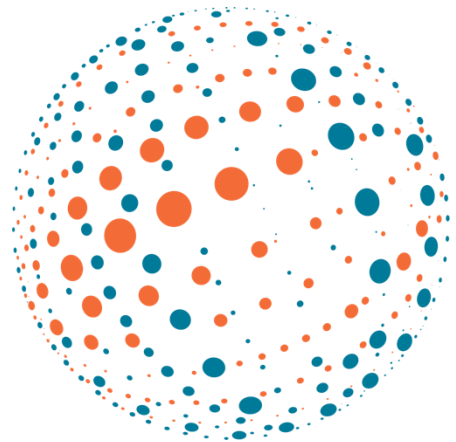


NETHOPE



DATA GOVERNANCE TOOLKIT

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WHY DATA GOVERNANCE IS IMPORTANT – TOWARDS INFORMATION CERTAINTY

“Data is essential to digital transformation, but it is also very complex to tame and manage to successful outcomes.”¹

This statement is more true when organizations start their data journey without first laying down the foundation: data governance. Organizations find themselves with inconsistent, untimely, inaccurate, and inadequately protected data, leading to misuse, lost opportunities and poor decisions making.

However, organizations are relying more and more on data analytics to help optimize their internal operations and process as well as make data driven decisions across all levels of the Organizational Hierarchy.

Therefore, Data Governance is a cornerstone to ensuring data is consistent, trustworthy and doesn't get misused².

FIVE PILARS OF DATA ANALYTICS CAPABILITY

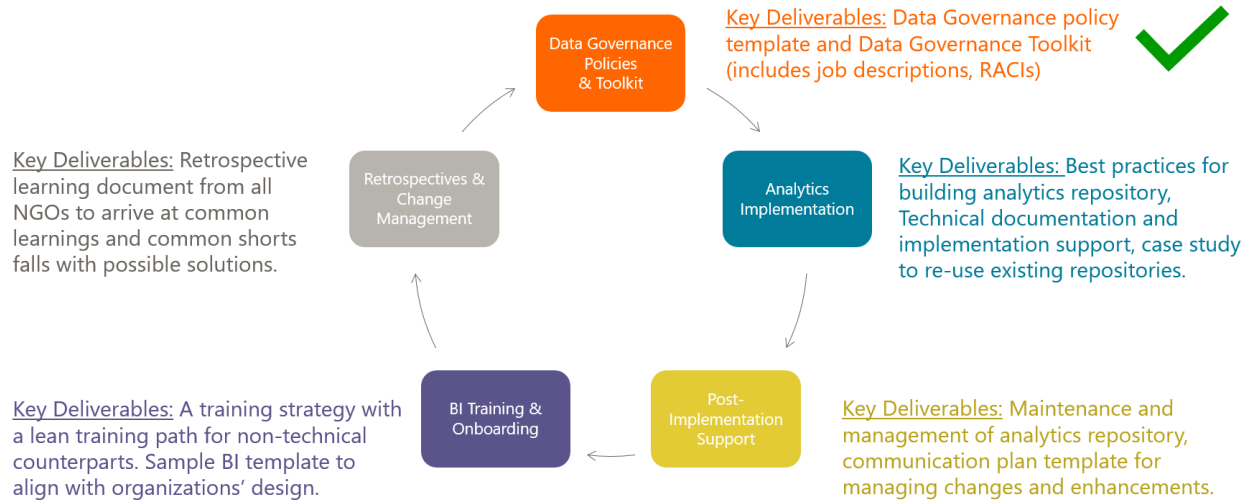
The Data and Applications Working Group of NetHope recognized the importance of data analytics within NGOs in 2020 and the lack of capacity to implement data analytics within their organizations. Thus, members of this Working Group created a Workstream dedicated to help bridge this gap. The Workstream identifies 5 pillars that form the foundation to ensuring the data analytics capability within NGOs. These five pillars are:

1. Data Governance polices
2. Analytics Implementation
3. Post-implementation support
4. BI Training and onboarding
5. Retrospective and Change Management

The Workstream has completed its work for the first pillar, Data Governance with the delivery of this Data Governance Implementation toolkit as well as a Data Governance Policy Template.

¹ From “[The Nonprofit Data Journey](#)”, published by NetHope on June 17th, 2021

² <https://www.gartner.com/en/information-technology/glossary/data-governance>



PURPOSE OF TOOLKIT

Purpose:

Although there're already existing standards for Data Governance (such as [TOGAF](#)), these were not adapted to the reality and the complexity of implementing such governance within NGOs.

The goal of this Data Governance Toolkit is to guide non-profit organizations through the steps and best practices for implementing Data Governance within your organization, while keeping in mind the changing organization IT landscape, enterprise architecture and program deliverables.

To support organizations, reach their goal of capacity building in Data and Analysis, this toolkit guides you through a Framework to implementing Data Governance that includes template policies, roles, roadmaps and KPIs.

How was it developed:

All the elements within this Toolkit are based upon best practices and commonality within NGOs, allowing for sector wide usage and possibility for tailoring to individual organizations and use cases.

This Toolkit was developed with Plan International and SOS Children's Villages which included a literary review of Data Governance Policies mapped to the Data Management Body of Knowledge (DMBOK), word tagging for common semantics and definitions.

TOOLKIT JOURNEY FOR DATA GOVERNANCE

Lay the foundation	Write your policy	Implementation	Post-implementation
<ul style="list-style-type: none"> •Data Governance Framework •Needs Assessments •Create Stakeholder Matrix to identify buy-in •Data Strategy (includes <u>KPI</u> definitions) •Data Governance Roadmap (milestones to implementation) •Add Data Culture as part of your overall Data Strategy 	<ul style="list-style-type: none"> •Use the template for •People – identify and assign roles •Process – define data quality, data security, data literacy needs •Technology – identify tools that will help manage your data governance (metadata, data catalogue) 	<ul style="list-style-type: none"> •RACI example using roles •Communications plan •Stakeholder Matrix in use – regular practices to track implementation •Evaluate technology stack for suitability (ongoing) 	<ul style="list-style-type: none"> •Define plan to update/nurture/grow emerging data practice •Define plan to update policy & framework documentation •Share policy to NetHope •Build and evaluate Governance <u>KPIs</u>

LAY THE FOUNDATION

Before you even start to write your policy, it is critical that you work through developing your Data Governance Framework as this will ensure that your policy is robust and will increase your odds of successfully implementing Data Governance within your organization.

Another important factor to consider is the staffing, time and cost of rolling out a Data Governance within your organization. This will deeply vary across organizations depending on the organizational model, internal governance models, and funding. However, the key take way is that “data governance is not a technology; **it’s an organizational commitment** that involves people, processes, and tools. [...] As your company’s data grows, you will need to continue to establish rules and procedures around its governance. Data governance is not just a project you can launch and then wrap up in an 18-month period. **It is a continuous organizational commitment that needs to grow and adapt to new compliance, business, and security challenges.**”³

Develop your Data Governance Framework:

- **Complete a Needs Assessment** to identifying priority areas – look at business units and identify where data is being exchanged and how to manage it, assess risk and data ownership.

Example questions to think about:

³ From [5 Steps to Successful Data Governance](#) from [Snowflake](#).

1. *Does the data strategy call for change in technology and/or organizational behavior that will impact who and how data is accessed, used, stored, shared, and purged?*
2. *What is your organization's biggest data risk?*
 - a. *Too much access*
 - b. *Data Quality*
 - c. *Data Security*
 - d. *Too much data*
3. *Do you have a roadmap on what data changes and what data governance requirements are going to look like in 2, 3 or 5 years?*
4. *Do you have a regulatory requirement to add Data Governance in your organization?*
5. *Do you need help with increasing trust and understanding of your data?*
6. *Does your data strategy include increasing data analytic knowledge and freedom / autonomy?*

- **Approach to Data Governance** – your approach will be determined based on your organization's situation and model. Understanding your organization's operation model will help with a successful implementation. Whether your organizations distributed, federated, and 'open ecosystem' governance models, this will impact the level of capacity, resources, and governance levers that are appropriate for building/advancing data governance within your organization.⁴

Example questions to think about:

- a. *Does your organization have an organized operating model?*
 - b. *Does your organization have a single operating model?*
 - c. *Is your organization data ready? By this we mean, is your organization looking to automate current processes using technologies (digital transformation) or is your organization looking to reengineer processes (transform)?*
- **Create a stakeholder Matrix to identify buy-in** – getting buy-in at all levels will be critical in the successful adoption and implementation of your Data Governance Policy. Think about Senior level sponsorship, but also who will be your champions/subject matter experts and how to cultivate them through the entire process (pre and post implementation). A stakeholder matrix is a useful exercise to get a full picture of your audiences.

Template to use:

You can use [this template stakeholder matrix](#) to start mapping out your audiences. This will help you think through and identify what information each audience needs to know and how you will keep them informed.

- **Start your Data Strategy** – this does not have to be clearly defined or complete you go about writing your Data Governance Policy. But your Data Strategy will most likely come up as you start to identify your KPIs for measuring successful implementation and engagement. Being able to measure progress and plan ahead is crucial for continuous improvement.

⁴ From NetHope article, The digital nonprofit: key considerations for a better data hygiene

Example of KPIs to consider:

1. *Organizational structures and awareness*
2. *Stewardship*
3. *Policy*
4. *Value creation*
5. *Data risk management and compliance*
6. *Information security and privacy*
7. *Data architecture*
8. *Data quality management*
9. *Classification and metadata*
10. *Information life cycle management*
11. *Audit information, logging, and reporting*

- **Develop a Data Governance Roadmap** – create milestones based on the needs assessment you already completed before ([see needs assessment section](#)). Your roadmap does not need to be completely defined and in a project plan format. You will need to remain flexible when it comes to planning ahead as your roadmap will most likely change. Thus, we suggest that you think in broader terms and focus on the following areas for planning your roadmap.

Example of areas that you should include in your Data Governance roadmap:

- *Data Quality Management*
- *Data Security and Identity Access Management (you can separate these into their own area if needed).*
 - *This can also include Data Sharing both internal and external.*
- *Data Warehousing (Cloud, On/Off premise, Data Lake, etc.)*
- *Storage and security*
 - *Access roles*
 - *Build new warehouse*
 - *Increase warehouse data*
- *Metadata / Glossary / Data Catalogue (you can separate these into their own areas if needed)*
- *Data Literacy and Data Culture*
 - *Consider adding Data Culture to your overall Data Strategy. Often biggest obstacles to instilling data-based decisions aren't technical but they're cultural. By considering the importance of change behavior as well the policy and technical aspect, you can further advance and build your Data Governance in your organization.⁵*
- *Document and Content Management*
- *Reference Data Management*

⁵ [10 Steps to Creating a Data-Driven Culture](#) by the Harvard Business Review

- *Data Retention and Deletion*

WRITING YOUR DATA GOVERNANCE POLICY

You are now ready to start writing your Data Governance Policy. The Policy should be based on the elements from the previous section. Though it is not a pre-requisite to have [your Data Governance Framework](#) completed before you start writing your Data Governance Policy, it will greatly help you with the writing and implementation of your Data Governance Policy.

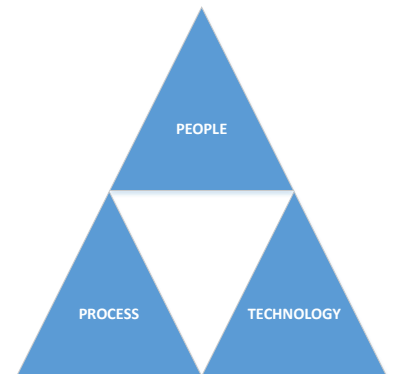
[The Data Governance Policy Template can be found and downloaded here.](#)

The template has suggested sections with comments and examples to help guide you. Replace the comments and examples from the document and replace with your own content, based on your organization's mandate.

We recommend that you read the glossary and key terms to familiarize yourself with the terminology you will be using ([see Appendix section of the Data Governance Policy Template](#)).

When starting to write your Data Governance Policy, we strongly suggest you create a working group that is made up of your key stakeholders you identified in the [stakeholder matrix](#). This group will be your sounding board for developing and writing your policy that will be applicable across your organizations. We strongly suggest that this working group be diverse and not only made up of IT folks.

The Data Governance Template Policy used the "People, Process and Technology" as its basis for a holistic approach to implementing Data Governance within your organization. The below sections will elaborate on each (People, Process and Technology), giving your specific example or templates as reference to further help guide through writing your Data Governance Policy.



PEOPLE

Identifying and assigning which people, roles and responsibilities is key in order to successfully implement Data Governance within your organization.

Data Governance being a relatively new function within organizations, this Toolkit provides you with a list of recommended roles that play an important part in implementing Data Governance. These roles have been extracted from commonalities found within other policies. [You can review the find and analysis here.](#) Please note the important following two points:

1. **These are recommended roles and are to be used as examples.** Depending on your organizational structure, you may have to adapt and/or identify people with similar roles within your organization that could take on some of the areas of responsibilities list in the table below
2. The following terms used for the roles **do not refer to the legal terms used and defined under the General Data Protection Regulation (GDPR) in Europe.** Depending on how your organizational stance on GDPR, you may need to adapt these roles to align with GDPR in order to be compliant.

For further details about the Responsibility, Accountability, Consulted and Informed (RACI), you can [consult the RACI matrix here](#). We will explore how to use this RACI matrix in the [Implementation section](#) of this Toolkit.

Data Governance Role	Description and area of responsibility
Business Data Owner	Data owners are managers or staff who have been assigned by the strategic level as being responsible and accountable for a data domain or data asset. By data owners we refer to the business owners of data assets and not to the owners or providers of IT systems used for creating, collecting, storing, processing, disseminating, or archiving data. Every data asset must have a designated data owner.
Business Data Steward / Delegate	Representing the Data Owner, this subject-matter expert is responsible for day-to-day implementation and monitoring controls of the Data Governance Policy and Standards.
Technical Data Owner (Overall) and Technical Data Steward / Custodian	Accountable for oversight and overall management including the provision of resources for data usage needs, including end-user support, access provisioning, and quality remediation. Overall accountability for safety and soundness of data at all stages of the life-cycle.
Head of Data Governance/Data Governance Head	Responsible for the leadership of the Data Management Office and governance strategy for each individual data-driven solution or artifact
Data Governance Lead	Accountable for writing and updating Data Policies, Standards and Guidelines. Responsible for managing and monitoring Data Governance best practices as outlined in the Data Policy and DG Mandate. Responsible to review and provide DG feedback and recommendations on IT and Business data requirements.

PROCESS

The Process section encompasses the set of policies, standards and guidelines that will support how Data Governance will be managed and implemented within your organization (this includes monitoring and evaluation). Below is a list of policies you should consider including in your Data Governance policy as they are core principles within the Data Governance Framework discussed earlier in this Toolkit ([see section on Data Governance Framework and Data Governance Roadmap](#)). We have provided examples or template for each of these policies to provide you inspiration and further guidance.

- **Data Access and Sharing**

Refers to policies that manages access to data-based roles and permissions. Good Data Governance will enable your organization with the appropriate guidelines for sharing internally and externally. However, it is important to understand that effective, secure and correct usage of data sharing is a result of the implementation of good Data Governance practices and is not simply enabled through the creation of a Data Governance Policy (see [Post-Implementation section](#) for further details).

Example for you to consider:

- You can take a look at [Oxfam's Responsible Program Data Policy](#) which outlines the responsible use of data when it comes to sharing and disclosing data with other INGOs.
- **Data Quality**

Refers to a set of standards, guidelines, reporting and controls to proactively manage the quality of the captured data.

You can use the five data quality standards developed by USAID⁶:

1. Validity – refers to the extent to which a measure actually represents what was intended to be measured.
2. Reliability – data should reflect stable and consistent data collection processes and analysis methods over time.
3. Precision – precise data have to sufficient level of detail to present a fait picture of performance and enable management decision-making.
4. Integrity – focuses on whether there is improper manipulation of data.
5. Timeliness – data should be available and up to date enough to meet management needs.

Examples you can look at:

- See [section 3.3 of the European Commission Data Strategy](#) for an example of a Data Quality Policy (page 20).
- Read NetHope article on [Key Considerations for Better Data Hygiene](#)
- Read article from Gartner, [How to improve your Data Quality](#)

- **Data Security**

Refers to security Standards, including Data Protection and Privacy and access management

Examples you can look at:

- See [section 3.4 of the European Commission Data Strategy](#) for an example of a Data Protection and Information Security Policy.
- See the [Oxfam Data Rights Course on Kaya](#) for an overview of why Data Rights is so important to humanitarian and development work and practical example related to the responsible data lifecycle
- See [Oxfam's case study "Going Digital: Privacy and data security under GDPR for quantitative impact evaluation"](#) which discusses privacy and data security with a focus on quantitative impact evaluation.

- **Data literacy**

Set of policies and standards advising of the most up-to-date and approved requirements and tools to capture, store and share data. Applicable internally and with 3rd-party suppliers / vendors.

Examples you can look at:

⁶ From the [Data Quality Standards](#) from USAID

- Review the [Canadian Government Data Literacy website](#) which includes a [Data Literacy training catalogue](#). The goal of this website is to provide information on basic concepts and skills with regard to a range of data literacy topics.
- See [Oxfam's Responsible Data Management Training Pack](#) for best practices for responsible data management (RDM) towards the collecting, storing, sharing, transmission, analysis and publishing of data.

TECHNOLOGY

"Data storage and infrastructure focus is on the IT artifacts that enable effective data management across the organization. Organizations must consider various hardware and software requirements such as functionality, cost, reliability, complexity, capacity, scalability, and maintainability.

Data governance with a focus on data storage and infrastructure comprises of the initial assessment of the application, storage landscape, planning of software applications, storage capacity to support data quality, data security, and data lifecycle. Further governance mechanisms include the definition of policies, standards, processes, and procedures regarding storage and distribution of data, the control of storage costs, and the education of stakeholders regarding storage utilization."⁷

Since every organization implements a unique distinct set of software and hardware it is very important to emphasize that this part of the document should be closely aligned with your IT system architecture. A guideline on which technology components are in scope and out of scope should be identified

Examples you can look at:

- [Plan international Canada](#): Scoping of the technology component (page 4)

IMPLEMENTATION

Once you have written your Data Governance Policy, it is time to up it in action and implement it across your organization. In order for your implementation to be successful, we recommend that you use the RACI to ensure responsibility of deliverables as well as a Communications plan to socialize and drive the acceptance and understanding of Data Governance.

Data Governance RACI

Also known as "Responsibility Assignment Matrix" (RAM), RACI stands for "Responsible, Accountable, Consulted and Informed". A RACI or RAM is used to describe the participation by various roles in tasks or deliverables for a project or business process.

Looking at the different roles you defined in your Data Governance Policy ([see full role details in "People section"](#)), you can use [the Data Governance RACI](#) to assign different levels of ownership and responsibility for the different areas of work. Each role gets assigned a letter (R, A, C, or I) that corresponds to a level of responsibility for the area of work.

The letters in the RACI correspond to:

- R – Responsible
- A – Accountable

⁷ From "[Data Governance: A conceptual framework, structure review and research agenda](#)" Page 18

- C – Consulted
- I – Informed

Data Governance Role	Meta-data	Data Lineage	Data Retention and Purge	Data Access & Security	Privacy	Data Storage and Security	Data Classification	Critical Data Elements	Data Sharing	Data Integration	Data Model	Advanced Analytics	Reporting & Business Intelligence	Business Query	ODI Validation Rules	Data Policies, Standards and Guidelines	Data Governance Adherence
Business Data Owner	A	A	A	A	C	R	A	A	C	C	I	I	A	A	A	A/R	A
Business Data Steward / Delegate	R	R	R	R	C	R	R	R	C	C	I	I	R	R	R/I	I/C	
Technical Data Owner (Overall) and Technical Data Steward / Custodian	A	C/I	A	R	A	R	R	A	A	R	C	C	C/I	I	A/R	R	
Data Governance Lead	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	A/R	A
DQM Manager / Lead Data Quality Analyst	R	R	R	R	R	R	R	R	C/I	C/I	I	I	C	A	R	R	
Architect and / or Data Modeler	I	C	I	R	I/C	I	I	R	R	A	R	A/R	I	I	R	A	
Executive Steering Committee	I	I	I	I	I	I	I	I	I	I	I	I	I	R	I	R	

The [Data Governance RACI](#) was elaborated through mapping and word tagging for common job titles and job descriptions within NGOs ([see details in section above](#)). Please note that this RACI is not exclusive, and we encourage you to add, remove or modify it in order to best fit your organization needs, Data Governance Framework and Policy.

Communication Plan

Creating a Communications plan will help you with tracking your implementation as well as socialize best practices across your organization. You can [use this template for a simple Communications plan](#) that includes:

- Goals and objectives
- A stakeholder matrix - ([see section](#) and [template stakeholder matrix](#)) as this allows you to have targeted messages to your different audiences, increasing your success of acceptance and implementation of Data Governance.
- Scope and messaging
- Communications activities timeline

Please note that your Communications plan will evolve and change over time and according to your implementation. Your Communications plan and your stakeholder matrix are not set in stone and you should revisit them to make adjustment.

Technology stack evaluation

The discovery, implementation, maintenance, and changes of data artifacts in your organization should follow an architecture framework. Some (not exhaustive) examples of the architecture frameworks that provide a complete overview of the technology landscape can be found in the links below:

1. [The TOGAF® Standard, Version 9.2 \(opengroup.org\)](#) The TOGAF Framework for effective Enterprise architecture planning and implementation
2. [ArchiMate® 3.1 Specification \(opengroup.org\)](#) Archimate EA standards

POST-IMPLEMENTATION

Congratulations on getting to this point! If you are here, it means you have successfully planned, written and implemented a Data Governance policy for your organization and that is no small feat.

Now that you are done, [please share your own Data Governance Policy to the NetHope repository](#) of policies so others can benefit from reading through examples. This will help others with creating and writing their own policies as well as drive consistency and commonality.

However, as we are all aware, we live in a fast pace and fast changing world, which means that context, environment, and procedure will change over time. This means that you need to update the different elements of this toolkit accordingly:

1. Update your stakeholder matrix – as people move in and out of organizations, restructures and other way in which the organizational landscape can change, you will need to update your stakeholders, the messaging, frequency of messages and method. We recommend that you revisit this document on a yearly basis.
2. Update your Data Governance Policy – depending on whether you have already Data Governance strategy and Roadmap, you will have to make sure that your policy is continuously mapped your goals and KPIs as these will change over time. We suggest you revisit this each 6 months in order to ensure strong alignment and synchronicity.
3. Update your Communications plan – as your data practices emerge and mature, you will need to update your communications plan to align with your audiences needs and maturity levels (also based on your stakeholder matrix).

CONCLUSION

This toolkit's aim is to guide non-profit organizations through the steps and best practices for implementing Data Governance while keeping in mind the diverse non-profit organizational structures, governance models, and enterprise architecture.

Most non-profits are starting their Data Governance journey, thus complete examples of Data Governance strategies and Data Governance polices from the non-profit sector were scarce. However, this toolkit was developed using elements based upon best practices and commonality within NGOs, thus ensuring it is relevant to all NGOs.

Still, it is only through the validation of case studies and share knowledge that this toolkit will be considered as the most accurate template for implementing Data Governance within NGOs.

NetHope and its Members will review this document on a yearly basis to include updates.

RESOURCES

Laying the foundation resources

- [Stakeholder matrix template](#)
- [10 Steps to Creating a Data-Driven Culture by the Harvard Business Review](#)
- [Glossary and terms – see appendix section of the Data Governance Policy Template](#)

Writing your Data Governance Policy resources

- [Data Governance literary review](#)
- [Data Governance role descriptions](#)
- [People literary review](#)
- [Process literary review](#)
- [Technology literary review](#)
- [Data Governance Policy Template](#)
- [Data Quality Standards](#) from USAID

Implementation resources

- [Oxfam's Responsible Program Data Policy](#)
- [Oxfam Data Rights Course on Kaya](#)
- [Oxfam's case study "Going Digital: Privacy and data security under GDPR for quantitative impact evaluation"](#)
- [Data Governance RACI](#)
- [Communications plan template](#)
- [Canadian Government Data Literacy website](#)
 - [Data Literacy training catalogue](#)
- [Oxfam's Responsible Data Management Training Pack](#)
- [European Commission Data Strategy](#).

Post-implementation resources

- [Repository of Data Governance Policy examples](#)

The Data Governance Policy Template was developed and created Micheline St. Clair (Plan International), Abhijit Balakrishnan (SOS Children's Villages), Gabriela Waldhart (SOS Children's Villages) and Morgane Bradley (NetHope). If you have any feedback, please fill in this [feedback form here](#).