Petco harnesses the power of data with erwin® Data Intelligence by Quest®

Balancing self-service with data governance fuels data literacy



Country: United States of America, Mexico, Puerto Rico Employees: 27,000 Industry: Pet health and wellness Website: petco.com

Challenge

As a health and wellness company for pets, Petco's pet care centers offer pet grooming, training and veterinary care services, in addition to high-quality nutrition and products. Each of these areas operate as a line of business with data scientists who require access to accurate data to analyze the business and find insights. The company wanted to empower data users with self-service capabilities, while also ensuring proper levels of data governance, consistency and security.

Kiran Kanetkar, senior director for data and analytics at Petco explains, "Technically, Petco is on sound footing, with a cloud-based Snowflake enterprise data warehouse and data lake running in AWS." Petco faced the challenge of empowering data users with self-service capabilities, while also ensuring proper levels of data governance, consistency and security.

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Solution

To address these challenges, Petco selected erwin[®] Data Intelligence by Quest[®] to establish a data governance framework, improve self-service and expand data literacy. Petco's use of erwin Data Intelligence includes erwin Data Catalog, erwin Data Literacy and erwin Smart Data Connectors.

Benefits

- Established a data governance framework that permitted self-service while maintaining data use guardrails
- Fostered a culture of data literacy by promoting the collaborative development and definition of business metrics
- Empowered users to become data champions and share responsibility for data quality

Solutions at a glance

erwin[®] Data Intelligence by Quest[®]



The diagram shows the data processing layer, consisting of the data lake where data is sourced from many different internal applications. At first, the data is in raw form, typically the same format as in the source systems. Then, the raw data undergoes transformation and translation before going into an enterprise data warehouse (EDW). There, the data is organized by different subject areas, and will ultimately be aggregated, sliced and diced according to the reporting requirements of the business line.

Within this structure, Petco wanted to enable its business analysts and data scientists to execute reporting and analytics in a self-service manner. But self-service is not without its challenges, among them:

- Metrics may have similar names, but different calculations and logic – Kanetkar said, "As an example, consider customer lifetime value. It can be calculated in multiple ways, but if different departments don't follow the same calculation methodology, they will get different answers and cause confusion. We wanted the definition of metrics to be the same across the enterprise."
- Datasets are created and used by individual teams in isolation – According to Kanetkar, "When different business teams work in isolation, they create new datasets specific to their needs without a complete understanding of how that data is used more broadly across the enterprise. This results in duplicated efforts and multiple copies of the data, which can add cost to a cloud platform."
- Reports are published with inaccurate data

 In this worst-case scenario, reports get published with incorrect data purely because people don't understand the data and how it is organized. It is basically a lack of knowledge of the data – in other words, poor data literacy.

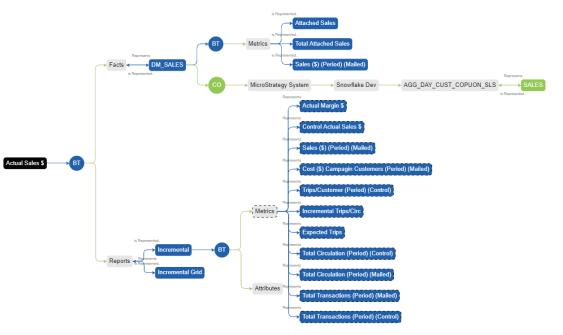
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The first step was to use erwin Data Catalog and erwin Standard and Smart Data Connectors for Snowflake to automatically harvest metadata to build a data dictionary with details about the tables and columns used to organize the data. Business users can refer to the data dictionary for information about data assets so they know they are using the right

Before we implemented erwin Data Intelligence by Quest, my team used to constantly get questions from many different business users about available data, which was taking a lot of time. By providing all of this data catalog information in a selfservice manner, our business users are empowered and able to perform their analysis much faster. And that has actually led to efficiency changes in our development process as well.

Kiran Kanetkar Sr. Director of Data & Analytics, Petco



Data champions throughout Petco use Mind Maps within erwin Data Intelligence by Quest to quickly and visually understand the relationship between business terms and associated facts, metrics, reports and other attributes

data objects correctly. According to Kanetkar, "Any business user, whether they are typical business analysts or data scientists, should be able to easily search the thousands of objects in our data warehouse, see the details of the tables or columns, and have confidence that they're using the correct objects – all without needing help from IT."

Next, the team used erwin Data Literacy to build a business glossary and promote a shared understanding of key business metrics and how they are calculated. At Petco, the definitions are categorized by subject areas, such as sales, marketing, finance, supply chain, inventory, etc. erwin Data Literacy makes it easy to access the metrics for the various business areas, and it also facilitates a governance review and approval process before the metrics are published and can be used across the company.

Finally, Petco implemented additional erwin Smart Data Connectors for reporting and Python. In Petco's case, it uses MicroStrategy as a reporting tool, and that environment already contained hundreds of metrics, dashboards and reports. To load metrics from MicroStrategy into erwin Data Intelligence, Petco worked with erwin Professional Services to customize and enhance the reporting connector which pulls all the different reports from the reporting environment and populates all the metrics into the business glossary where they can be reviewed and disseminated. The Smart Data Connector provides a way to enforce governance and can catch metrics that get into the reporting layer without going through a glossary review.

We needed to balance self-service with the proper level of governance. For me, that starts with data literacy – making sure everyone knows how the data is organized and how to use it.

Kiran Kanetkar Sr. Director of Data & Analytics, Petco



Petco uses Python with Snowflake SQL for the ETL and ELT code needed for data processing. The erwin Smart Data Connector for Python reverseengineered the Python Snowflake SQL script, and provided a visualization of the data lineage across transformations. Kanetkar explained, "Our data goes through transformations from raw layer, to conformed zone, to the modeled zone. Let's say I have a table in our modeled zone, where did this data originate? What is the corresponding raw table from which the data was loaded? The only way to answer these questions is with good lineage documentation. And that's what erwin Data Intelligence plus the erwin Smart Data Connector for Python is able to provide."

Results

Petco was able to establish a data governance framework, and then empower its business users with knowledge of, and self-service access to that data using erwin Data Intelligence. At the same time, the organization fostered a culture of data literacy by promoting the collaborative development and definition of business metrics.

Petco also recognized that data governance had to be an ongoing commitment and shared responsibility among users, without giving it negative connotations or making it onerous. In particular, the role of "data steward" did not resonate with Petco users and didn't motivate them to maintain business metric definitions within the glossary. Instead, Kanetkar redefined the role as "data champion," and found that with this title, people were more willing to take responsibility for the definitions in their areas.

Now, these data champions are empowered to speak with the business executives responsible for their subject area and make sure they are also literate about data and metrics. According to Kanetkar, "They are also collaborating with data champions from other departments to make sure that whenever there are overlapping metrics, we have a common understanding and consensus that the definition

Key Results

- Expanded organizational literacy around how data is organized and how to use it
- Built a searchable data dictionary for critical data assets
- Populated a business glossary to foster common understanding of business terminology and metrics
- Empowered data lake users to use a data catalog to understand objects, tables andr columns
- Enforced data governance framework with proper review of metrics
- Provided detailed documentation of data lineage
- Gave users a portal for self-service access to appropriate levels of data for their analysis needs.

works well across departments. And that's really what helped us implement governance in a positive way."

Finally, the erwin Business User Portal within erwin Data Intelligence provides the one-stop access needed for true self-service. From the portal, anyone within Petco can find the data they need, including tables and columns, metric definitions and common business terminology. Search functionality, mind maps and visualizations help users connect concepts

Our ultimate goal is that when two different people across the organization calculate metrics, they should get the same answer based on the common definition found in the glossary.

Kiran Kanetkar Sr. Director of Data & Analytics, Petco and trace data lineage. Throughout this initiative, Petco found that for data governance to be effective, they needed to provide users with the right technology and processes. Data governance must also be a shared responsibility between the business and IT. Kanetkar concluded, "The only way IT and the business can collaborate effectively is if we provide a proper tool along with the processes that can be executed using that tool. And that's what we did. We implemented the data governance process using erwin Data Intelligence, and provided the right blend of technology and process."

About Quest

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Quest Software. Where next meets now. In this day and age, analytics has to be done in a self-service manner, but it can't be the wild west out there. Data selfservice with the proper level of governance is what will ultimately deliver the value to the business.

Kiran Kanetkar Sr. Director of Data & Analytics, Petco

