How Should DATA Act Implementation Impact Federal Project Management Practices?

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Introduction

The recent passage of the DATA Act (Digital Accountability and Transparency Act of 2014) got me thinking about the data management work that will have to be initiated to support its implementation. Since both standard and existing legacy systems and processes will be impacted it's likely a variety of data related project work will have to be planned and executed. Resources will need to be located and secured, decisions about technologies made (possibly including system retirement), and project plans will have to be created and implemented.

Looked at this way what's coming sounds pretty much like a lot of project work where large or small systems have to be developed at the same time “business as usual" is conducted.

It's unlikely vast quantities of extra money are going to be appropriated to cover the extra costs of the new work that needs to be done. Now is a good time to think about whether there will be special project management considerations driven by the simple fact that we’re focusing here on how large quantities of data and metadata data – much of it financial – are managed.

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New Project Work

Project-wise we're talking about moving a variety of systems and processes from Condition A to Condition B. In the process we have to define starting points as well as what we need to accomplish to get from here to there. We have to consider the resources needed to make this transition, how we'll measure progress along the way, and how we know when we're "finished."

These are pretty standard project management issues that need to be addressed in any type of project management situation. The question is whether there is anything particular about the data intensive projects associated with the DATA Act that needs to be taken into consideration.

DATA Act Requirements

Consider the purpose of the law, based on the summary of S.994 prepared by the Congressional Research Service:

- *expand the Federal Funding Accountability and Transparency Act of 2006 by disclosing direct federal agency expenditures and linking federal contract, loan, and grant spending information to federal programs to enable taxpayers and policy makers to track federal spending more effectively;*
- *establish government-wide data standards for financial data and provide consistent, reliable, and searchable government-wide spending data that is displayed accurately for taxpayers and policy makers on USASpending.gov;*
- *simplify reporting for entities receiving federal funds by streamlining reporting requirements and reducing compliance costs while improving transparency;*
- *improve the quality of data submitted to USASpending.gov by holding federal agencies accountable for the completeness and accuracy of the data submitted; and*
- *apply approaches developed by the Recovery Accountability and Transparency Board to spending across the federal government.*

Just based on the above there are several implications for project planning and governance, including:

1. Words like "published," "on website," and "searchable" are used to describe how data will be made available and need to be defined.
2. Are specific tags or standardized metadata required to aid in file location?
3. Who is assigned responsibility for data accuracy and how is accuracy defined?
4. Once data are located after searching what download or visualization features are needed?
5. Which "open and nonproprietary" data standards will be adopted for which data? How will compliance be assessed?
6. Should data files made available for searching or downloading go through some kind of certification or review process so they comply with security and privacy regulations?

7. When financial data describing program expenditures are made available online what provisions if any will be made to to link such data[2] to data describing performance outcomes and effectiveness?
8. A variety of different agencies and stakeholders will need to be involved in development of the various standards required by the data. Which governing body will be empowered and adequately resourced to develop such standards?

These are just a few of the requirements that will have to be addressed. At one level these requirements will touch on many projects that are, by definition, cross-agency in nature. Staff, data, and project resources will need to be integrated at some level via a governance model that provides mechanisms for managing both within-agency as well as cross-agency reporting. That's a challenge by itself.

Governance

Standardizing federal financial data supports many worthy goals including:

1. Improved reusability of data, systems, and processes.
2. Increased transparency and comparability of data across data sets.
3. Ultimately – and hopefully -- reduced costs.

One possible governance mechanism for overseeing multiple data projects is a specially designed Program Management Office (PMO) that helps all participants and stakeholders manage individual data projects while supporting lean but firm oversight and control. Such organizational units are not unusual in the U.S. Federal government and are often run for both Defense and non-Defense agencies.

A Federated and Collaborative Approach

Given the variety of systems and processes that will be touched by the DATA Act it's unlikely that a monolithic (or autocratic) top-down management approach that is centrally controlled will be feasible or acceptable. What's more likely to be effective is a federated approach where the actions of numerous local teams can be coordinated where DATA Act initiated work must run parallel temporarily to ongoing agency operations.

This need to "keep the program fires burning" at the agency and department level while standards related changes are implemented across agencies will require a balancing of central control with collaboration. It also requires the sharing of tools, expertise, and technical resources so that the benefits of the DATA Act are generated while maintaining local program performance.

CommunIcation and Knowledge Sharing

[2] See "Government Performance Measurement and DATA Act Implementation Need to be Coordinated" (http://www.ddmcd.com/coordinated.html) for a discussion of the need for convergence between the DATA Act and Federal program performance measures.

The need to balance control with collaboration requires a communication infrastructure that supports a spectrum of project communication including real-time, one-way, two-way, and broadcast. Also supported across and within agencies and departments should be modern social media and social networking that accommodate the decentralized and informal communication so important to the success of any complex operation.

Tools as well as data and human communication need to be shared so that solutions developed at one agency can be adapted and adopted throughout the network. Sharing knowledge, tools, and solutions is more effective than just tossing a data standard "out there" and requiring participants to adopt it. Consulting, mentoring, and sharing advice and expertise must be encouraged. Collaboration and communication, not just tight control, should be the model, with a central organization providing clear direction and meaningful oversight.

Conclusions

Assuming a central office coordinates the activities of the many projects stimulated by the DATA Act, attention must also be paid to the manner in which projects are defined, prioritized, planned, and implemented. A process for doing this should take into account both the strategic objectives of the DATA Act and its push for standardization, balanced with the need to manage ongoing business at the agency and program level.

Think of the ripple effects that changing how data are gathered and reported can have. Potential changes will impact many areas including:

- Delivery of citizen services
- Ongoing database management
- User and administrator training
- Use of contractors for temporary assignments
- Documentation and version control
- Publicity
- Websites
- Publishing and content management practices

While a central program management operation can define detailed technical requirements, technical approaches, and management tools, implementation work needs to be occurring locally – while the "train is still running."

How this overall governance process is managed will determine how long DATA Act implementation takes, how much it costs, and whether or not it is successful.

Related reading:

- *DATA Act Implementation: Where's the Plan?*
- *Government Performance Measurement and DATA Act Implementation Need to be Coordinated*
- *The State of Government Data Transparency, 2013*

- *A Project Manager's Perspective on the GAO's Federal Data Transparency Report*
- *Using Improved Knowledge Sharing to Address Acquisition Reform Challenges*
- *Data Standards and Data Dictionaries Need Data Governance*
- *Recommendations for Collaborative Management of Government Data Standardization Projects*
- *Agile Software Development and Project Collaboration Tools*
- *How I.T. Projects Are Selected Needs To Change, But How?*
- *Developing a Collaborative Approach to Improving Project Management Practices, Part 1: Culture*