



Daniel York - M1EG &lt;daniel.york@gsa.gov&gt;

---

## Comment on open government data for today's forum

---

**Alexander Howard** <alexanderbhoward@gmail.com>

Thu, Apr 25, 2024 at 11:59 AM

To: Open Government Secretariat &lt;opengovernmentsecretariat@gsa.gov&gt;, us-open-government@googlegroups.com

Dear Open Government Secretariat,

I look forward to seeing some or all of the Secretariat this afternoon at the OpenGovHub. Thank you for your many efforts to reboot the executive branch's work on open government.

I write today to comment on data transparency in the federal government.

In some ways, the situation in 2024 is radically better than it was in 2014, much less 2004.

Across the immense enterprise of the executive branch, agencies are publishing data online at a scale that dwarfs the disclosures of years past, from scientific data to regulatory disclosures to health data to campaign finance data to education data and much, much more.

But in other ways, we are far behind where we should be. Far too much information remains locked up in paper form, non-machine-readable or proprietary formats, obscure servers, or overclassified systems.

It is most welcome that the U.S. government is investing more in data science capacity to make open government data more understandable and useful and to use modern Internet technologies to explain it. Many agencies are already pursuing this work, notably the Treasury Department at USASpending.gov.

But, as we wrote in response to the White House at the end of 2022, a key commitment was not included in the reasoned response, despite it being a clear priority of organizations committed to open government for many years, nor the 5th NAP.

<https://governing.digital/2023/01/18/the-white-houses-reasoned-response-dismissed-civil-society-priorities-and-undermined-the-open-government-partnership/>

Conspicuously missing from this reasoned response and 5th NAP was a commitment to issue guidance on the OPEN Government Data Act and oversee its implementation, including ensuring every agency has a Chief Data Officer who is wholly dedicated to improving public access, usage, and understanding of public data.

This should have been a top-level commitment in this theme, alongside other ambitious commitments to open government that our coalition called for:

<https://governing.digital/letters/letter-to-president-biden-on-advancing-ambitious-new-commitments-on-open-government-to-defend-democracy/>

The General Accountability Office has been highlighting the need for this guidance to improve federal information transparency for years now, and yet, oddly, there is no OMB official scheduled to attend today's forum to announce a draft policy for public comment, in the spirit of open government.

<https://www.gao.gov/federal-information-transparency>

This void in White House leadership and lack of accountability for an ongoing failure to deliver on Congressional mandate, unfortunately

calls into question this administration's actual commitment to data transparency.

There should be a NAP5.5, with an official accountable for every commitment and a commitment to publicly identify a human steward for dataset listed on [data.gov](https://data.gov) – likely an agency CDO – creating iterative feedback loops between data stewards and the press, public, and other stakeholders, including scientists and engineers.

Making the public information the federal government holds in trust for the American people open to us online will require far more resources, commitment, and leadership than are currently being applied today. Fortunately, this goal is directly connected to making this information AI-ready, as required under the executive order President Biden issued. The recent RFC issued by the Department of Commerce makes this explicit connection:

<https://www.federalregister.gov/documents/2024/04/17/2024-08168/ai-and-open-government-data-assets-request-for-information>

It's long past time for the White House to issue guidance on open government data and for the United States government to then collectively move forward with making public information open and accessible to the public it serves.

Thank you for the opportunity to comment.

Respectfully,  
Alex Howard

--

You received this message because you are subscribed to the Google Groups "US Open Government" group.

To unsubscribe from this group and stop receiving emails from it, send an email to [us-open-government+unsubscribe@googlegroups.com](mailto:us-open-government+unsubscribe@googlegroups.com).

To view this discussion on the web visit <https://groups.google.com/d/msgid/us-open-government/CAD%2BC%3DS5R-mOBNDw6vBP1N9ZLFwZcpJ0i4avakPu-L86pnmRTRw%40mail.gmail.com>.

## Agree or Disagree?

### Data Purposes, Uses, and Users

*Shelley Metzenbaum*

*Date Foundation April 25, 2024*

Performance management and evidence-informed management are not, as too often assumed and communicated, primarily about measuring the performance of and evaluating government programs. Rather, it is about programs and others measuring, analyzing performance measures and other data, and using data analyses and findings of well-designed trials to:

- **inform where to focus;**
- **find ways to improve;**
- **increase adoption of better practices while reducing use of less effective, efficient, and equitable ones;** and
- **build understanding of government choices about priorities and strategies, progress, challenges, and lessons learned, hopefully building trust in government as well.**

Government performance and evidence-informed management use data and findings of well-designed trials for three primary purposes:

- **Outcomes:** current and future well-being of people, communities, places, and incidents and conditions affecting them.
- **Operational quality:** how well government processes used to implement laws and initiatives work, including their transactional ease, time required, complexity, fairness, timeliness, courtesy, understandability, costs, and integrity.
- **Transparency:** how well performance information is communicated to improve outcomes and operational quality, inform individual and organizational choice, inform democratic debate about goals and strategies, and build understanding of and trust in government and those it supports financially or otherwise.

Lessons have been learned about how to use and avoid using (and communicating with) five performance and evidence-informed management tools:

- (1) **goals;**
- (2) **data and data analyses;**
- (3) **well-designed trials** (including but not limited to randomized control trials) to test and assess to find ways to do better:
- (4) **communication and community**, including frequent data-informed meetings and continuous-learning-and-improvement communities; and
- (5) **motivational mechanisms.**

These tools have multiple uses for multiple users, including people in government, government delivery partners and many others.

Several challenges have slowed progress:

- One is **inadequate understanding of the why and how of performance and evidence-informed management**. Fortunately, as knowledge and experience have grown, an increasing number of those making funding and implementation decisions have come to appreciate that government performance and evidence-informed management is not primarily about measuring program performance to inform decisions about whether to fund a program. It is, instead, about government programs, those government funds, and funders continually using performance management and evidence-finding, building and sharing tools to inform focus and find ways to improve. At the same time, more progress is needed to build knowledge and understanding among agency officials, delivery partners, and policymakers of the what, why, how, who, when, and where to use (and communicate) performance and evidence-informed management tools to increase wise and discourage performance-dampening uses.
- A second challenge is **building, sharing, and using understanding of incentives and other motivational mechanisms** to encourage continuous improvement and avoid discouraging, frustrating, and worse. The federal government lacks the existential pressure to survive that compels private companies to collect and analyze data continually to choose which products and services to sell and which markets to serve. Multiple motivators influence federal employees, most of whom report being motivated by advancing the common good. The more likely motivational problem may be that individuals feel they lack the license and authority to pursue progress on specific goals, especially when cooperation from other organizational units is needed or when risk-taking innovation is required. A complementary problem arises when poorly designed extrinsic incentives are introduced in personnel or grant-linked reward and penalty systems, whether those incentives are explicit, implied, or assumed without those assumptions getting corrected.
- A third challenge is **clearance hurdles and other administrative barriers** that impede effective, cost-effective, and equitable performance and evidence-informed management plus **oversight mechanisms that focus on finding and reporting problems but not promising practices** worth further study and do so without generating and sharing insights to prevent problems and realize outcome and operational quality gains.

Evolving technologies for collecting, analyzing, visualizing, sharing, and discussing analyzed data and findings of well-designed trials will continue to increase opportunities for performance gain. It is time to reflect on lessons learned and actions to take to accelerate and amplify future progress. Decisions must be made about what to do and when to act to find ways to improve societal outcomes, government's operational quality and government transparency. Also, decisions must be made that assure adequate resourcing so government programs and those governments fund are able to use performance and evidence-informed management tools wisely.

*Full article exploring these issues and considering lessons from and progress in federal performance management available [here](#).*



## PREPARED FOR:

Open Government Data Forum discussion with members of the U.S. federal government and civil society involved in advancing open data principles.

Hosted by the U.S. General Services Administration's (GSA) Open Government Secretariat, the Federal Chief Data Officers (CDO) Council, the Data Foundation, and the Open Gov Hub.

# Elevating Open Data with Baldrige: Our Path Forward

*Speaker: Josh Racette, Vice President of National Programs & Development  
Baldrige Foundation*

[www.baldrigefoundation.org](http://www.baldrigefoundation.org)  
[www.baldrigeinstitute.org](http://www.baldrigeinstitute.org)



# A NATIONAL FRAMEWORK Using Baldrige as the Vehicle for Open Data

Ladies and gentlemen,

Good afternoon! I'm Josh Racette, Vice President of National Programs and Development with the Baldrige Foundation, and today, I am here to share a vision—adopting the Baldrige framework as our national standard and framework for open data initiatives across U.S. federal agencies and civil society. This is not just about improving systems but about transforming our approach to governance and public engagement, driven by evidence-based concepts.

Why Baldrige? Because it's more than a set of criteria. For more than 30 years, Baldrige has demonstrated a commitment to excellence that has proven successful across sectors, from healthcare to education to business and manufacturing, and now, officially expanding to include our communities. On August 9th, 2022, President Biden signed into law the CHIPS and Science Act, which also authorized "Community" to become the seventh category of the Malcolm Baldrige National Quality Awards. The bill authorizes communities across the United States to apply for and receive, the highest level of recognition for quality and performance excellence provided by the Office of the President of the United States using the Baldrige Criteria. Award recipient communities will serve as national role-models and share their best practices, which will allow thousands of other communities across America to learn from them. This expansion by Congress highlights the crucial role that communities play in our collective well-being and the potential of the Baldrige framework to enhance community services through systematic, evidence-based improvements.

Integrating Baldrige with our open data efforts ensures that we manage and use data with the highest standards of quality and integrity. This is crucial for building trust with the public, making our operations not just visible but understandable and reliable.

Transparency and accountability are cornerstones of open data. The Baldrige framework enhances these principles by demanding clarity and consistency in how we handle information. As we extend our focus to communities, open data becomes a powerful tool for local governments and organizations to engage with residents transparently, improving public trust and participation.

Efficiency is another hallmark of Baldrige. In the context of open data, it means doing more than just releasing numbers. It's about ensuring that every dataset serves a

purpose, supports decision-making, and improves outcomes. By applying Baldrige's rigorous process management principles, we can achieve more impactful data dissemination, maximizing the utility of every byte of data.

Innovation—how do we use open data to not only address current challenges but also anticipate future needs? Baldrige encourages us to think creatively, use data to drive innovation and develop services that meet the evolving demands of our citizens. This proactive approach is essential for keeping our government at the cutting edge of public service. Additionally, within the Baldrige Foundation, we are utilizing the Institute for Performance Excellence as a way to catapult innovation. Within this community of leaders, we engage with organizations and communities representing every sector of the economy. The Institute for Performance Excellence is the vehicle by which we can provide a central ground for all to come, engage, and learn from one another which fits perfectly with the so many great opportunities that surround open data principles.

Importantly, Baldrige is about sustainable improvement. It teaches us to build systems that learn and adapt over time, ensuring that our data practices are not static but evolve with technological advances and societal changes. This continuous learning is vital for maintaining the relevance and effectiveness of our open data initiatives. Additionally, Baldrige is highly focused on creating resilient organizations and communities and open data principles are key to maximizing that success.

Lastly, standardizing on Baldrige means unifying our efforts across all levels of government. This standardized approach helps streamline data sharing and collaboration, leading to better interoperability and more coherent public services. Baldrige can be the national framework.

By embracing the Baldrige framework, we are not just adopting best practices; we are setting a standard that promises transparency, efficiency, and innovation. Let's work together to make open data not just available but truly transformative for our government. Baldrige is the national framework and the key to help accomplish these goals!

Thank you for your attention, and I look forward to championing this journey with all of you.

**About the Author**

*Josh Racette is the Vice President of National Programs and Development for the Baldrige Foundation where he oversees the Institute for Performance Excellence. The Baldrige Foundation's Institute for Performance Excellence is a thought leader on performance excellence, leadership, and management. Our team carries out its mission in a number of ways: undertaking research projects, hosting conferences and activities, conducting executive-level and online professional development and skills training, making resources available to enhance organizational performance, and publishing and distributing a wide variety of educational materials to share best practices.*



## IMPORTANCE OF BALDRIGE

"America's economic strength depends on industry's ability to improve productivity and quality and to remain on the cutting edge of technology, and that's why the Malcolm Baldrige National Quality Award is so important."

**RONALD REAGAN**  
PRESIDENT OF THE UNITED STATES



[www.baldrigefoundation.org](http://www.baldrigefoundation.org) | [www.baldrigeinstitute.org](http://www.baldrigeinstitute.org)

1717 Pennsylvania Ave NW Suite 1025, Washington, DC 20006 | Phone (202) 559-9195 | © Copyright 2020 | The Foundation for the Malcolm Baldrige National Quality Award, Inc. is a 501(c)(3) nonprofit organization | EIN 59-2891462 | NAICS 813211 (Grantmaking) 611430 (Professional and Management Development Training) | DUNS 004808751

Good afternoon, everyone.

I'm here today to advocate for the vital adoption of open source and open standards in Government as it implements the Evidence Act.

Consider the 20th century's transformative infrastructure—bridges, railroads, highways. None were hindered by proprietary constraints. Instead, open standards enabled widespread usage, driving progress and prosperity.

Similarly, the early internet, funded and fostered by the U.S. government through ARPANET and TCP/IP protocols, blossomed into a global communication backbone when commercial restrictions were lifted in the early 90s. This open, standard-based approach catalyzed an unprecedented wave of innovation, essentially crafting the digital fabric of today's society.

Now, imagine a world where we clung to the proprietary networks of yesteryear like CompuServe, Prodigy and AOL. Would we have achieved the digital richness we enjoy today? Unlikely.

This historical precedent underpins why we must champion open standards and open source in government data. Open access to government data ensures no individual or organization is gatekept by financial or technical barriers. This democratization not only nurtures innovation but also bolsters our economy in this digital age, much like the open policies that shaped the 20th century.

It is heartening to note that in implementing the Evidence Act, there is ample evidence that the government is continuing its unique market-making role in securing the Digital Commons. Just last month, DCAT-US v3 metadata standard achieved recommendation status - setting forth a standard way to catalog and describe the Government's vast data assets.

I'm convinced that it will set the standard not just for Government, but for Society at large to build Tim Berners-Lee's long dreamed Web of Data.

Digital Public Infrastructure NEEDS to be built on open source and open standards.

It cannot be built on proprietary, rent-seeking solutions from GovTech vendors whose business models depend on lock-in and limited interoperability.

The future of our Digital Commons, vital for a thriving democracy and robust economy, relies on our commitment to openness and shared standards.

I urge you all to champion the integration of open source and open standards for open government data. It is not just a strategic move—it's our responsibility to ensure a free, accessible, and prosperous digital future.

Thank you.

Joel Natividad

Co-founder and Co-CEO, datHere, Inc.

## Open Government Data Forum Comments

From Marc Joffe, Board Member, XBRL US, April 25, 2024

Thanks for organizing today's forum and for giving me the opportunity to speak.

I would like to highlight delays in the Executive Branch's implementation of the Grant Reporting Efficiency and Agreements Transparency, or [GREAT Act of 2019](#). Under this bipartisan legislation, the government was supposed to promulgate machine-readable data standards for grant documents and federal single audits by the end of 2022. Unfortunately, this has not occurred, but now that the pandemic is firmly in the rearview mirror, I hope that OMB, HHS, and GSA will move forward with releasing and implementing these standards.

With federal grantees spending over \$1 trillion annually, it is essential for oversight agencies and interested citizens to be able to analyze grant data. By replacing PDFs filed by grantees with machine-readable documents, GREAT Act implementation would vastly improve the ability to conduct such analysis.

Although GREAT Act implementation appears to have stalled within the federal government, a lot of progress has been made by external stakeholders that the federal agencies can leverage. XBRL US, working in conjunction with member organizations, has developed a taxonomy for grant and single audit filings. We then applied this taxonomy to grant filings produced by the College of DuPage, a large Illinois community college district, producing sample machine-readable inline XBRL documents consistent with the GREAT Act's legislative intent.

With respect to Single Audits, a new flurry of work is occurring in association with the Financial Data Transparency Act enacted in 2022. FDTA requires machine-readable disclosure from governments and non-profits participating in the municipal bond market. The annual financial statements these bond issuing entities produce are often identical to the federal reporting package they include with their single audits. So FDTA implementation work is directly relevant to the GREAT Act.

To assist with FDTA implementation, the Governmental Accounting Standards Board (GASB) is creating a reporting taxonomy that will borrow from XBRL US's work. Ultimately, FDTA implementation will be the responsibility of the US Securities and Exchange Commission.

I recommend that OMB, HHS, and GSA work with both the SEC and non-governmental organizations to push machine-readable state and local government reporting forward. The GREAT Act can have a great impact on our understanding of grantee financial performance, but only if and when it is finally implemented.



Public comment from Sarah Schacht, of Smarter Civic.

[smartercivic@gmail.com](mailto:smartercivic@gmail.com)

Website: <http://smartercivic.squarespace.com>

American federalism creates a complex challenge to open government, AI, and general use of open data. Why? Long ago, we decentralized governance, and with it, data collection and reporting.

Data challenges that result from our decentralized government and data collection include:

Public comment from Sarah Schacht, of Smarter Civic.

[smartercivic@gmail.com](mailto:smartercivic@gmail.com)

Website: <http://smartercivic.squarespace.com>

American federalism creates a complex challenge to open government, AI, and general use of open data. Why? Long ago, we decentralized governance, and with it, data collection and reporting.

Data challenges that result from our decentralized government and data collection include:

- We struggle to know emerging trends on the ground—we're left somewhat flatfooted in emergencies, emerging pandemics. Our modern age requires knowing what's happened *today*, not a month or a year ago. Our decentralized governance and open data systems aren't AI-ready, as 80% of open government data required data wrangling and cleaning to be useful.
- Many local, county, and state governments still don't have access to open data tools and their vendors often own the machine readable versions of data public employees collected.
- I believe that our country's Semantic Heterogeneity across open data holds us back from being more open *and* more effective in governance, particularly at moments where new trends or threats emerge

My name is Sarah Schacht, I'm an open government professional with nearly 20 years of experience in our field. I've written two data standards in public health, the LIVES and SAFE data standards, the latter on contract with the National Environmental Health Association and CDC. As a former Beeck Center fellow, I produced research on 50 states's Covid data and how the semantic heterogeneity could be reduced with a simplified data schema. Recently, I developed the first certificate program for congressional staff, Data Skills for Congress, produced by USAFacts and UC Berkeley.

I believe US Open Government Action Plan must include quantifiable goals on producing shared schemas for commonly collected government data. But how can we do that without being weighed down with slow-moving, expensive standards bodies?

Let's not make "perfect" the enemy of "good." Here are action steps the US could take:

- First, let's stop using the term "standards," as they carry too much weight and limit an agile approach. "Shared schemas" feels... less intimidating. We're not trying to standardize internal processes of states and counties, we just need versions of data exports which are formatted with a shared schema.
- Produce a small, one year tiger team to identify America's highest priority and most heterogeneous open data categories.
  - Through ecosystem scans of these categories of data, identify the most commonly used fields across jurisdictions, any shared policy or practice documentation (such as the Model Aquatic Health Code (MAHC), or the International Building Code), and model the required fields on the highest priority information outlined by broadly shared practice or policy. For instance, while there are over 400 pool inspection data fields which *can be* collected in compliance with the MAHC, the most telling part of a pool inspection is if the inspector can see the pool main drain. If not visible, the pool should be closed because a number of safety concerns are tied to opaque pool water. Therefore, "Is the main drain visible? Y/N," is a required field.
  - Limit the scope of new, shared schemas to up to 10 fields and a maximum of 30 optional fields. This keeps adoption attainable by county and state governments; additional optional fields can always be added and notified to participating governments of the shared schemas.
  - Engage relevant public employee associations, who serve an educational and convening role to experts in their fields, to review the recommended shared schemas and make modification recommendations. Leverage those relationships to promote shared schema implementation on new versions of open data sets.
  - Engage major vendors in easing shared schema adoption.
- Leverage community grants from the Senate appropriations subcommittee to fund local implementation and local/state staff training through webinars and participation in public association conferences.
- Leverage shared government software initiatives to fund shared ETL (extract, transform, load) tools to share amongst counties, cities, and state agencies.

AI-ready, open, and shared schema government data doesn't need to be intimidating, but it does need effort. By including a "shared schema" effort in our OGP commitments, with quantifiable goals, the U.S. will become more open—and effective—government.

# ADVANCING OPEN DATA PRINCIPLES.

Open Data is structured, semi-structured or unstructured data that is freely available to anyone at no cost, and is curated and distributed from governments and also from commercial and non-profit organizations.

Ideally, Open Data conforms to domestic and, ideally, international standards. Data standards are usually expressed with “meta data,” using datatypes, definitions, formats, schemas and, importantly, identifiers.

- **Interoperability, Exchange and Collaboration:** Data standards enable interoperability so that enterprise and external systems can seamlessly exchange data. Data standards also facilitate exchange of data and operational collaboration across systems, organizations, and stakeholders. When data is standardized, it becomes easier to share and integrate data across boundaries, enabling effective collaboration, data sharing, and joint initiatives. By adhering to common data standards, organizations can avoid data compatibility issues, reduce duplication, redundancy, and integration complexities, improve data sharing and collaboration across various platforms and stakeholders, and often, reduce costs.
- **Data Quality and Consistency:** Data standards help ensure data quality and consistency by defining guidelines for data collection, validation, and storage. By following standardized practices, organizations can minimize errors, improve data accuracy, and enhance data reliability for analysis, reporting, and decision-making purposes.
- **Efficiency and Cost Savings:** Adopting data standards can lead to increased efficiency and cost savings. Standardized data formats and structures simplify data processing, integration, and analysis, reducing the time and effort required to handle data. This efficiency can result in cost savings and improved productivity.
- **Compliance:** Data standards play a crucial role in data governance and compliance efforts. They provide a framework for data management, privacy, security, and regulatory compliance. By adhering to data standards, organizations can ensure data protection, mitigate risks, and comply with relevant laws and regulations.

The value proposition for data standards lies in their ability to promote interoperability, improve data quality, enhance efficiency, ensure compliance, facilitate collaboration, and enable future-proofing of data systems. By adhering to data standards, organizations can unlock the full potential of their data and derive maximum value from it.

# ADVANCING OPEN DATA PRINCIPLES.

## 1. What is a Data Standard?

A standard is a set of rules for constructing data products in a defined and repeatable way.

The International Organization for Standardization (ISO) describes standards as “a formula that describes the best way of doing something. It could be about making a product, managing a process, delivering a service or supplying materials – standards cover a huge range of activities.”

The National Institute of Health explains that “a data standard is a type of standard, which is an agreed upon approach to allow for consistent measurement, qualification or exchange of an object, process, or unit of information.”

Data.gov explains that “a ‘data standard’ is a technical specification that describes how data should be stored or exchanged for the consistent collection and interoperability of that data across different systems, sources, and users. Data standards are typically made up of discrete data standards ‘components.’”

In summary, standards are an agreement between parties (people, organizations, jurisdictions) to conform to a way of doing things. These are generally agreed upon to affect an outcome to the benefit of the parties involved in their development.

Some organizations confuse reference data with standards. This is an opportunity to define the “open data” standards so that anyone can produce, consumer or construct the data products later.

Finally, a standard that is followed by no one nor agreed upon by all parties is not a standard at all.

## 2. Federal Open Data Policy

According to the General Services Administration, “Policy that instructs agencies to manage their data as an asset from the start and, wherever possible, release it to the public in a way that makes it open, discoverable, and usable.”

The OPEN Government Data Act makes Data.gov a requirement in statute, rather than a policy. It requires federal agencies to publish their information online as open data, using standardized, machine-readable data formats, with their metadata included in the Data.gov catalog ([2.15 Open Government Data Act \(2018\) | CIO.GOV](#)).

## 3. What is Reference Data?

Reference data are collections of code values and their definitions that are used to facilitate data processing, reporting and analytics, and to facilitate “straight through processing” in organizations that perform high transaction volumes.

Examples of reference data include country codes, currency codes, and industry codes, and in large organizations, include product, services and counterparty identifiers and other codes and identifiers.

In many cases, the operational implementation of a data standard, such as common code lists like those described in ISO 3166-1 and 2 for Countries and Subdivisions, e.g., AR for Arkansas, or ISO 4217 for Currencies, e.g. USD for United States Dollar, can be described as reference data.

## 4. What is Master Data?

Master data describes the most important entities that interact with an organization. It is highly curated, integrated data that is used to facilitate data processing, reporting and analytics. Master data usually describes core business concepts such as counterparties, products, services, owners, employees, students, suppliers, and other tangible assets.

# ADVANCING OPEN DATA PRINCIPLES.

Assigning an identifier to represent an entity or concept is called "semantic encoding". Ensuring that master entities are always represented by the same unique identifier over time is a key process in master data management. Just as with Reference Data standards, unique and persistent master data identifiers also promote data quality by providing consistent representation which in turn promotes data interoperability.

The US Geological Survey explains using the DAMA Data Management Body of Knowledge, "Master Data Management are the processes that control management of master data values to enable consistent, shared, contextual use across systems, of the most accurate, timely, and relevant version of truth about essential business ethics (DAMA-DMBOK Guide, 1st edition, pg. 171).

ISO 8000-115 is a standard that specifies the requirements for quality identifiers that form part of an exchange of master data.

This standard exists at the boundary of disparate organizations in order to define the framework in which they interoperate, and goes beyond defining the best way of doing something by governing the interoperation of these organizations.

SAIC® is a premier Fortune 500® technology integrator focused on advancing the power of technology and innovation to serve and protect our world. Our robust portfolio of offerings across the defense, space, civilian and intelligence markets includes secure high-end solutions in mission IT, enterprise IT, engineering services and professional services. We integrate emerging technology, rapidly and securely, into mission critical operations that modernize and enable critical national imperatives.

We are approximately 24,000 strong; driven by mission, united by purpose, and inspired by opportunities. SAIC is an Equal Opportunity Employer, fostering a culture of diversity, equity and inclusion, which is core to our values and important to attract and retain exceptional talent. Headquartered in Reston, Virginia, SAIC has annual revenues of approximately \$7.4 billion.

## About SAIC.

- SAIC is focused on solving some of the country's most complex and challenging issues and working in partnership with the government to do it strategically.
- We consider ourselves an essential partner to the government as mission integrators and innovators - bringing the latest cutting-edge tech and talent to the table, and I'm thrilled to be a part of this organization.

## What does SAIC do?

- We integrate emerging technology, rapidly and securely, into mission critical operations that modernize and enable critical national imperatives.
- We are experts in mission critical programs across each military service and command in the Department of Defense, the Intelligence Community, Space and Civilian agencies and we have the ability to use open system architecture – that can plug and play software from any provider.
- Here are a few examples of the work referenced in our recent earnings, it includes key wins which we believe SAIC was selected for because of our expertise in:
  - System modernization for space launches
  - IT infrastructure modernization
  - Hypersonics
  - Data strategy and governance.
- Dr. Justin Magruder is SAIC's Corporate Chief Data Officer.

# ADVANCING OPEN DATA PRINCIPLES.

## Data Standards from ISO Technical Committee 184 - Automation Systems and Integration

Standard	Scope	Status
ISO 22745	Open technical dictionaries and concept encoding	International Standard
ISO 8000-051	Formatting data governance policies	International Standard
ISO 8000-114	Formatting of portable data using the interoperable data format (.idf)	International Standard
ISO 8000-115	Formatting of identifiers (PO numbers, part numbers, asset numbers, certificate numbers)	International Standard
ISO 8000-116	Formatting of Authoritative Legal Entity Identifiers	International Standard
ISO 8000-117	Formatting of identifiers in blockchains to allow secure links to off chain data	International Standard
ISO 8000-118	Formatting of Natural Location Identifiers (NLI)	Out for ballot as Draft International Standard
ISO 8000-119	Formatting of Transport Unit Identifiers (TUID)	Approved New Work Item
ISO 25500-1	Supply Chain Interoperability and Integration - Overview	Out for comment as Committee Draft
ISO 25500-2	Supply Chain Interoperability and Integration - Vocabulary	Out for comment as Committee Draft
ISO 25500-3	API Verification of authoritative legal entity identifiers	Out for comment as Committee Draft
ISO 25500-100	API verification of supply chain data	Out for comment as Committee Draft
ISO 25500-110	API verification of certificate data	Out for comment as Committee Draft
ISO 25500-120	API verification of localization data	Out for comment as Committee Draft
ISO 25500-240	Strategic Sourcing concepts, principles and data requirements	Out for comment as Committee Draft