Data Quality Governance
For Analytics Teams
Abstract

Having data that are consistent, reliable and well linked is one of the biggest challenges facing financial institutions. Over the past few years, we have had a revolution in measurement, that has allowed banks to understand in much more detail what their customers are doing, what their processes are doing, what their employees are doing.

That tremendous improvement in measurement is mandating the data sourcing team to prepare, cleanse, link and format data consistently to make high quality data available to the analytical model development team. The quality data not only improves the employee productivity but also promises great result to the banks to withstand competitors.

The current paper attempts to show, how a strong data quality governance process with SAS® data management tools improves the close team collaboration and promote innovation in the data analytics teams.

Key Challenges

List of key challenges in any typical data quality program initiative
- No roles and responsibilities in the data quality program charter.
- Easy attitude on the data quality issue.
- No corporate education on the importance of data quality and continuous user training.
- No clear goals on how the data security and access is managed for the data quality program initiatives.
- Unclear or conflictive the data quality program is unclear and how to enforce standards and enable collaboration at an enterprise level program.
- Confusion on what tool to use for data quality and cleansing efforts in the data sourcing and integration projects.
- No standard templates to deliver the data quality assessment results and no follow-up actions on the improvement opportunities.
- No transparency in withdrawal procedures on how the quality issues are highlighted and escalated for a resolution and remediation step.
- No link to the data quality and the reliability and repeatability of analytical models.

Data Quality Governance

The data quality governance framework as seen in Figure 1, 2 defines how the program evolves and promotes innovation as it collaborates across the data quality, data sourcing and data analytics team in an enterprise.

SAS data management platform supports to bring the people, process and technology together to deploy a robust data quality program for an efficient data delivery to the data analytics teams.

As the data passes from the data producing applications, where it is collected, to the IT group, the key business data terms or the modeling variables can be defined in the SAS data governance product suite. Business data networks and the business data terms are polled to diagnose any defects and to discover business rules, cleansing rules and matching rules so the powerful components of SAS data management suite, reporting, and entity resolution functions can be utilized to streamline the data improvement process.

The monitoring component of the SAS data governance suite displays the before and after cleansing results in the form of data quality dimension dashboards and provide data stewards and executives a summary view of the scores at all the key data domains to quantify the issues.

Figure 1: Team Collaborations
Figure 2: Data Quality Governance Framework

Results

A successful data quality governance program combined with a robust SAS data management software platform would help to capture the data quality metrics and help to visualize how the program is running and quantify the cost justification on the overall program spending (IT and labor). It also helps the business to be more productive in minimizing the repetitive data quality work.

With the reliable data, the analyst spend more time in turning the data into actionable insights applying advanced analytics and modeling.

Figure 3: Sample dashboards and reports on the SAS Data Management repository.

Conclusions

Though a minimal data quality processes in place now-a-days in the data sourcing team and analytics team, a good data management tool infrastructure and governance has to be built around the existing data quality processes to make the program reusable across the enterprise teams in a consistent repeatable manner.

Having a product like SAS data management platform rightly helps to keep the data quality program up and running engaging multiple teams across the enterprise with processes submission.

There is a more value when the data quality dashboards are built and linked to the key performance indicators and modeling variables so the model development teams are aware of the issues and occupy less time in the data preparation step and stay creative in turning the data into actionable insights. The business can focus on business engagement and capabilities balancing the speed, cost and acceptance of the quality and integrated data.

References


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