Document your pre-solicitation technology assessment (Continued)

Questions	Why am I asking this?
Can the agency or office specify particular features, functions or services needed?	The answer to this question can help you determine specific information to request from vendors and aid the review of proposals (e.g. Terms of Service), especially proposals that seek to include additional or bundled products and services.
What are the funding sources for this request?	The answer to this question can help you assess the optimal solicitation approach and information to seek the solicitation process. If external funding sources are used, be sure to review whether it includes specific limitations or requirements that can impact the procurement process.
Is the agency or office interested in immediate or long-term technological solutions?	The answer to this question will help you assess solicitation options, particularly whether to pursue experimental approaches (e.g. a pilot or trial) to ensure the best long-term solution is identified.
Does the agency or office have capacity and interest to explore a pilot or trial use of technology requested?	The answer to this question can help you determine whether to explore pilots, trials, or even <u>regulatory sandbox</u> efforts.
Has the agency or office assessed potential risks associated with the technology request?	Some technologies can pose risks internally or result in public backlash, so it is helpful to know whether there has been any assessment of these risk to inform whether to proceed with solicitation or to inform what information should be requested in the solicitation (e.g. whether the technology has been independently audited or validated).
Does the requesting agency or office intend to publish information about the product or service?	The answer to this question can help you determine specific information to request from vendors in the solicitation or during contract negotiations. Vendors should be able to work with the requesting agency or office to create public-facing information or it can be mandated in contract provisions.

Asses all solicitation approaches

There are different types of solicitations and the type of approach selected typically depends on the level of certainty regarding what is needed. However, failing to select the optimal approach can unnecessarily limit information obtained in proposals, constrain bid evaluations, erode negotiation advantages later on in the procurement process, or lead to costly litigation. The following graphic compares different solicitation approaches and related considerations:

Innovative or Short-Term Procurement Methods (varies by jurisdiction)*	Request for Information	Request for Proposal	Request for Quotation or Invitation to Bid
<p>Used when:</p> <ul style="list-style-type: none"> • Government wants to test new initiative or experimental approach • Purchaser is not committed to buying a specific product or service • There is less certainty regarding the feasibility, appropriateness, risks or validity of certain technologies or services • The need or problem is not urgent and more information is needed • Purchaser is not committed to buying • Low or no resources to commit • Informing further procurement efforts 	<p>Used when:</p> <ul style="list-style-type: none"> • Government is exploring a new initiative • Purchaser lacks sufficient information about government need and/or market offerings • Purchaser has generic specification about product or service • Purchaser is not committed to buying • Informing further procurement efforts 	<p>Used when:</p> <ul style="list-style-type: none"> • Government has a directive, need, or goal but no clear specification • Purchaser wants competition but requires more information to determine how government need will be met or how a project should proceed • Purchaser is interested in negotiating with vendors and price is not the primary consideration • Purchaser is more committed to buying 	<p>Used when:</p> <ul style="list-style-type: none"> • Government knows what it wants but has budgetary constraints • Purchaser is committed to buying and cost is a primary consideration or there are costs constraints • Purchaser has the information they need about a product or service and how they want the contract performed • Purchaser is seeking a product or service that meets specific criteria and requirements • Purchasers wants to screen vendors and is not interested in negotiating



Some jurisdictions authorize experimental procurement opportunities, where a government agency or office can perform a pilot or otherwise test a technological product or service for a short period of time or under specific circumstances. These opportunities may be explicitly granted in the state or local procurement laws, or authorized through separate laws and regulations (e.g. Arizona’s financial technology regulatory sandbox).

Proposal Evaluation & Contract Negotiations

Data-driven technologies pose several challenges, risks, and opportunities that may require additional considerations when reviewing solicitation proposals and when negotiating contracts with vendors. These technologies use and rely on government data in different ways than traditional software, and they often require continued engagement with the vendor. This section highlights key considerations when reviewing vendor proposals and for contract negotiations to ensure vendor accountability. The recommended considerations are combined in this section because they should be evaluated at each stage, and if information is missing in proposals, it can be raised or addressed during contract negotiations.

Key Considerations and Best Practice for Proposal Evaluation and Contract Negotiations

How will data be collected, analyzed, managed, shared, secured, and who owns it?

If the product or service relies on data to perform expected tasks:

- Does it require the requesting agency, office, or multiple agencies to provide data? If so, how and when?
- Is government data used to develop the system?
- Does it use third-party data? If so, do you know how the vendor obtained this data and whether the vendor has validated its sources and datasets?
- Are there documentation requirements for the underlying datasets or models? If not, who assesses the validity of the datasets and have you requested this information?

If the technology captures and uses real-time data via sensors, cameras, or access to government or third-party information systems:

- Is the data personally identifiable or otherwise considered sensitive information? If so, can it be aggregated, de-identified or anonymized? Who is responsible for performing such tasks and will information regarding these practices be communicated to the public and directly impacted individuals or communities?
- Is the data collection compliant with local laws (e.g. antidiscrimination laws or consent requirements for the collection of sensitive data)?
- Is the data deleted? If so, how frequently and is any data (including metadata) maintained or stored by the vendor?
- Does the vendor store or maintain the data? If so, how and what, if any, policies or mechanism does the vendor have to ensure security of the data? Where is data hosted?
- Who has access to the data? Does the vendor and requesting agency or office have policies or practices in place regarding access to data or the technology itself?
- Is the product or service capable of limiting the collection of unnecessary information?
- Can the vendor draft a public facing document for the requesting agency or office describing how data is collected, used, shared, maintained, or deleted by the product or service?

Key Considerations and Best Practice for Proposal Evaluation and Contract Negotiations (Continued)

How will data be collected, analyzed, managed, shared, secured, and who owns it?

If the product or service enables or enhances data sharing within and/or outside of government:

- Does the requesting agency or office have data use, management and security policies in place or under development?
- Did the vendor share information on existing policies or practices regarding data use, management, and security? If not, have you requested this information?

If the proposal or contract draft is silent on data ownership:

- Who owns the data collected or otherwise used by the product or service? Is ownership exclusive or can the data be licensed, copied, used, or shared during or after the contract?
- Will the vendor use data related to this product or service for other commercial purposes?
- Will the vendor or requesting agency or office waive rights if data collected or used by the product or service or relevant system outputs are requested via freedom of information laws or legal proceedings?
- Is the vendor required to provide data, outputs or other information from its product or service after the contract expires or is terminated?

Does the system work, who maintains it, and are there known risks?

- Has the product or service been audited, validated or otherwise assessed? If so, is the vendor willing to share the results or allow the requesting agency or office to publicly post this information? If not, consider including audit rights provisions in the contract.
- Has the requesting agency or office communicated with other customers of the vendor about their experience using the product or service?
- Does the product or service require any form of maintenance or updates during the expected contract period? If so, who is responsible for this and will it result in additional costs not covered by the contract? Can the requesting agency or office store earlier versions of software?
- Will the vendor provide or offer training to staff using the product or services?
- Does the product or service produce revenue? If so, does the contract include provisions on how revenue is handled and will this information be publicly available?
- Who is responsible if the product or services fails to meet expectations or produces unexpected, negative outcomes? Does the contract include an indemnity clause? Does the contract include disclaimers for warranty of merchantability or fitness for purpose?

Key Considerations and Best Practice for Proposal Evaluation and Contract Negotiations (Continued)

Miscellaneous

- How will vendor payments be issued? Are payments outcome-dependent or otherwise constrained by contract performance requirements?
- Does the contract have consent to assignment provisions if the vendor merges or is acquired by another company during the contract period?
- Is the vendor offering products or services beyond the scope of the solicitation request? If so, has the requesting agency or office considered how these add-ons may benefit or compromise their goals?
- If your jurisdiction requires specific reviews or assessments (e.g. algorithmic impact assessments, equity impact assessments, or surveillance oversight) before the product or services is used or during the contract period, who is responsible for compliance? Does the contract require the vendor to provide necessary information for compliance with local laws, regulations, or policies?
- Is the product or service in compliance with federal, state, and local laws (e.g. disability discrimination laws)?
- If the product or service is location-based, will it be installed universally in your jurisdiction? If not, has the requesting agency or office explained why its use will be targeted? Is it possible that the cost of the product or service can limit how it is installed or used?
- Does the vendor have an existing contract with another agency or office in your jurisdiction? If so, are there rules that require this contract to have similar provisions? If not, you should contact someone within your jurisdiction, who is familiar with the contract, product, or service before finalizing the contract with the vendor.

Summary of Existing Resources

AI Now's Algorithmic Accountability Policy Toolkit (2018)

This is an informational guide for advocates but the last section of this toolkit titled "Government Contract Provisions/Requirements" includes model procurement contract provisions and language for contract regarding automated decision system or other technologies that involve data analysis or statistical modeling. Some of the model contract provisions are annotated with explanations on the purpose of the provision. This toolkit can be a useful resource for updating standard contract language, drafting contracts for new technologies, and in negotiating with technology vendors.

Results for America What Works Toolkit (2018)

This toolkit is focused on US state and local government officials that lead procurement of human service providers, but many of the recommendations provided can be useful in the technology procurement context. For example, the toolkit provides recommendations on drafting an outcomes-focused "Requests For Proposals", which can be instructive in the technology procurement context because a product's capabilities does not necessarily guarantee expected outcomes.

Summary of Existing Resources (Continued)

AI Now's Confronting Black Boxes: A Shadow Report of the New York City Automated Decision System Task Force (2019)

This is a report about the New York City Automated Decision System Task Force process and it includes a range of recommendations based on the experience and emerging research. Section Two of this report includes recommendations to government agencies considering procurement of development of automated decision systems, and many of these recommendations are best practices or key considerations for procurement.

DataEthic's White Paper on Data Ethics in Public Procurement of AI based Services and Solutions (2020)

This white paper provides a risk informed due diligence practices procurement officials or offices can adopt for public procurement of artificial intelligence based technologies.

DotEveryone's Buying Better Tech in Government (2020)

This report highlights several challenges and dynamics in government procurement of emerging technologies. The report and its recommendations are specific to the United Kingdom, but it's main themes and takeaways can be useful in other jurisdictions. For example, the report describes common missteps in evaluating social impacts of technologies and provides recommendations on how governments can better value and control data used to develop and implement technologies.

Prison Policy Initiative's Best Practices for Prison and Jail Tablet Procurement (2020)

This guidance highlights general considerations and best practices for the procurement of technology in the criminal legal system. Though this guidance is sector and technology specific, its recommendations offer useful insights regarding technology vendor practices and some of the best practices can be extrapolated and modified in other contexts (e.g. inviting subject-matter experts to assist bid evaluations).

World Economic Forum's AI Procurement in a Box: Workbook (2020)

This workbook is intended for government officials that engage in procurement of AI-enabled technologies and it provides a number of resources and tools for rethinking traditional procurement practices. It guides the reader through key questions and considerations for identifying and selecting technological solutions, including a risk matrix for assessing technical vulnerabilities. The workbook also includes detailed, tactical advice and key considerations for every part of the procurement process. It concludes with five case studies that explore how the procurement guidelines were applied to different procurement challenges.

World Economic Forum's AI Procurement in a Box: AI Government Procurement Guidelines (2020)

This report provides procurement guidelines for governments seeking to acquire AI solutions and services. It highlights key considerations to address before acquisition or use, and it includes high-level recommendations for drafting requests for proposals (RFP) and evaluating vendor responses.