U.S. FOOD & DRUG ADMINISTRATION

Governing the Multiverse:
Implementing Data Governance to Enhance Data Sharing and Collaboration in the Evolving and Expanding Landscape of CTP's Data Multiverse

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Abstract

Center of Tobacco Product's (CTP) is a data-driven, regulatory organization and strives to unlock the full potential of data for all CTP stakeholders. Over the last few years, CTP's data multiverse has exploded in size and complexity with a huge influx of data coming into the Center due to a court ordered mandate. In June 2022, CTP's **Office of Science (OS)** initiated the OS **Data Governance Program (OS DGP)** as part of OS's Data Modernization effort. The OS DGP not only helps with the increased size and complexity of CTP's data multiverse, but it also greatly improves sharing and collaboration. Governing the multiverse showcases the benefits of leveraging DG principles and practices to facilitate efficient and trustworthy data sharing and collaboration within the data multiverse. To achieve this vision, CTP must provide its **people** with skills needed to perform key data **processes**, while using appropriate **technology** to support them.

Objectives

1	Remove siloes via interoperable systems and modern data exchange mechanisms and tools
2	Create a common understanding of critical data assets and use a shared vocabulary
3	Improve quality by removing duplicative and ambiguous data
4	Make real-time and well-informed decisions based on trusted and shared data
5	Enable automated reporting and data visualization
6	Reduce time spent searching for necessary data and cleansing data

Acknowledgement

Disclaimer

Methods

The OS Data Governance Program assessed CTP's current Data Governance **maturity and gap analysis** to establish a wholistic data governance framework.

The project assessed CTP's data maturity through 50 interviews, 223 survey responses, and supporting material reviews.

The interviews concluded that the lack of a formal Data Governance program results in data that is

- **Inaccessible**
- **Redundant**
- **Poor Quality**
- **Un-managed**
- **Un-governed**
- **Manual Reporting**

Figure 1. DAMA-DMBOK2 Data Governance Framework

Results

The **OS Data Governance Board (DGB)** consists of 14 members from all OS divisions that share and collaborate to create DG policies and solutions.

- Conducted **26 OS DGB sessions**.
- Data Governance **policies** have been created to ensure consistency of data in OS systems.
- A **working group** has been established to create a **Business Glossary** which helps with collaboration through a shared language.
- **DG education materials** have been created and DG information sessions have been presented to each division within OS.
- Established **data quality issue triaging system**
- Identified **data governance tools** such as a data catalog

All of this work helps the entire center build a common understanding and leverage the same, consistent and trusted information.

DATA GOVERNANCE OUTCOMES

Better decision-making | Reduced operational friction | Standard, repeatable processes | Coordinated efforts | Common approaches to data issues | Protect needs of data stakeholders | Transparency of process
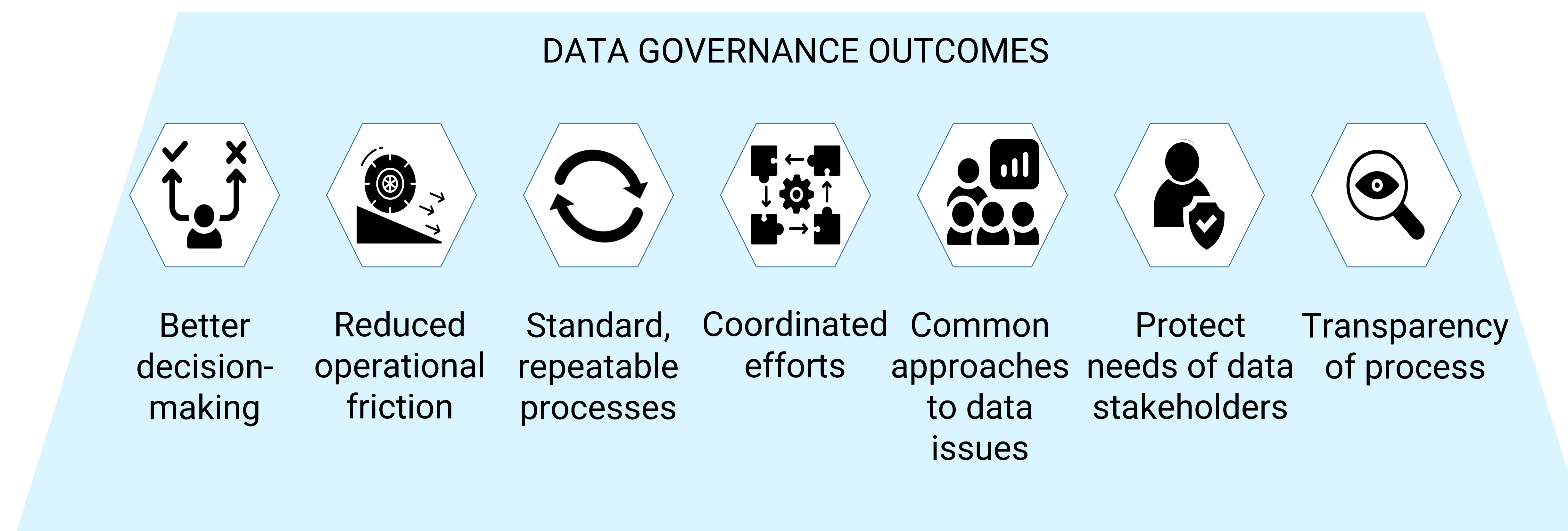
Figure 2. Data Governance Outcomes

Conclusion

Data Governance (DG) plays a crucial role in enabling efficient and trustworthy data sharing and collaboration within the data multiverse. By establishing robust DG framework, CTP can navigate the complexities of the data multiverse while ensuring Data integrity, quality, and security. The OS DGP will continue improving sharing and collaboration in CTP's data multiverse in the coming months as it **focuses on improving data quality and creating and implementing data standards for tobacco products.**