MOVING FROM IDEA TO PRACTICE

A READINESS MATRIX FOR DATA SHARING AGREEMENTS

Andrew J. Zahuranec, Hannah Chafetz, and Stefaan Verhulst

GOVLAB

Open Data Policy Lab

This paper is part of a series—"Data Sharing Agreements: Moving from Idea to Practice." This series describes the ways organizations can use data-sharing agreements to facilitate data collaborations that serve both the public and institutional interests. To view the other papers in this series, visit our webpage at dsa.opendatapolicylab.org.

The process of pursuing a Data Sharing Agreement (DSA) can be hard. Data Providers and Users entering into the process need some degree of trust and understanding in their partner—an understanding that their datasets are accurate, an understanding that their financial resources and systems are as described, an understanding that there is an institutional commitment to long-term collaboration. If there is a mismatch between needs and capacity, it could mean the loss of additional time, money, and resources. For these reasons, it is critical for parties to assess their maturity level across specific areas to ensure they are ready to enter a DSA.

This *Readiness Matrix for Data Sharing Agreements* provides data collaborative organizers with a resource to do just that. Using a table format, we give data providers and data users the 10 defining conditions for a successful DSA as well as a ranking system to evaluate their level of maturity across each of these areas. This matrix is intended to be a guide for data providers and users to complete during their initial conversations. It is organized into four parts.

- **Conditions:** The first column provides the 10 preconditions of a successful DSA. These conditions were drawn from a combination of existing assessments[1] and the results of a studio workshop on data-sharing agreements.[2]

---

[1] Assessments leveraged to develop the 10 Conditions include:

"Data Maturity Assessment for Government." *HM Government*, 2023, 101. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1143860/Data_Maturity_Assessment_for_Government_-_FINAL_PDF.pdf

data.org. "Data Maturity Assessment." Accessed June 20, 2023. https://data.org/dma/.

Moore, Susan. "Take Your Analytics Maturity To The Next Level." Gartner, December 6, 2018. https://www.gartner.com/smarterwithgartner/take-your-analytics-maturity-to-the-next-level.

Office of Data Governance - U.S. Department of Labor. "Data Management Maturity Model." Accessed June 20, 2023. http://www.dol.gov/agencies/odg/data-management-maturity-model.

[2] The Open Data Action Labs (ODAL) is an effort from the Open Data Policy Lab (ODPL) to support organizations by helping to define new strategies and tools that can resolve the policy challenges they face. These solutions are built around addressing gaps and asymmetries that slow data innovation and hinder progress toward realizing the promise of the Third Wave of Open Data. ODALs are built around a series of workshops (called "studios") which give experts and stakeholders an opportunity to define the problems facing them and then ideate possible solutions to those problems in a collaborative setting. In February and March 2023, the ODPL and TrustRelay co-hosted conversations with experts in law, data, and smart cities. This mechanism is based on the findings from these conversations.

- **Assessment:** In the second column, we provide a scoring system that data providers and users can leverage to evaluate their own level of preparedness across the 10 conditions. For each condition, we will ask you to rank your level of maturity out of 3 using a specific set of criteria.

- **Scoring:** In the third column we provide a space to allow you to tally your score for each condition based on the assessment criteria. This column should also be considered a "free space" where you can also further elaborate on any circumstances that emerge while filling out the assessment.

- **Tallying the results:** Finally, at the bottom of the table, we ask you to tally your total score based on the prior scores you made across all ten conditions. Based on your final score, we indicate your estimated level of readiness for a DSA and suggested next steps.

Completing this assessment early in the DSA design process can help avoid problems later on. To align with The Tenets of Principled Negotiation, we recommend completing this assessment as a group–with all parties present–to help foster a culture of transparency and collaborative problem solving amongst all parties. Going through this matrix verbally should take no more than two hours of your time.

READINESS MATRIX FOR DATA SHARING AGREEMENTS

Conditions of a successful DSA	Assessment Criteria	Score
1. **Experience Level:** The data provider and user have sufficient training, data literacy and previous relevant experiences to participate in the data collaboration	*1 point: Both the data provider and user have never participated in a data collaboration before and require significant training* *2 points: Either the data provider or user has previously participated in a data collaboration and others have relevant experiences, but additional training is needed* *3 points: The data provider and user have participated in a data collaboration or have relevant experiences and no further training is needed to get started*	
2. **Mandate:** The data provider and user have the authority to make decisions about the data collaboration	*1 point: Additional team members are needed from both the data provider and user's organizations in order to make decisions about the data collaboration and sign the agreement* *2 points: The majority of personnel needed to make decisions about the data collaboration are already involved but additional team members from the data provider or user's organizations will be needed to sign the agreement* *3 points: All representatives from the data provider and user's organizations who can make decisions about the data collaboration and sign the agreements are present*	

3. **Purpose:** There is a clearly defined problem statement and set of objectives	*1 point: The data provider and user have not yet agreed on the problem to be solved through the data collaboration and what it aims to achieve* *2 points: The data provider and user have agreed on shared priorities for this work but have not yet documented a shared problem statement and objectives* *3 points: The data provider and user have documented the problem statement and objectives that they will collectively pursue through this data collaboration*	
4. **Data Assets:** There is a shared understanding between the data provider and user of what data will be needed for this data collaboration as well as the required quality and completeness of it	*1 point: The data assets required (the demand) and available (the supply) for the data collaboration have yet to be clearly articulated by the data provider and/or user* *2 points: The data user has articulated the assets required for the data collaboration (the demand), but it is not yet understood if the data in question can sufficiently address the context at hand* *3 points: The data provider understands what data assets are needed for the data collaboration to be a success (the demand) and agrees to provide access to the required data assets in the exchange (the supply)*	

5. Infrastructure and Technical Assets: The data provider and user have the appropriate infrastructure, systems, technologies and tools to participate and have agreed to align with each other's technical requirements	*1 point: The data provider and user have not yet discussed the infrastructure and technical requirements needed and/or those with technical expertise are yet to be involved in the conversations* *2 points: The data provider and user have articulated each others' infrastructure and technical requirements, but have not yet determined whether they can meet each other standards* *3 points: The data provider and user have evaluated each others' infrastructure and technical requirements and have confirmed they align with each others' technical standards*	
6. Governance: A shared understanding of the requirements in how the data assets should be managed between the data provider and user	*1 point: The data provider and user have not yet discussed how the data in question will be governed or managed* *2 points: The data provider and user have articulated their baseline governance needs but have yet to determine whether they are aligned* *3 points: The data provider and user have a baseline understanding of how the data should be managed, but the governance plan will be further developed further in the DSA process*	

7. **Security and privacy:** The data provider and user agree to adhere to the security and privacy policies of each others' organizations, including for how data will be shared, stored, and destroyed	*1 point: The data provider and user have yet to discuss each others' security and privacy policies* *2 points: The data provider and user have shared their security and privacy policies with one another but have yet to determine how they will adhere to each others' standards* *3 points: All data provider and user have agreed to adhere to their organizations' collective security and privacy standards and participate in any necessary training*	
8. **Ethics:** The data provider and user agree to handle the data in an ethical way and assess all sensitives that require additional duties of care	*1 point: The data provider and user have not yet assessed the ethical implications of the data collaboration and the sensitivities in the data that may require additional guardrails* *2 points: The data provider and user have a general understanding of the dataset sensities but further work is needed to ensure the data is handled appropriately* *3 points: All data provider and user have determined the sensitivities in the dataset that need to be addressed and developed a plan to ensure the data will be handled in an ethical way*	

9. **Social License:** The data provider and user have evaluated whether each others' practices align with societal norms and expectations	*1 point:* The data provider and user have yet to evaluate previous data collaborations (with comparable data providers, users, and datasets)and how they were perceived by the public, government offices, and other stakeholders *2 points:* The data provider and user have researched previous comparable data collaborations, but have yet to determine whether the data collaboration in question aligns with the local context *3 points:* There is a shared understanding amongst the data provider and user that comparable previous data collaborations have aligned with societal norms and expectations	
10. **Organizational Culture:** Agreement to adhere to all data-related organizational practices required including guiding principles, required training/ certification, etc.	*1 point:* The data provider and user have not yet articulated their organizational requirements *2 points:* The data provider and user have articulated their organizational practices but have not yet determined how they will adhere to each others' requirements *3 points:* All data provider and user have a shared understanding of each other's requirements and how they will address them through this data collaboration	

TOTAL DATA PROVIDER SCORE:

TOTAL DATA USER SCORE:

What does my score mean?

- **The Green Zone:** Score of 25 and above
  - o Congratulations, you are ready to participate in your data collaboration! You have already discussed the key elements needed to develop the DSA and you are ready to proceed with drafting the agreement. Additional information on how you might go about articulating each element of the agreement can be found in *The GovLab's Contractual Wheel of Data Collaboration 2.0.*

- **The Yellow Zone:** Score between 20 and 24
  - o Almost there! You have met the majority of the conditions of a successful data collaboration and can begin discussing how to proceed with the DSA. However, we recommend first revisiting the conditions with the lowest scores to ensure they are appropriately addressed ahead of the DSA. This will help avoid complications later on.

- **The Red Zone:** Score less than 20
  - o There are a few more steps needed before you can begin the design of the DSA. We recommend revisiting each condition of the Readiness Matrix and ensuring each one is met ahead of the DSA.

BIBLIOGRAPHY

"Data Maturity Assessment for Government." *HM Government*, 2023, 101. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1143860/Data_Maturity_Assessment_for_Government_-_FINAL_PDF.pdf

data.org. "Data Maturity Assessment." Accessed June 20, 2023. https://data.org/dma/.

Moore, Susan. "Take Your Analytics Maturity To The Next Level." Gartner, December 6, 2018. https://www.gartner.com/smarterwithgartner/take-your-analytics-maturity-to-the-next-level.

Office of Data Governance - U.S. Department of Labor. "Data Management Maturity Model." Accessed June 20, 2023. http://www.dol.gov/agencies/odg/data-management-maturity-model.

"Open Data Readiness Assessment: Government of the Republic of Paraguay." The World Bank, 2017. https://documents1.worldbank.org/curated/en/711141530859805700/pdf/Open-Data-Readiness-Assessment-Report-English-Version.pdf.

SCRIBD. "ODI Maturity Model: Guide - Assessing Your Open Data Publishing and Use," 2015. https://www.scribd.com/document/260481608/ODI-Maturity-Model-Guide-Assessing-your-open-data-publishing-and-use#.