

Leveraging Data as a Strategic Asset Phase 1 Comments by Owen Ambur, Chair, StratML Working Group, and Co-Chair Emeritus, xml.gov Community of Practice (XML CoP)

General Comments: Perhaps the most important action the government might take to leverage data as a strategic asset is to implement the good practice set forth in [Executive Order 13642](#), establishing machine-readability as the default for government information.

An unrecognized implication of the order is that XML &/or JSON schemas should be specified for all Federal Records series. For additional background, see Wikipedia's [article on Machine-Readable Documents](#).

Agencies should also comply with [section 10](#) of the GPRA Modernization Act (GPRAMA), which requires them to publish a very important set of records in machine-readable format, i.e., their strategic and performance plans and reports.

See also my Government Computer News articles entitled "[The open, efficient, machine-readable government](#)" and "[A plethora of YADs: Let's hope they point to a more intelligent future](#)" as well as my [posting on LinkedIn](#) announcing that I have done what agencies should have done for themselves with respect to compliance with section 10 of GPRAMA.

By complying with that provision of GPRAMA and using an open international (ISO 17469-1) and American national (ANSI/AIIM 22:2017) standard like Strategy Markup Language (StratML) to identify their stakeholders, agencies will also be in compliance with paragraphs [202\(b\)\(4\) & \(5\)](#) of the eGov Act, which require agencies to work together to link their performance goals to key groups, including citizens, businesses, and other governments, as well as internal Federal Government operations.

Doing so will also support [Goal 7: Stakeholder Engagement](#) in leveraging data as a strategic asset. Failing to comply with the law feeds mistrust in government while making it difficult for stakeholders to track what agencies are trying to accomplish, much less engage in helping them become more effective.

Specific Comments:

[Objective 2.1.1: Availability & Formats](#) - Make data available more quickly and in more useful formats

Data should be made available in open, standard, machine-readable formats, like Extensible Markup Language (XML). As directed by [OMB Circular A-119](#), agencies should participate in the specification of such standards by ANSI-accredited standards development organizations like [OASIS](#) as well as widely respected developers of *de facto* standards like the World Wide Web Consortium ([W3C](#)).

[Objective 3.1.3.2: Performance Metrics](#) - Provide accurate and timely performance metrics

As required by GPRAMA, agencies should publish their performance metrics in an open, standard, machine-readable format like StratML Part 2, Performance Plans and Reports (ANSI/AIIM 22:2017). Doing so will empower value-added intermediaries to make such information readily available to stakeholders in ways that are highly useful to them.

[Objective 5.4:](#) Intentionality - Integrate Intentionality

Other Information: Create, acquire, use, and disseminate data deliberately and thoughtfully, considering quality, consistency, privacy, value, reuse, and interoperability from the start.

The vision of the StratML standard is: *A worldwide web of **intentions**, stakeholders, and results*. Each data collection should have a performance plan published in an open, standard, machine-readable format like StratML Part 2.

The [information collection approval process](#) required by the Paperwork Reduction Act (PRA) should be streamlined by substituting the publication of such plans for the current bureaucratic process, thus enabling value-added intermediaries to facilitate input and feedback on each proposed data collection as well as existing collections.

[Objective 5.5:](#) Relevance - Ensure Relevance

Other Information: Validate that data are high quality, useful, understandable, timely, and needed.

“Relevant” means applicable to the goals and objectives in question. Thus, the relevance of data should be evaluated based on how well it supports the underlying objective(s). If both the objectives as well as the data are published in open, standard, machine-readable format, value-added intermediaries will be empowered to facilitate feedback from stakeholders on its usability, usefulness, and timeliness.

[Objective 5.10:](#) Accountability - Practice Accountability

Other Information: Audit data practices, document and learn from results, and make changes as needed based on findings.

Accountability requires records having the [attributes set forth in ISO 15489](#). If those records are created and maintained in open, standard, machine-readable format, traditional auditing processes can be largely automated, thereby freeing human auditors to perform higher-value activities – like learning, evaluating results, and proposing process improvements.

[Objective 6.2:](#) Use, Access & Augmentation - Identify use cases for data interoperability techniques and coordination tactics to better serve agency missions and the public.

The proper response to this issue is obvious and compelling: Agencies should actively participate in the development and use of international voluntary consensus data standards, as directed by generically by OMB Circular [A-119](#) and explicitly by [OMB Circular A-130](#) and [M-13-13](#).

As far as agency missions are concerned, [ISO 17469-1](#), Strategy Markup Language, is the applicable international standard. By using the standard, agencies will empower value-added intermediaries to help them coordinate more efficiently and effectively not only with each other but also agencies at all levels of government across the nation and the world. The public will also be empowered to engage more efficiently and provide more effective input and feedback.

[Objective 6.3](#): Decision-Making & Accountability - Identify use cases addressing how the Federal Government can better assist policy-makers with data.

By far the most important use case for using data to assist policy-makers is to develop, track, and report agency and program performance metrics to support evidence-based decision-making. Agencies are already required by law (section 10 of GPRAMA) to do so. The necessary first step is for them to comply with the law.

[Goal 7](#): Stakeholder Engagement - Determine the best mechanisms for engaging stakeholders in the development of the data strategy.

The first requirement is to more explicitly identify the stakeholders who may be interested and/or affected by each goal and objective. The second requirement is to publish the generic group names and descriptions of stakeholders in an open, standard, machine-readable format like StratML.

When that is done, myriad value-added intermediary services will emerge to empower stakeholders to provide input and feedback far more efficiently and effectively than ever before possible – not merely on the data strategy but *all* of the goals and objectives of all of the agencies.

To use a term of which the President is fond, it would be *sad* if taxpayers were forced to pay for yet another data stovepipe system reinvented to engage stakeholders on the data strategy when the requirements are exactly the same for providing input and feedback on goals and objectives of all types, regardless of the plans in which they are documented.