Defining Business Governance: The Lumos Spell for Data Clarity

Before diving into data modeling, it's crucial to cast a "Lumos" spell, illuminating the often-chaotic path of your data ecosystem with well-defined business rules. These rules act as a guiding blueprint for managing and utilizing data within your organization.

Business rules as backbone for your data governance.

In the diverse realms of companies, from one to another, business rules can vary significantly. It’s essential to engage deeply with stakeholders and financial departments to outline your data rules and the scope of your dashboards and reports. This foundational work assures that your data ecosystems are built on solid business rules and commitments. Make sure to not only define what is expected with regard to granularity in the reports but also the access security points of control.

Data ETL and security procedures should be aligned with the business needs.

Proper data governance should align closely with your company's objectives and operational procedures, ensuring that the data models you develop are not only technically proficient but also relevant and practical. A comprehensive understanding of the available data, including its periodicity, size, and privacy constraints, is vital to guide business leaders on feasible analytics and reports, avoiding commitments to unattainable outcomes.

Defining who should have access to what is essential to be able to develop complex security access for your data bases. Its always great to be consolidate the information in data schemes that allow you to

consult the information effectively for several hubs, but for this to be able to be deployed safely in operation you must first define data security levels on the business meetings you should had beforehand with the client and operation teams.

Knowing the type of data, its sources, and how it translates into actionable insights across departments is imperative before curating a list of data products and BI tools. Clear data rules contribute to creating models that are both robust and adaptable, ready to accommodate future shifts in business strategies or market trends.

Scaling Your Data Projects: Preparing for the Magical Expansion

Assessing the scale of your data projects in terms of volume and retention is a pivotal step. Recognizing how much data your organization generates and its required storage duration is fundamental. This foresight enables the design of scalable, efficient data systems, averting potential bottlenecks or data

overload. Considerations like storage capacity, archiving policies, and data access frequency should inform your infrastructure decisions, impacting cost, performance, and system longevity.

Its usual for data analysts on the early stages of their careers to be faced with reports that don't necessarily require you to define strong security rules or even a data scheme at all, due to the simplicity of the data gathering and reporting process. But as business grows and you evolve with it, the complexity in the reports may increase, specially when the client requires for more granularity or longer time periods.

That is why you need to plan ahead what will be the size of your data for an estimated amount of time that may depend on your business needs, but I personally like to think in a 3-5 years time frame ahead and make a size estimate on the amount of the data based on what I have gathered so far. to make sure I select the right database program that will help me comply with my business needs effectively.

Prioritizing Business Process Repair for Enhanced BI Utilization

An often-neglected aspect of data management is the need to repair business processes at their source. Instead of applying complex coding over flawed processes, it’s wiser to address these issues at the root, employing root cause analysis. This approach not only streamlines the data management pipeline but also ensures optimal utilization of Business Intelligence tools for advanced analytics and insight generation. Tackling process inefficiencies head-on reduces data inaccuracies and enhances the quality of data feeding into your BI tools, leading to more informed decision-making.

In scenarios like complex hiring workflows or financial reporting, coding may seem convenient. However, collaborating with operational teams to reduce data fragmentation and implement efficient procedures exemplifies the "power of one", enabling your tools to focus on delivering advanced analytics and BI solutions.

Prompt Engineering for Debugging and data consulting.

As we embrace the era of AI-driven productivity, the need for adaptable databases becomes more pronounced. Businesses must be ready to evolve their data governance rules and ecosystems in response to the dynamic nature of AI technologies. A key to achieving this adaptability is the creation of readable, logically structured code.

If your company is not missing out on having an AI assistance work setting that includes Large Language Models (LLMs), such as those powered by GPT or Claude LLM, used with the right data privacy rules and masking the data when necessary are really making a change in the productivity for all types of developers specially when handling debugging of code.
Remember to preferably opt out of AI assistants that train on your data or parametrize your AI environment in a way that it will not collect your data so you can safely share your data with the LLM model.