Implementing an effective data governance plan

Inside:

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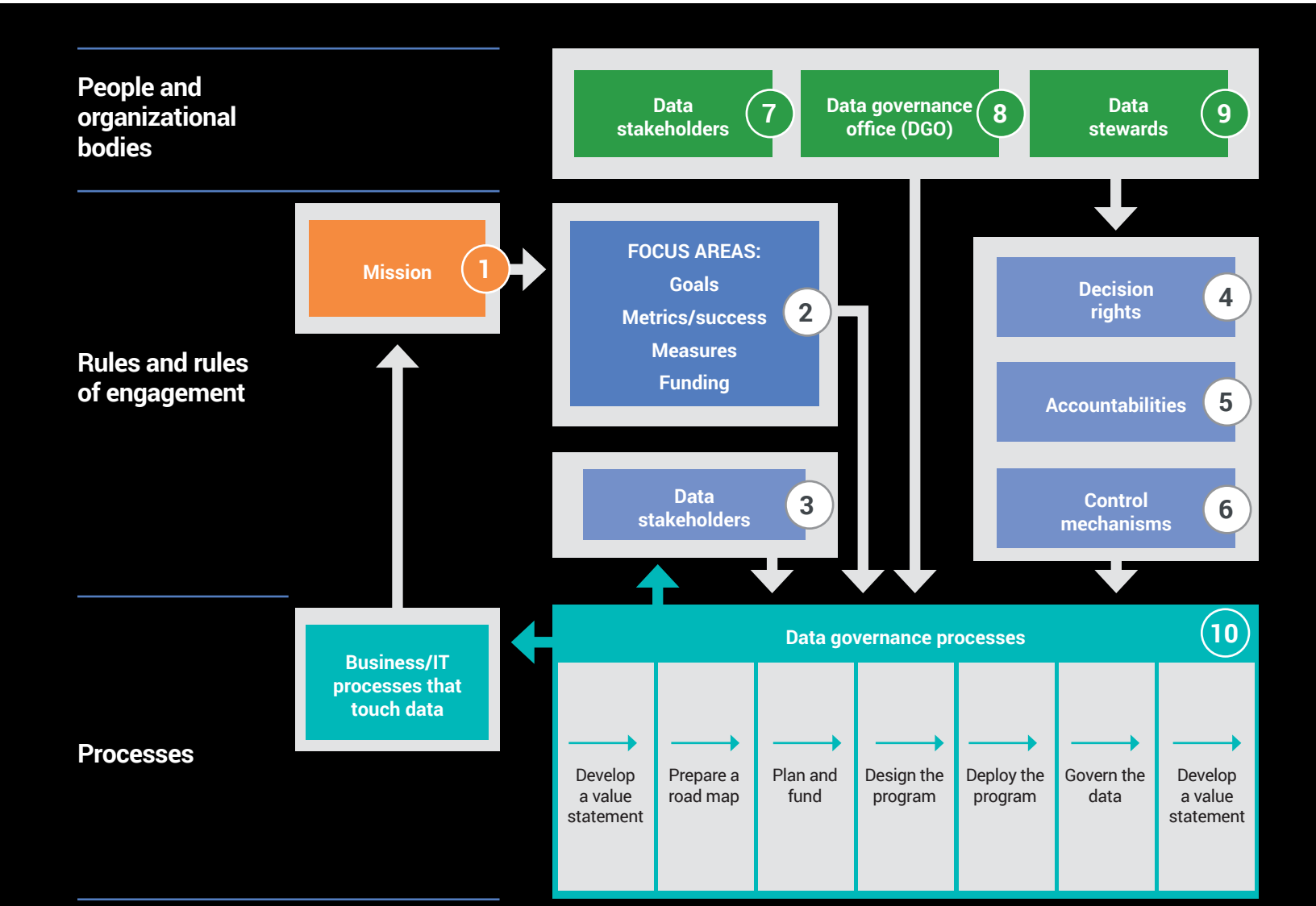
What is data governance?

Data governance is the exercise of decision-making and authority for data-related matters.[1] Think of data governance as a framework for making decisions around the handling of data. This broad description leaves room for ambiguity because in practice, the specific goals of a data governance program will be tailored to the organization.



Why is data governance important?

Nearly every company can use data to gain insights that will advance strategic or operational objectives. Making any type of decision without referencing data assets is like blindly steering a ship. Data is the key to removing subjectivity and bias so leaders can make informed and logical decisions to achieve the goals that will transform their business outcomes.

However, making business decisions based on incorrect data has serious consequences, including a lack of objectivity and inaccurate insights. These consequences are a very real risk for organizations that don't have strong data governance practices.

In addition, many recent industry advancements are driving the need for effective data governance programs:

Increasing data volume from multiple sources
The Internet of Things (IoT), streaming analytics, and even consumer data mining practices through social media platforms have increased the volume of data and the variety of sources available to organizations. However, without strong data governance to standardize data across sources, many organizations miss out on the opportunity to capitalize on this information. According to Datawatch, only 12% of enterprise data is used for analysis and decision-making, leaving 88% of enterprise data untouched.[2]

Self-service reporting and analytics
Many organizations implement self-service reporting platforms to shift the burden of report writing away from IT resources. But enabling more individuals to create reports comes with increased risks. Data stewards must consider: Is data standardization consistent across users? Are reports accurate? Is there a consistent framework to test and validate reports?

Regulatory and compliance requirements
Growing consumer protection concerns have led to heightened regulatory standards of sensitive information. Standards such as the European Union's General Data Protection Regulation (GDPR), Payment Card Industry Data Security Standard (PCI DSS) and Health Insurance Portability and Accountability Act of 1996 (HIPAA) make protecting data even more critical. In addition to controlling the risk of hacking, organizations are also responsible for ensuring those with authorized access to their systems are accessing data appropriately, creating the need for auditing and compliance policies.

Machine learning (ML) and artificial intelligence (AI)
Cutting-edge technologies like ML and AI rely on curated, defined data, and are only as effective as the data they use to identify patterns and trends.

Data governance focus areas

Most organizational data governance programs are created with goals tailored to one of six focus areas.[3] A company's data governance program might focus on one area or a hybrid of these suggested areas to align with an organization's current needs.

1. **POLICY, STANDARDS, STRATEGY**

   This type of program is usually established when an organization is moving from siloed use of data to a unified enterprise data management approach. This program highlights the need for cross-functional data stewards to establish and administer policy.

   Objectives:

   - Review, approve and monitor policy and standards
   - Contribute to data strategies
   - Identify stakeholders and establish decision rights

2. **DATA QUALITY**

   According to Infogix, 48% of organizations question the accuracy of their data.[4] A consequence of poor data quality is a lack of trust in the data. A data quality program can help organizations experiencing issues with data integrity, usability or quality.

   Objectives:

   - Set direction for data quality, establish data quality initiatives
   - Communicate quality policies and measures
   - Monitor data quality
   - Identify stakeholders, establish decision rights and clarify accountabilities

3. **PRIVACY/COMPLIANCE/SECURITY**

   This type of program is usually established when an organization has concerns about data privacy, access management or compliance with regulatory requirements.

   Objectives:

   - Protect sensitive data through establishing access management and security policies
   - Assess risk and define controls to manage risk
   - Enforce compliance requirements through regular auditing practices
   - Identify stakeholders, establish decision rights and clarify accountabilities

4. ARCHITECTURE/INTEGRATION

This type of program is usually established when an organization is working on a major system acquisition, development effort or other projects that require advanced levels of cross-functional decision-making and accountabilities.

Objectives:

- Ensure consistent data definitions
- Support architectural policies and standards
- Support metadata programs, master data management and enterprise data management
- Bring cross-functional attention to integration challenges
- Identify stakeholders, establish decision rights and clarify accountabilities

5. DATA WAREHOUSES AND BUSINESS INTELLIGENCE (BI)

This type of program is established when an organization is working on a data warehouse project or BI initiative. Strategic decisions must be made when implementing a BI tool, with the primary focus being to reduce the amount of time users spend preparing reports. The primary strategic decision is analyzing data sources to prioritize which will add the most business value.

According to Gartner:

"To drive revenue and cut costs, both of which are rated in the top five priorities of any chief data officer (CDO) according to Gartner's third annual CDO survey, the chief challenge is that 50+% of time is spent on data wrangling. A big part of that is not just scrubbing the data, but finding the best data sources with sufficient quality that will transform the data into business-impacting knowledge to drive the business."[5]

A data governance program can establish the framework and players needed to make these strategic decisions that will guide the organization's BI initiatives.

Objectives:

- Establish rules for data usage and definitions
- Make decisions to guide the implementation of a specific project
- Clarify the value of data assets and data-related projects
- Identify stakeholders, establish decision rights and clarify accountabilities

6. MANAGEMENT AND SUPPORT

This type of program is usually established when an organization's managers find it difficult to make routine data-related decisions because of their potential effect on operations or compliance efforts.

Objectives:

- Measure the value of data
- Align frameworks and initiatives
- Identify stakeholders, establish decision rights and clarify accountabilities
- Identify systems development life cycle governance steps
- Monitor and report on data-related projects
- Promote data-related messages and positions

Implementation plan

Once the focus areas are determined, a company can start planning and implementing a customized data governance program. There are five universal steps for any implementation:

Stakeholders and future data governance team members will need to understand what data governance is and how it will add value to the organization.

Executive support is critical to success. Strong team candidates also include a chief legal officer concerned about data security and compliance or a chief financial officer concerned about accuracy of financial reporting and auditing.

Designing the program will consist of developing a formal, documented and repeatable procedure for each component.

Start by executing on the communication plan to update the entire organization on any new policies.

To govern is to execute the program policies day in and day out, and constantly monitor challenges and successes.

1. DEVELOP A VALUE STATEMENT

Stakeholders and future data governance team members will need to understand what data governance is and how it will add value to the organization. A value statement conveys how specific actions will add value.

This step is often missed when organizations jump right in to implementing a program, instead of strategically designing the program around the value proposition and organizational culture. Vimal Vel, vice president and global head of Master Data Solutions for the data and insights cloud provider Dun & Bradstreet, explains:

"A lot of time, we notice customers dive into data strategy or data governance straight away. It's important to take the time to understand what kinds of business outcomes you're looking to drive, and what is the culture of your organization, both locally and globally." [6]

There are multiple ways to organize a value statement, but it should state clearly defined actions and the resulting business improvements:[7]

- Organizations that do (X) demonstrate business value improvements through (Y)
  - Where X are the clearly defined actions and Y are the business improvements that come from the actions

Examples of data governance value statements:

- "Organizations that build, communicate effectively and enforce stricter data management policies assure themselves lower levels of enterprise risk when it comes to data management and data compliance assessments."
- "Organizations that document information about highly valued core and corporate critical data elements demonstrate improved understanding and business use of this data."

2. GAIN EXECUTIVE SUPPORT AND ASSEMBLE THE DATA GOVERNANCE TEAM

Executive support is critical to the ongoing success of data governance initiatives. Instead of going right to the chief information officer (CIO), consider approaching other leaders whose responsibilities are directly affected by data.

An involved CIO will be an asset, but it's important to ensure the data governance initiatives support the business, not just IT. A chief legal officer concerned about data security and compliance or a chief financial officer concerned about accuracy of financial reporting and auditing may be strong candidates.

The following table outlines the roles and responsibilities of the data governance team members. At the beginning of a data governance program, it's likely these roles will be served as part-time commitments by employees who have other full-time roles. As your program matures, the data governance program manager or technical resources (such as an architect or security lead) might evolve into full-time or near full-time roles.

It's critical that this team represents diverse areas of the business and views data governance as a strategic priority. For example, the University of Vermont Health Network's first two attempts at implementing a data governance program were unsuccessful because the teams weren't representative of the overall organization. Chief Medical Information Officer, Dr. Douglas Gentile, sheds light on what helped the third try be successful:

"It was important that the steering committee represent all facets of network business and clinical operations, and that the organization made it a strategic priority." [8]

ROLE	RESPONSIBILTIES
Executive sponsor	A VP or C-level executive who will support the vision and mission of the data governance program. They will champion the organizational change and explain the value to leadership. They will also chair the steering committee. Responsibilities include: — Get funding, support and political backing — Connect with a broad network of relationships — Help identify and overcome obstacles of resistance within the institution — Note: Funding may mean additional funding, or it may mean time for employees to deprioritize day-to-day responsibilities to do governance work — Support data governance project team(s) with communication and visibility — Help to determine and report out measurable success indicators — Make key decisions when consensus within the group cannot be reached
Data governance program manager	The public face and point of contact for the data governance program. Convenes meetings, communicates with team members, and keeps projects moving forward. Responsibilities include: — Manage the resources on the project team(s) — Negotiate the tasks of the team members in conjunction with their managers — Facilitate team interactions — Monitor team participation, create reports to update the organization on progress — Monitor project progress and provide feedback on performance

ROLE	RESPONSIBILTIES
Data governance steering committee members	A committee composed of leaders within the organization who are concerned about data initiatives, from a diverse range of business and functional areas with both technical and non-technical backgrounds. The executive sponsor chairs the committee. A data steward/ functional lead can also sit on the steering committee. The steering committee should be under 10 members. Responsibilities include: — Create data standards and business rules — Set goals for future state of data management capabilities — Advocate for governance and improved data management — Identify and prioritize data governance projects — Organize these projects into a backlog of data governance initiatives — Resolve issues escalated by data stewards — Track data quality by profiling/reviewing the data and monitoring metrics on data quality
Data stewards/ functional leads	The face of data and reporting for their business units. At least one data steward should represent each business unit. Responsibilities include: — Escalate issues to the data governance steering committee — Help create policy and define standards — Evangelize and enforce data policies to their business units — May also be involved in various data governance initiative projects as team members
Data architect	Serves as a technical resource to explain the structure of the data. Will be an expert on the organization's data sources and how the data is structured. May be technical team lead for data governance related projects. Responsibilities include: — Leverage technical expertise to support the success of data governance projects
Security expert	Serves as a technical resource to outline options around security of data and reports. Will be an expert on how the organization's data security is currently organized. Will work closely with the compliance officer to ensure data is secured to meet the organization's legal requirements. Responsibilities include: — Leverage technical expertise to support the success of data governance projects.
Compliance officer	An expert on the organization's compliance requirements, and likely from the legal team. Their main objective is to make sure security and compliance is considered in decisions and projects. Responsibilities include: — Collaborate with the security expert to ensure security practices are executed technically

3. DESIGN THE PROGRAM AND CREATE A CHARTER

In this step, the data governance team will design a program specific to the current needs of the organization. Designing the program will consist of developing a formal, documented and repeatable procedure for each component. In conjunction with designing the program, the organization will create a data governance charter to serve as a framework and reference document about the purpose of the data governance program.

Data governance components

The following components provide a starting framework for designing the program.

- **Aligning policies, requirements and controls**
  - What are the policies, requirements and controls around data management, privacy, security and access management?
- **Establishing decision rights**
  - Who has decision rights to update or modify the policies and requirements outlined in the above component, "aligning policies, requirements and controls"? Questions to consider are: Who is responsible for approving access requests? Who is responsible for enforcing compliance to the policies?
- **Establishing accountability**
  - Once a rule is created or a data-related decision made, the organization will be ready to act on it. Who should do what and when? For activities that do not neatly map to departmental responsibilities, define accountabilities that can be incorporated into everyday processes.
- **Performing stewardship/specifying data quality requirements**
  - Establish the policy around information quality. How will information quality be monitored?
- **Managing change**
  - Making sure stakeholders understand "the why" is critical for change management. How will it be communicated? What change management tactics or practices have been successful or unsuccessful in the organization before?
- **Defining data**
  - This process may involve creating reference materials such as an overview of different data sources, defining KPIs, implementing a data dictionary or a metadata framework.
- **Resolving issues**
  - Who/how/when/where will issues be resolved?
- **Building governance into technology**
  - Determine current state of IT governance at the organization. Can it be improved? How? If it's mature, how will data governance align with IT governance?
- **Stakeholder care**
  - If a stakeholder has an issue or concern, how will the data governance team know? Develop a process for this, whether that's simply reporting the issue to their data steward or a more formal method.
- **Communications**
  - Communicating to all stakeholders is a common challenge of data governance programs, according to the Data Governance Institute.[9] How will new policies and the activity of the data governance team be communicated to the organization? Develop a communication plan. Many organizations will use data stewards as a method to evangelize processes with their colleagues.

- **Managing and reporting value**
  - How will you monitor and measure the success of the data governance initiatives? This could be in the form of testimonials or metrics. Examples of possible metrics to use:[10]
    - Cost reduction
    - Time to submit
    - Frequency and number of audit visits
    - Data governance process adoption rate by business personnel (via a survey)
    - Number of data issues identified
    - Time from issue identification to resolution
    - Percent of data warehouse metrics validated at source
    - Number of local spreadsheets used

Create a data governance program charter

The program charter will provide reference material for anyone in the organization. It will offer clarity around the background, goals, mission, and vision of the program in a transparent manner. It will also serve as the framework for data governance program initiatives.

A standard data governance program charter includes:

- **Background of data governance at the organization**
  - Why was the program established?
- **Mission and vision**
  - Expand on the value statement to create a mission and vision statements.
- **In-scope components**
  - What is the scope of the data governance program?
  - Outline each component. Don't go into detail about the plan for each component, but simply define what each component is.
- **Out-of-scope components**
  - Consider if there are items worth mentioning as out of scope.
  - For example, the University of Wisconsin-Madison's program charter mentions external data sets a researcher may work with as out of scope.[11]
- **Guiding principles**
  - Determine if you would like to include any guiding principles in the charter.
- **Roles and responsibilities**
  - Include the roles and responsibilities, as well as the meeting structure of the steering committee.

Review an example of a data governance program charter from the University of Wisconsin-Madison.

4. DEPLOY THE PROGRAM

Start by executing on the communication plan to update the entire organization on any new policies. Work with the steering committee to determine what the first data governance initiative projects will be. Assemble the team and kick off the prioritized project.

5. MONITOR SUCCESS

To govern is to execute the program policies day in and day out, and constantly monitor challenges and successes. Are issues being escalated to data stewards? Is the steering committee meeting regularly to define the initiative backlog, decide on policy changes and resolve issues? Ensure any program initiatives or projects are well-organized, managed, and progress is visible to stakeholders.

Lastly, monitor and highlight the success of the program. Communicate the value to stakeholders as stated in the communications and managing and reporting value program components.

Conclusion

With strong execution, data governance has the power to transform an organization. A transformational data governance program has three distinguishable characteristics:

1	Strong executive support	2	Tailored to the needs of the organization	3	Effective communication with stakeholders

Strong executive support is critical to providing resources and funding, as well as making sure the organization is politically aligned to pursue data governance strategically.

When designing the program, structure it around your organization's strengths, weaknesses, opportunities and threats. Choose team members who are familiar with these traits of the organization to help design the program. Data governance programs are not cookie cutter in nature. Consider other organization-wide initiatives that have been launched. What factors determined how successful they were?

Lastly, communicating with stakeholders can be challenging, but is the key to a data governance program's success. Policies that aren't communicated can't be implemented, and issues that aren't reported can't be resolved. Keep in mind that the communication plan will need to be multi-faceted. Not everyone is going to read every sentence of an email, and not everyone will seek out their unit's data steward. Continue to adjust the communication plan to efficiently reach stakeholders.

By keeping these three characteristics in focus, organizations can successfully implement a data governance program that will transform their business.

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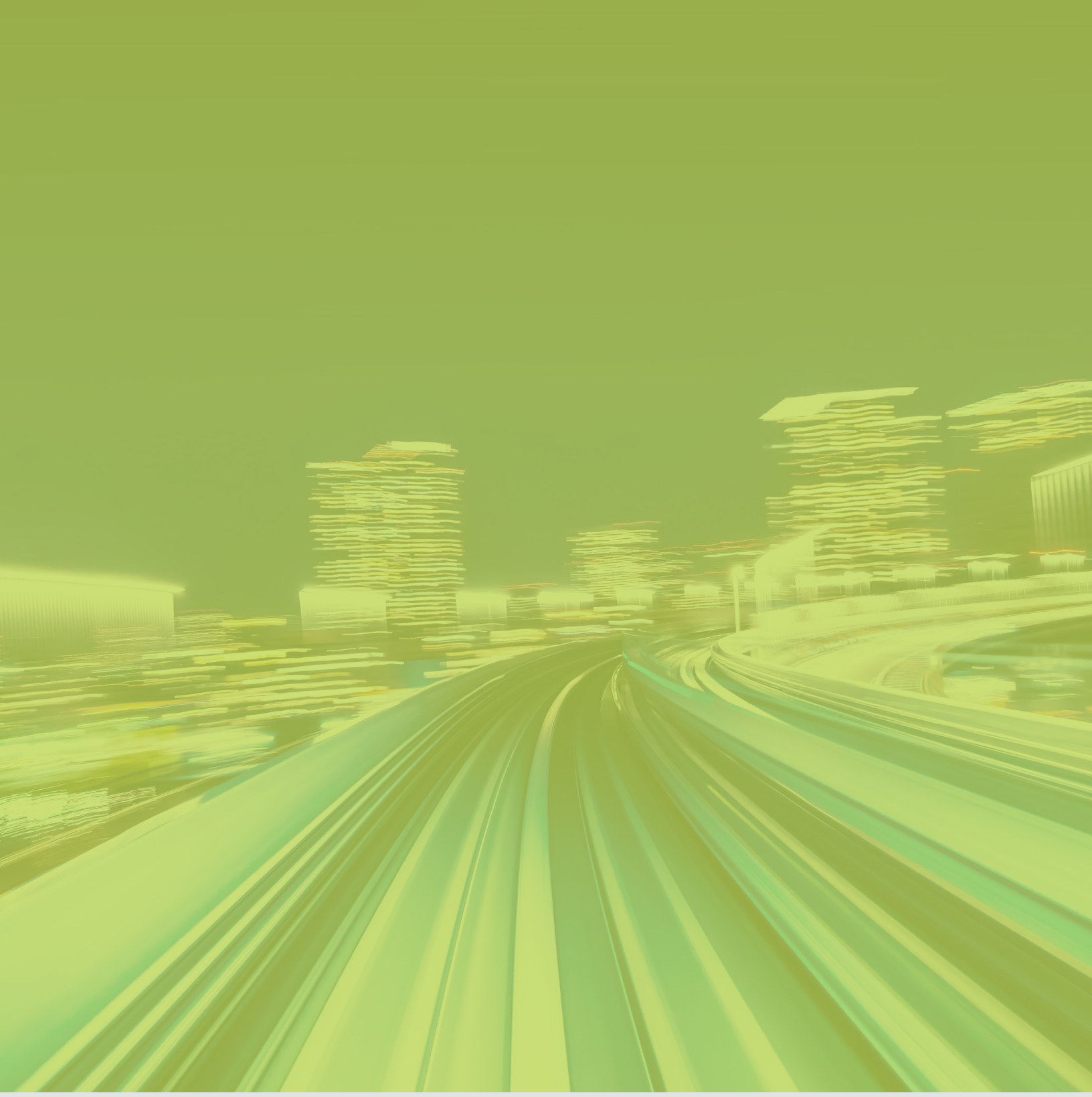

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