



MONTAGE

Montage Whitepaper Data Governance- Part 1

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Montage Whitepaper: Data Governance- Part1

INTRODUCTION

- What is Data Governance and why is it needed

BUSINESS PRACTICES

- Reactive Business Intelligence vs. Proactive Data Governance

EXAMPLES:

- Public Sector: Customer mailing address
- Private Sector: Supplier and Finance



Introduction

With so much talk and focus on Data Governance do you find yourselves asking these questions -What is it? What should I do about it? How does it apply? How will it affect my world at work, my team, my unit, my organisation, all the processes, systems and technology within it? What is the benefit? Will I see it? And on goes the list...

With this 2 part white paper I would like to introduce you first to what Data Governance is all about and why is it essential and, secondly the framework and implementation methodology.

Typically, projects and programs involving business and IT embark on data processing-cleansing and unification of data to provide single version of truth for business benefit. Despite the best technological solutions in place- confidence in data periodically falls as the solutions are unable to deliver accurate information consistently and continuously.

We are all aware the data will not turn itself into meaningful, usable information on its own. So the question is - who is being accountable to enforce, ensure that solutions put in place will sustain the constant change of real-world data that enters your business every day? Is there an individual/unit responsible to keep up and deliver quality information consistently for the business to make decisions? Often the answer is no, which is why many IT solutions fail to continue to deliver high quality information with the best of efforts.

Bottom line, even top end technology solutions only provide a means, you still need to have someone/a group/a team with sufficient authority to efficiently and effectively manage the processes that turns your business's **Data** into valid, accurate, timely, useful **Information**.

Data Governance does exactly that. It is needed because, it provides a mechanism and a medium to those that support your business to represent their data needs and quality issues; to bring awareness of commonly used data across the org, benefits of sharing, promoting and communicating from one platform in the organisation.



Reactive and pro-active business practices

Reactive BI- predominant current practice

True BI realisation assumes data to be of highest quality, is accurate and usable. But that is rarely the case. Due to inconsistent and unreliable operational/transactional systems data, traditionally, Business Intelligence programs and projects have been confined to reactive roles such as data unification, ETL (Extract, Transform, Load), data integration, de-duplication and data profiling- all efforts towards getting data to a higher quality. Only then the actual realisation of BI commences via Data Warehouses, data marts, cubes etc. to provide intelligent information to the business for better decision making.

Pro-Active Data Governance- high value best practice

Getting data right in the first place is one of the objectives of Data Governance.

Whether a top-down strategic driven mandate that demands highest quality of data enforced by a group with well-defined roles and responsibilities throughout the organisation or a humble project driven bottom-up approach that delivers project deliverables along with solution continuity with Data Governance/Data Management Program deliverables, which starts out as a small collection of metadata objects from every project and eventually becomes the organisation's repository of business processes, rules, data flows, data definitions, standards, policies, roles and responsibilities, upkeep and usage of the repository information etc. Both drivers achieve successful results.

Simply put, Data Governance is a program of work that consists of a set of processes to define and enforce data standards and policies by a group of people who are accountable to ensure data quality, usage, its usefulness, and accuracy is managed through technological solutions. The value data governance adds is

- The confidence business can make decisions consistently
- The platform it provides for the whole organisation to meet and share data needs and quality issues
- Promotes communication across Business units, teams and groups throughout the organisation



Example1: Customer's mailing address (Public Sector)

Premise: Inaccurate, incorrect Customer Mailing Address causing additional work and loss of revenue

Without Data Governance

Members of a city have different relationships with their local council such as- rate payer, library memberships, resource consent owner, dog owner etc. and in each instance customer postal address is requested. Usually these are entered in multiple systems which mean multiple ids of the customer, which also means if the customer updates one address it does not necessarily update other versions of their address. Say when the customer is paying annual dog fee he/she would like to update their mailing address. But customer does not receive rate bill to the updated mailing address.

No address validations for multiple occurrences of addresses in the systems. Some adhoc validations against New Zealand Post may exist.

No confidence in the accuracy of data which often ends up as taking a best guess while transacting with the customer.

Result- customer not receiving important payment at their correct address, which could lead to late payments, fines and customer frustrations

Now let us look at it solving this problem

With Data Governance

Validations- are performed by technology tools like data profiling, removing duplicates, resolving multiple occurrences due to different source systems resulting in a single view (not necessarily single system) of a customer which is achieved by enabling maintenance of Customer information (Create, Update, Read, Delete) from a single front-end

Typically, validations are done in conjunction with **Data Rules**, data constraints and applications constraints.

For example- customer address line 2 can only have 30 characters, or Last Name can be 35 characters, or payment terms can only be 4 char alpha numeric field etc.

Accuracy- Valid data alone is not sufficient to minimize incorrect transactions. Data needs to be accurate which means the usage of valid data needs to apply to the real world business situations.



For example- technology solutions have validated all addresses in the systems, yet customer's mail is delivered to a wrong address. This can be achieved by applying accurate **Business Rule**. In this case, one of the Customer Business rule states that 'systems should hold appropriate *current* mailing address for each customer transaction'.

One way to confirm this is to ensure that **business rule for data accuracy** and **data rule for data validity** are applied through a **Data Policy** which states 'Data that is critical and frequently used is always in its valid and accurate state'

Ensuring this process is followed by the people who create, update, view, delete data within the technology solutions supporting the business process by making valid and accurate data available consistently is **Data Governance**.

Example2: Supplier and Finance (Private sector)

Premise: Same supplier for several raw materials yet company fails to avail discounts. This is due to suppliers existing in multiple versions in systems.

Without Data Governance

Manufacturing plants rely on suppliers for providing materials to support production systems. Often supplier data has is inconsistently captured which fails to produce a single view of the supplier and all the materials it supplies. This causes double orders, re-orders, missing details, additional shipping costs etc.

With Data Governance

List all the source systems for supplier data and create a project for supplier data unification. Basically, to transform as-is inconsistent incorrect data through data profiling, and validating using business rules, data rules to produce a single view of the supplier linked to all the contracts the company has with them. This information can be used to leverage better rates and contract agreements with the supplier.

Going forward- as a pro-active measure ensure supplier data is entered and managed using a single process that has been explained to staff and train them where required. Also, as a reactive measure collate data in the systems and run through validations and data quality metrics- this ensures you capture and remedy whatever was missed during the day.

With data governance these processes are enforced by introducing changes in behaviour- to perform same steps for a given process instead of silo approach.