

Solutions

Master Data Governance – Model and Mechanism

Executive summary

Organizations worldwide are rapidly adopting various Master Data Management (MDM) solutions to address and overcome business issues and challenges associated with master data quality. Successful MDM implementation depends on building capabilities needed to support long-term strategy on master data quality. Governance provides the foundation required to address the business issues relating to master data quality. This article presents a perspective on the critical components of a governance model, the processes required to get to an operating governance model and insight into key challenges expected along the way. We'll discuss how governance consists of various scalable components which form a framework that provides the flexibility needed to build a platform for enterprise data initiatives.

Governance overview

What is Governance?

To put it simply, governance is about institutional ownership and accountability of all things associated with master data, including:

- Master Data elements and structure
- Master Data processes (to create and maintain master data)
- Master Data quality and business rules (for creating and maintaining master data)
- Master Data access, delivery, security and usage

How do we promote ownership and accountability?

Ownership and accountability are created within and across an enterprise in three ways:

- **Initiated by** and responsibilities for a governance organization
- **Standardized by** defining a set of policies to enable ownership and accountability
- **Implemented by** defining a set of procedures to support various activities related to governance and by establishing metrics to measure performance

It is this combination of governance organization, policies and procedures that provides the foundation for improving master data quality. This foundation is necessary for organizations to build a governance model.

Components of a governance model

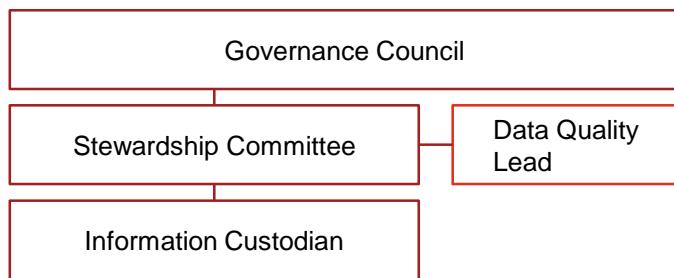
Think of governance as a component model, where several inter-related yet distinct components seamlessly interact to provide a connected environment that fosters ownership and accountability. Figure (i) depicts this governance model.

The model has 3 layers each with its own set of components

Figure (i): Governance model components



Figure (ii) – Governance organization structure



The optimal governance organization contains three unique roles that allow a span of control that distinguishes between establishing governance, defining what to govern, and executing based on the governance model.

Governance council

The Governance Council consists of director level representation from various business units and corporate functions. These representatives should include the 'business owners' of master data. These 'owners' are the executives ultimately responsible for running the business and establishing the policy and procedures of the organization. Information Technology executive participation in this group is recommended. It is also important to have representation from the data quality group at this level to provide visibility and importance to data quality initiatives and also to measure and monitor data quality improvements against governance program progress

Layer 1: Establish governance organization

- **Structure:** Provides the chain of command required to make strategic and tactical decisions. Typical governance organizations look like Figure (ii).
- **Roles and responsibilities:** Provides authority to the governance organization to undertake various governance activities and enforces accountability

The Governance Council ideally will be chaired by an **Executive Sponsor** from the business.

Responsibilities include:

- Providing strategic direction for the governance program
- Providing guidelines on policies, standards and procedures to drive business improvements across business units
- Serving as the ultimate authority on approving new policies, procedures and standards

- Making decisions on strategic business investments to support business growth pertaining to master data governance and related initiatives
- Measuring and monitoring effectiveness of governance on a continuous basis
- Prioritizing and approving master data initiatives for process improvements, data cleansing, policies, and standards against budget and resource constraints
- Delegating activities/tasks to members of the Stewardship Committee

Stewardship committee

The Stewardship Committee consists of business leaders/managers from various business units who act as **Information Stewards**. These individuals will act as program drivers for the governance initiative and will be tasked with the responsibility of managing progress. Their role is central to the success of the governance initiative in any organization.

The Stewardship Committee will be chaired by a **Chief Steward**. This leader should have the background and understanding of the business and technology initiatives of the organization and should be respected by the business community that the committee supports.

Responsibilities include:

- Developing, collaborating, and implementing policies, standards, and procedures
- Driving master data management initiatives across the enterprise
- Reviewing and recommending master data management projects, analyzing funding needs, and requesting approval from the governance council

- Monitoring performance measures and providing feedback to the Governance Council
- Collaborating with the Data Quality Lead to ensure data quality procedures are designed and followed by the Information Custodians
- Managing the demand for changes to processes, policies, and procedures against budget and resource constraints
- Facilitating the prioritization of work, scheduling, and assignment of master data initiatives
- Resolving day-to-day process issues in coordination with the Information Custodians
- Developing training plans, training materials and coordinating training activities related to governance and master data processes

Information custodians

Information Custodians are operational personnel from various business units responsible for specific master data domains. They are physically responsible for master data quality and work closely with the corresponding Information Stewards to develop and implement governance procedures in line with expectations set forth under governance policies.

These individuals will be responsible for maintaining the key master data elements within their sphere of influence. They will report to their respective functional area business leadership and to the **Information Steward** from their corresponding business function.

Layer 2 – Define governance policies

Data governance policies are required to drive ownership and accountability. They promote consistency of business processes and work products associated with master data creation, maintenance, access, usage, and delivery.

Typically two sets of policies are required:

- Executive Directives
 - A set of policies from the **Executive Sponsor** to authorize and initiate governance. This will be the basis for establishing a Governance Council.
- Governance Directives
 - A set of policies from the Governance Council that cover the following:
 - Ownership and accountability
 - Procedure development & implementation
 - Governance issue resolution
 - Compliance audit
 - Governance training

Layer 3 – Integrate Governance procedures

Governance procedures define and document steps required to support governance based on established organizational structure and defined policies. These procedures provide the workflow needed to make various decisions associated with governance activities. They act as a vehicle for collaboration and control. The procedures typically required are:

- New policy definition and implementation
- New master data initiatives

- Master data governance model modification
- Master data governance oversight process to measure and monitor effectiveness
- Manage progress of existing initiatives
- New procedure definition and implementation
- Capture metrics to measure performance
- Conduct compliance audit
- Manage governance issues on a daily basis

Advantages of this model

The advantages of model based governance are as follows:

- The **model** provides the flexibility needed to adapt a governance framework that can be scaled across business units, functional areas and data domains within an enterprise and supports the ability of an organization to start with a pilot program and grow to enterprise strength.
- The model also provides the flexibility of a choice of governance maturity levels to be established across business units, functional areas and data domains.

By leveraging this model, an organization can:

- Focus on key functional areas that warrant master data governance to increase business benefits
- Measure the effectiveness of governance and prioritize the technology landscape along the way
- Prioritize roll-out of master data governance over a multi-phase approach through this scalable and extensible model

How to make the model operational

Now that we have put together the components of the governance model, how do we make this operational?

The following **role-function, responsibility-action** table lists steps required to make the model operational. These are specific steps required with identified role/function and corresponding responsibility and action.

Making the model operational and effective are challenges that will be faced by organizations whether they are beginning their master data management efforts or are well into implementing them. These challenges begin at very early stages – from conceptualization and scoping, to modification and scaling to meet the demands of business growth.

For master data management implementations to be successful, the policies, procedures and results should become a part of everyday operations within an organization.

Step	Role/function	Responsibility/action
1	Identify an Executive Sponsor	<ul style="list-style-type: none">• An Executive who can provide business focus to the master data management initiative• Pass “Executive Directive” policies across the enterprise• Formalize governance organization across the enterprise
2	Governance Council	<ul style="list-style-type: none">• Pass “Governance Directive” policies across the enterprise• Establish an independent compliance audit group• Nominate Chief Steward and other members for the Stewardship Committee
3	Stewardship Committee	<ul style="list-style-type: none">• Assume ownership of master data processes• Identify Information Custodians for various business units• Assign ownership of key master data elements to Information Custodians• Formulate policies for master data creation processes
4	Information Custodian	<ul style="list-style-type: none">• Own corresponding master data elements (by data domain) required for governance• Support various governance activities (follow governance procedures, support Stewardship Committee in new initiatives, etc)
5	Compliance Audit Group	<ul style="list-style-type: none">• Plan audit activities on an on-going basis• Work with Stewardship Committee to co-ordinate audit activities• Define preventive/corrective measures to support data quality and governance improvements
6	Change Management	<ul style="list-style-type: none">• Constantly communicate to stakeholders about importance of governance initiatives, share findings with Governance Council• Define training needs analysis and workforce transition plan to help implement governance successfully

Common challenges faced during Governance Organization establishment are:

- Identifying the Executive Sponsor
 - Overcoming the Business-IT political bottlenecks to decide on a business sponsor of governance is a challenge. It is important to understand that master data governance is part of a larger business initiative and IT will only act as a catalyst in this effort. Hence, executive sponsorship from business is imperative for the initiative to succeed.
- Identifying the Chief Steward
 - Stewardship Committee members are responsible members of the governance organization with representation from varied business units/data domains. To this effect, the Chief Steward should be an individual who advocates continuous improvements to master data quality holistically and should not be bound by existing or past business roles within a specific business unit or data domain.
- Assigning Information Custodian Roles
 - Diverse business units (across geographies), varying decision making hierarchies and business imperatives mandate a flexible approach in choosing Custodians. Different data domains may require different criteria for identifying them. Certain master data domains may require corporate level participation, and certain others may require regional or business unit level participation.

Critical success factors

Establishing master data governance is a major initiative within an organization. It crosses departmental, regional, geographic, and cultural barriers in an enterprise. Just like any other business initiative, master data governance implementation has several success factors. Here is a list of factors that we feel are critical for an organization to succeed.

- Build a scalable model
 - Successful governance initiatives build on staged implementations. This approach mandates the need for a governance model that is scalable over a period of time; in terms of geography, departments, and business functions.
- Data quality should be part of the governance model
 - It is important to realize the fundamental objective of a master data management effort is to improve the quality of master data. To this end, a data quality organization/representative should be part of the governance organization to assist with making holistic choices around master data management and data quality.
- Decision making structure
 - Organizations may have varying levels of decision making structure. From a governance standpoint, a manufacturing plant's decision making structure is fundamentally different from a corporate function within the same organization. This difference should be recognized and respected when establishing a governance organization. Hence, it is important that the governance model adapts to varying levels of decision making within an enterprise.

- Central master data management may not be the right choice
 - There are a variety of business and technology architecture choices that can be leveraged when establishing or changing how an organization manages master data. As with governance, there are foundational capabilities that need to be established prior to improving the maturity of master data maintenance. The choice of architecture depends on specific business problems with processes or data domains. Organizations should remain flexible in their architecture choices and select those that best fit their business needs. For example, centralized master data management may not be suitable for all organizations.
- Metrics to measure efficiency and effectiveness
 - Metrics are necessary to manage and improve the success of the governance initiative. They also help in undertaking mid-course corrections for making improvements to the governance operating model as it evolves within an organization. Efficiency metrics are required to report on operational performance of governance. **Effectiveness metrics** are required to report on business performance. **Efficiency metrics** answer the question, "Are things being done right?" Effectiveness metrics answer the question, "Are the right things being done?" It is important to review and analyze both types of metrics in tandem to determine the business value of governance.

Conclusion

The success of any MDM implementation depends on the adoption of a governance model across the enterprise. MDM implementations typically follow a multi-year, multi-phase approach; therefore, it is imperative to factor time and resources upfront for establishing a governance model. That model should be scalable, flexible, and adaptable to varying decision making cultures within a global organization. The objective is to change how the organization manages information so it can be effectively used to help the company achieve business goals such as driving down business costs, improving competitive position, or meeting risk and compliance objectives.

These business goals can be supported by a well defined MDM program that can provide:

- Key data elements synchronized across all systems
- Staff spending more time analyzing not verifying information
- Integrated view of a customer across the organization
- Customer records that are unique
- Consistently achieved accuracy levels and improved operational efficiency
- Quantitative knowledge of quality issues

The proper MDM governance model can provide the foundation to improve the adoption rate for MDM across the organization to address and overcome business issues and challenges associated with master data quality.

For more information, please contact:

Patrick Minton
(501) 978-0305
patrick.minton@pwc.com

Dimpsy Teckchandani
(312) 298 -2116
dimpsy.teckchandani@pwc.com