KRAFT HEINZ COMPANY DELIVERS A TASTE OF THE FUTURE WITH A TRANSFORMATIONAL DATA HUB

Early adopters are companies who align the capabilities of emerging technology with strategic opportunities and are willing to take some risk to achieve a competitive advantage. Kraft Heinz is probably not the first company that comes to mind as an early adopter. The story told to me by Jorge Balestra, the Global Director of Advanced Analytics, certainly puts Kraft Heinz in that category. The transformation was made even more impressive during a pandemic.

Source: Kraft Heinz Co.

ASPIRE TO BE “BEST-IN-CLASS”

It was Gordon B Hinckley who said, “You can’t build a great building on a weak foundation.” That is also true for how a company does analytics today. Very early in the process, Kraft Heinz decided to be “best-in-class.” Yes, that is an over-used term, but it aptly describes how Kraft Heinz set out to change how the company performed analytics now and into the future. Instead of cosmetic fixes, a radical step function meant moving to the cloud in a wholesale fashion and turning off the legacy applications.
The vision was new architecture. A single data hub for the company that powers both the new digital transformation initiatives and the day-to-day analytics that run the company.

SNOWFLAKE BEFORE IT MADE THE HEADLINES

The evaluation of cloud technologies resulted in the selection of Snowflake the Data Cloud, running on Azure. Kraft Heinz decided to go with Snowflake in 2019, long before making the headlines with a very public IPO. For those of you unfamiliar, Snowflake is the Data Cloud company. Due to its unique architecture, Snowflake separates storage and compute for a completely flexible and scalable solution built around data needs.

Users can leverage any cloud storage solution and only pay for what they use.

During the vendor evaluation, Kraft Heinz recognized data sharing as a critical Snowflake technology differentiator.
ETL TO ELT, MADE POSSIBLE BY THE CLOUD

The traditional approach for data analytics has included ETL (extract, transform, load) for decades. When Kraft Heinz moved from the Hadoop platform on-premises to the Snowflake Data Cloud, ELT (extract, load, transform) was adopted, which has become increasingly popular over the past few years. Without going into too much detail, when the “T” and “L” are switched, it speeds up the process. After data extraction, the load phase can be immediately started, made possible by large storage and scalable compute in the cloud.

ELT has become commonplace because of the power of modern analytic databases. Snowflake’s platform is incredibly performant and very scalable. Handling most data transformation use cases in-database can be much more effective than in some external processing layer. Add to this the separation of compute and storage, and there are decreasingly few reasons to want to execute your data transformation jobs elsewhere.

USING dbt TO EXECUTE ELT PIPELINES IN SNOWFLAKE

Kraft Heinz uses open-source dbt to perform the data transformation work that needs to happen between loading data and analyzing it for anybody comfortable with SQL. DataOps functionality, managing ELT workloads (orchestration and management of processing pipelines) is handled by cloud native capabilities, complementing what Snowflake does well.

dbt is the “T” in ELT. It doesn’t extract or load data, but it’s extremely good at transforming data already loaded into your warehouse.

CHOOSING THE RIGHT PARTNER

Rearchitecting a single data hub for the company is a significant undertaking that involves risk. Kraft Heinz considered several potential partners for this project.

The most important consideration was the shared vision. Most of the partners interviewed painted a picture of past achievements with examples of projects that happened in the past with technology thinking also based on yesterday’s technology. These examples did not align with Kraft Heinz’s vision of the future in the field of data analytics, which is moving at a swift pace.
In the end, the decision was simple. Infosys had a track record with Kraft Heinz’s going back to 2004, and trust is crucial.

But, most importantly, Infosys shared a joint vision around the future of data and analytics. Infosys has developed a point of view based on three distinct horizons: making better decisions as a data-driven enterprise to reimagining business as a data-native, digital-native enterprise, and finally leveraging data as the new capital to take part in the data economy.

The first horizon focuses on ways to make the data more accessible. Make data, transitions, and security work so that people can access the data when needed. The second horizon is to become digitally native to drive new digital experiences for consumers. The real-time ability to sense, respond, and evolve, with insights resulting in more meaningful interactions with customers. The third horizon is the vision for an actual data economy. A data economy that includes a new ecosystem enables companies to collaborate and create new data-driven products and services, driving new business models. To that end, Infosys leveraged its Infosys Cobalt ecosystem, a set of services, solutions and platforms for enterprises to accelerate their cloud journey.

**RESULTS TO DATE**

Amazingly the partnership between Kraft Heinz and Infosys created a single world-class database hub in nine months during a pandemic, a tremendous effort from both teams.

With the first data sets going live in September 2019, it is a little early to quantify improvements, but it is clear there are benefits immediately seen.

Increased performance compared to the on-premises environment, with the ability to scale on-demand in the cloud. With infrastructure as code, Kraft Heinz can fine-tune the compute requirements.

Faster response times to data sharing requests are made possible by Snowflake Data Marketplace with external data providers without data duplication.

Now that Kraft Heinz is on the journey of transforming digitally with a firm data and analytics foundation, with multiple initiatives in the pipeline.

We look forward to seeing them come to fruition.