



The Business Value of Data Modeling for Data Governance

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Motivation – it drives all that we do. From a marathon runner getting up in the cold early morning to train, to the violinist spending hours in the practice room preparing for the big performance, motivation drives us to do things that might otherwise seem unpleasant or impossible. Key to motivation is a view to a positive end goal, whether it's crossing the finish line first or delivering a stunning solo onstage. When clear benefits and rewards are in sight, humans are capable of amazing feats of skill and collaboration.

Data governance is not an activity that typically lights a fire of passion in the average individual, particularly businesspeople who may see it as yet another technical burden imposed by the IT department. What's often missing in data governance is not an understanding of best practices and procedures to help improve the quality of data in an organization, but understanding of the business drivers and motivation for embarking on a data governance initiative, otherwise known as the “what's in it for me” factor.

Aligning to Business Drivers & Motivation

Business drivers and motivation should be the starting point for any data governance initiative. If a clear end goal is not in sight, it will be difficult to get stakeholders on-board. With many competing projects and activities vying for people's time, it must be clear to people why choosing data governance activities will have a direct benefit to them. A helpful tool in defining business drivers and communicating them in a clear, concise way is a Motivation Model, shown in Figure 1. While the term “model” might conjure up images of a technical artifact, in reality this tool is best used as a type of “infographic” to show the value of data governance in a simple “one pager”. Key components of a Motivation Model include:

- **Corporate Mission:** The mission describes the aims, values and overall plan of an organization. For example, “To provide the most comprehensive, customer-driven online shopping experience in the market.”
- **Corporate Vision:** The vision describes the desired future state of the organization. For example “To transform the way consumers purchase goods through social-media-driven connections.”
- **External Drivers:** What market forces are driving this initiative? For example, a cultural shift to online retail is fueling the industry.
- **Internal Drivers:** What internal pressures or initiatives are key for data governance? For example, disparate internal and external systems may require an integrated view of customer.

Note that none of the statements above speaks directly of data governance, but instead focuses on the business value that can be achieved through better data. Now that you have them hooked, show how these business goals require data governance activities as their foundation. But lest you be tempted to start using technical jargon at this point, remember that it's still critical to make it simple and relevant. As much as technology is important, we all need to play the role of marketing from time to time. For example, rather than explaining the importance of a data governance framework, or a corporate information policy, talk about how “accountability” of data is critical for everyone. Summarizing the technical foundation into easy-to-understand “tag lines” such as Accountability, Quality, and Culture can help gain buy-in for data governance. To be successful, all stakeholders must be accountable for quality data and for building a data-driven culture across the organization.

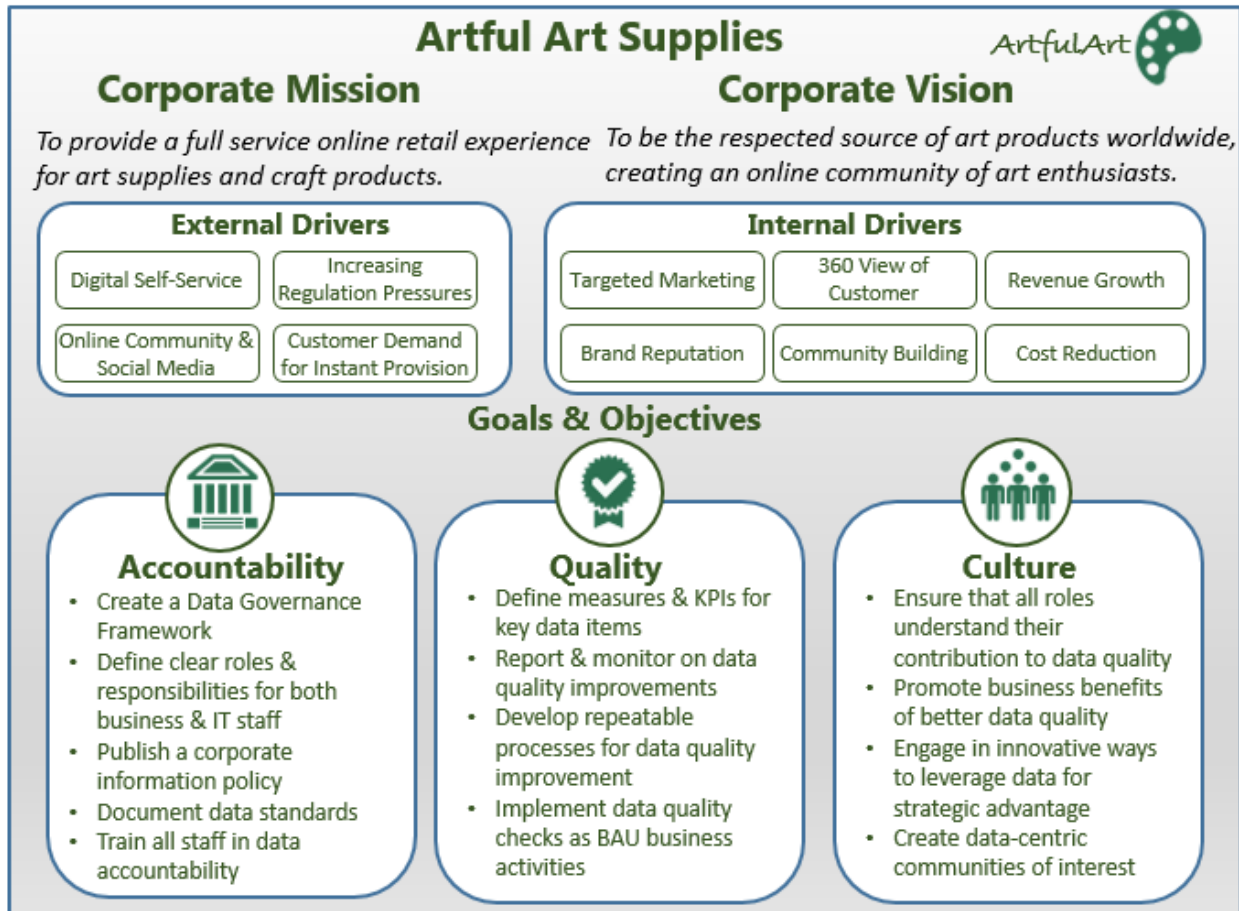


Figure 1 Understanding Business Drivers & Motivation is Key to Data Governance Success

Focusing on the Data that's Most Important to the Business

Another key component of a successful data governance initiative is focusing on the data that's most important to the business. It's not possible, or even ideal, to closely govern all data across the organization. Focus on the information that (1) is critical to key business processes and business outcomes (2) requires close governance. Customer information, for example, is a common data element that is core to the majority of business processes across sales, marketing, finance, product development, customer services, etc. But not all customer information needs to be closely managed. Core identifying data such as name, address, account information, etc. is held in internal systems that are critical to the functioning of the business and should be strictly governed. But social media information about customers by its very nature cannot be governed, and governance would be unnecessary since this data may only be used, for example, for trending analysis, but not for core business activities.

Prioritizing business-critical data elements and relating them to key business drivers helps gain the buy-in and interest of business users. Rather than ask a business stakeholder to attend a data governance workshop to define metadata attributes and definitions for key data elements (which will induce a desire to escape), choose a small subset of data that relates to a key business issue that is relevant to

them. For example, “For the upcoming marketing campaign for the new product launch, we want to make sure that we’re defining households in the proper way to maximize customer engagement. We’ve noticed that support, sales, and marketing have different definitions for household, and that the Northern region has a different definition as well.” By keeping the scope small, and aligning the outcome to a concrete, definable business outcome, you are more likely to get the engagement of business stakeholders. Data governance is now critical to their “day job” without having to use the word “governance” at all.



Figure 2 Focus on the Data that's Critical to the Business

The Importance of Business Definitions

Once you’ve identified a manageable subset of data elements that are clearly aligned to business drivers, next comes the process of formulating the definitions and business rules around data. To the technical reader, this may conjure ideas of entities, relationships, metadata, and cardinality. But remember, while these artifacts are ultimately needed to understand business requirements and design a technical data architecture, they are not of interest to the typical business stakeholder.

While it may be tempting to use a logical data model to gather business requirements, often more effective is to use a conceptual data model and be creative with the display, as shown in Figure 3. Use icons and graphics to help tell the “story” of the model and, ultimately, the story of the business. After all, a data model can be read as a sentence, with the entities as the nouns and the relationships as the verbs. For example, “A customer may buy one or more products.” Group these “sentences” together to tell a visual “story” that makes sense to the business.



Figure 3 Be Creative in your Data Model Presentation

Once the business is described in a model in this way, important distinctions in business rules and definitions come to light. For example, in Figure 3 is a Customer the same as a Client? Both buy a product from our company, but the Support team uses the term “Client”. Are they actually the same concept? Sales also uses the term “Customer” for someone they are working with to purchase a product. Since they haven’t bought a product, they are technically not a customer, so perhaps the term “Prospect” would be better used. Can relationships between customers (or customers and prospects) be evaluated and grouped together by household for better sales and support? None of these answers can be determined without the input of the business stakeholders, and by showing the concepts and their interrelationships in an intuitive way, definitions and business rules more easily come to light.

Communication & Collaboration

An important part of communication is making concepts understandable and using terms that are meaningful to your audience. Another key aspect is to make the information readily-available. While it may be feasible to have working sessions with stakeholders to review a data model as shown in the previous example, it’s not possible to scale these workshops to everyone in the organization. Making key business terms and their definitions available on the web in an intuitive business glossary or dictionary-style format allows everyone to have access to this information. While the engine behind this web glossary may be a metadata repository populated by the information stored in data models, end users don’t need to be aware of this. It’s simply just the place they go to find definitions and context for key business information.

True collaboration occurs when communication is bi-directional and users are able to provide feedback. While it is helpful for stakeholders to be able to view key business definitions and rules, even better is to allow them to comment and give input into the definitions. For example, a Finance analyst might discover that the definition of “region” used in a key financial report isn’t the same as the one they had

been using in the department, causing key financial metrics to be incorrect. If the analyst is able to share this information with the data architecture team, the proper corrections can be made.

Notice that we haven't used the term "data governance" in this section but what we just described is data governance in action. The "stewards" and users of business information are able to see the relevance of data as part of their daily jobs and have an active role in the improvement of data quality. The democratization of data is a concept that has become more prevalent as technology allows users of all types to have greater access to and control of information. Data governance as a top-down, mandated approach is not likely to work well in this new environment. More successful are "communities of interest" where key stakeholders have a vested interest in the quality of information, and work together to improve data quality with a common goal of driving the success of the organization.

Summary

Motivation towards a common goal is a strong force. It can make athletes push themselves past the point of pain, orchestras to create music whose sound is greater than the combination of individual musicians, and it can even make business stakeholders care about data models, metadata, and data governance. Once the importance of data is clearly aligned to concrete business objectives, gaining buy-in is an easier task. While hard work is often still necessary to achieve the end result, the process is easier when there is a clear and positive business objective as the end goal.

About the Author

Donna Burbank is a recognized industry expert in information management with over 20 years of experience in data management and enterprise architecture. She currently is the Managing Director of Global Data Strategy Ltd, an international data management consulting company. Her background is multi-faceted across consulting, product development, product management, brand strategy, marketing, and business leadership in organizations such as CA Technologies, Embarcadero Technologies, Enterprise Architects, and PLATINUM Technologies. She has worked with dozens of Fortune 500 companies worldwide in the Americas, Europe, Asia, and Africa and speaks regularly at industry conferences. She has co-authored several books including: *Data Modeling for the Business* and *Data Modeling Made Simple with ERwin Data Modeler*. She can be reached at donna.burbank@globaldatastrategy.com and you can follow her on Twitter @donnaburbank.