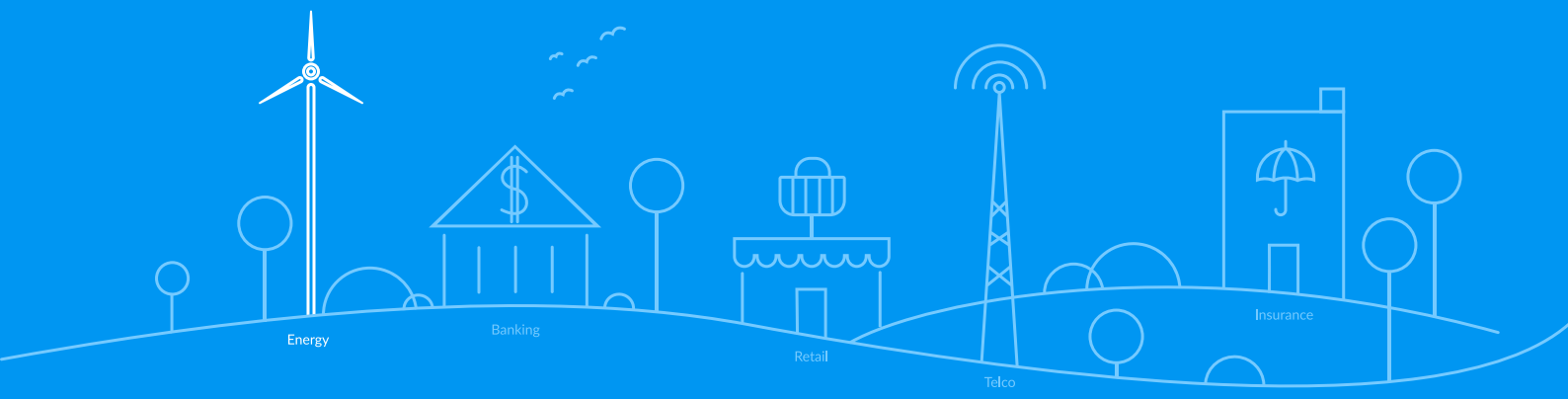
Customer-Centric Data Operations in Energy Retail



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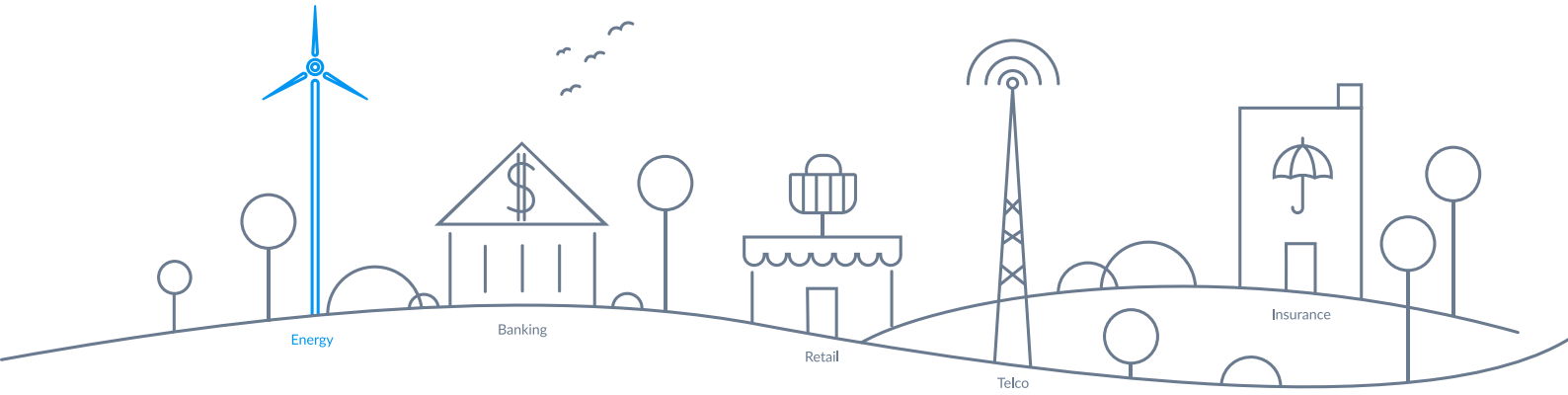


Industry pressures and overview

The energy market, a traditionally conservative and heavily regulated industry, is undergoing rapid changes to become green, smart and digital. Distribution of costs is a common challenge everybody in the industry is facing.

Furthermore, energy retail profitability is at its lowest in years as new players enter the power and gas market. Non-energy leaders from various industries entered the scene and shuffled the cards by bringing in their agility, customer relationships, and services. Staying ahead of the competition is harder than ever before due to this speedy commoditization and as a consequence, customer-churn levels are on the rise.

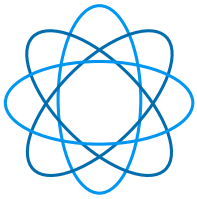
Due to these changes, it's no wonder retail energy customers are changing as well. They are in demand for an expanded product and services offering from their providers which is why energy retailers need to reposition from being solely energy providers to becoming solutions and services providers.

Business impact

Energy companies are well aware that data - and the modernization its processing and analysis - is key to becoming more customer-centric, driving infrastructure and operational efficiencies (such as cost optimization in asset management), better compliance, and new business opportunities for energy services such as e mobility or IoT smart home solutions.

Customer Retention Risk

The retail energy market is a highly competitive market: lower prices can easily sway customers to switch to a different provider. Personalized services through better customer insight can help counter customer churn. As customer value becomes one of the top priorities of operations, companies need to put all efforts into getting to know their customers, who they are, what they need and how they behave, so they can respond to them with the most suitable messaging and solution delivery.



Cost pressures driving need for operational excellence

New energy sources are introduced into the energy distribution system, which makes a stable, yet agile core infrastructure essential. In addition, cost pressures are coming from all sides, making the need for more efficient infrastructure and internal operations apparent. Industry leaders need to take advantage of their data in order to better manage their critical assets, reduce system performance issues, and improve productivity and processes.

Need for new services

To compete effectively, energy providers need to diversify their business operations, looking into relevant products and services outside of energy distribution. To define suitable growth-driving initiatives, analysing in-house, second and third party data sets can help derive suitable avenues. Introducing a central data platform is key to being closer to customers, driving operational efficiencies, and establishing the foundation for advanced business initiatives e.g. for prediction analysis.

Accelerate time-to-cloud with Snowflake, antFarm and DataMerlin

To achieve all of the above, organizations are facing a new challenge of sheer volumes of data: existing and new business applications (ERP, assets management...), operational systems such as SCADA systems and virtual power plants, IOT (efficiency and monitoring), web analytics, and social media.. This affects every part of the sector, from energy production, distribution, all the way to the acquisition of new customers and marketing. This massive amount of information needs to be stored, exploited, and transformed into actionable insights without producing new data silos.

In this new world of huge volumes of internal and external data in the energy industry, centralizing these in the Snowflake Data Cloud allows for a better view of customers, as well as drive new business models and revenue opportunities to spawn, such as additional services around energy monitoring and efficiency, e-mobility of power stations and car rental services and IoT smart home solutions. Snowflake supports data democratization, supporting users from business executives to data analysts and data scientists, allowing access to validated and standardized data.

Moving data can be challenging and can take a lot of time and resources. But the good news is, these amounts can be now cut down in half or even less. We introduce you to DataMerlin, and antFarm – the winning combo for your next data integration project.

DataMerlin

DataMerlin introduces a modern approach to solving complex data integration challenges. ETL / ELT development takes the largest portion (up to 80%) of the data warehouse development effort. In addition to being time-consuming, it can also be very challenging, error-prone and difficult to maintain.

It is a fast and effective solution to build data warehouses from scratch or migrate data from your current database into the Snowflake instance. It provides native support for Snowflake and leverages full ETL / ELT automation.

Furthermore, a lot of companies are still facing the challenge of how to move their data from on premise systems to cloud data environment. The most of the enterprise transactional loads are still on premise and new workloads arising everywhere, the companies are looking for ways to quickly, efficiently and safely load vast amount of data to the cloud on daily basis to take advantage of unlimited cloud resources to transform the data and get answers to their business questions and be able to respond to the fast changing market conditions.

antFarm

antFarm lift 'n' shift data migration solution supports both cloud and on-premises data sources. For this reason, it is opening paths to IT modernization by bringing in various benefits, including reduced costs, improved performance and the resiliency of cloud architecture. AntFarm provides automation and can be customized to support any custom proces (You can run any kind of SQL or Python processes). Whole data movement processing is defined with standard SQL syntax. It supports bulk loads, parallel execution, scalability, logging and serial execution.

PETROL

Case Study

About the Company

Petrol is a Slovenian sustainable energy company that trades in oil derivatives, gas, and other energy products. It has been in operation for more than 70 years and is now one of the largest and best-known Slovenian companies. Today, Petrol's retail network comprises 500 modern service stations, and the company has more than 5,000 employees. Headquartered in Ljubljana, Petrol has branches across south-eastern Europe.

Challenge of Customer Retention

Global energy trends have changed the Slovenian market significantly: A lot of new providers emerged and to get their share on the market, they all promised attractive offerings. As a consequence, customers started to be more demanding.

Petrol realized that in order to maintain its competitive advantage, they needed to focus more intently on customers' needs and demands. Data analytics became essential for gaining insights into what customers want, requiring access to more data, storing it in a single centralized location, and having the power to access and analyze that data in near real-time.

Its old operational systems required a lot of manual clustering, were slow and ineffective, and were a source of inaccurate data. Daily data refresh took more than 8 hours, therefore business users didn't get the information they'd need on time. In addition, historical analysis and predictive analytics were impossible. An on-premises data warehouse failed to deliver the desired results as it didn't enable different views on their business.

Petrol needed a new solution, a solution that would allow them to dig deeper into their questions: Who are their customers, how are they changing, what is sales efficiency, are they meeting the sales targets, what is their next best offering, etc. A solution that would be able to support all types of users from business executives to data analysts and data scientists.

Migration to Snowflake Data Cloud in 4 months

Petrol migrated to Snowflake (running on Microsoft Azure MS Cloud Platform) in about four months with the help of In516ht's solutions antFarm and DataMerlin. The new platform provides better customer insights, helps streamline operational processes and offers data access to anyone within Petrol to drive data-driven initiatives.

Personalized Service Offerings for Customers

With Petrol on Snowflake (running on Microsoft Azure), Petrol is now able to create more customer-centric and -driven products through accelerated customer segmentation and analysis, and compete effectively with new entrants on the market. They were able to increase the profitability of their products and sales channels and, when the pandemic hit in spring 2020, they were able quickly to respond to the changes in customer behaviors.

Optimized Operational Efficiencies Through Reduced Administration

By migrating from an on-premises solution to the Snowflake Data Cloud, Petrol is now saving space, electricity, and spends less time on database administration and maintenance: TCO was reduced by approximately 40%, while administrative operations decreased by 80%.

Instead of hours or days, data queries are run in minutes or seconds: Tuning is no longer required for about 98% of queries, and manual indexing has been fully eliminated, according to Petrol's Data Warehouse Architect, Amir Komic.

Due to Snowflake's scalability, Petrol can easily increase performance during peak usage and scale down afterwards to control costs: Petrol gets the performance it needs exactly when it's needed, without having to worry about any compute or storage limitations.

Petrol no longer requires traditional DBAs as everything except security can be managed by the BI department. This means that they can now spend more time analyzing key data sources to drive business value, instead of administrative tasks.

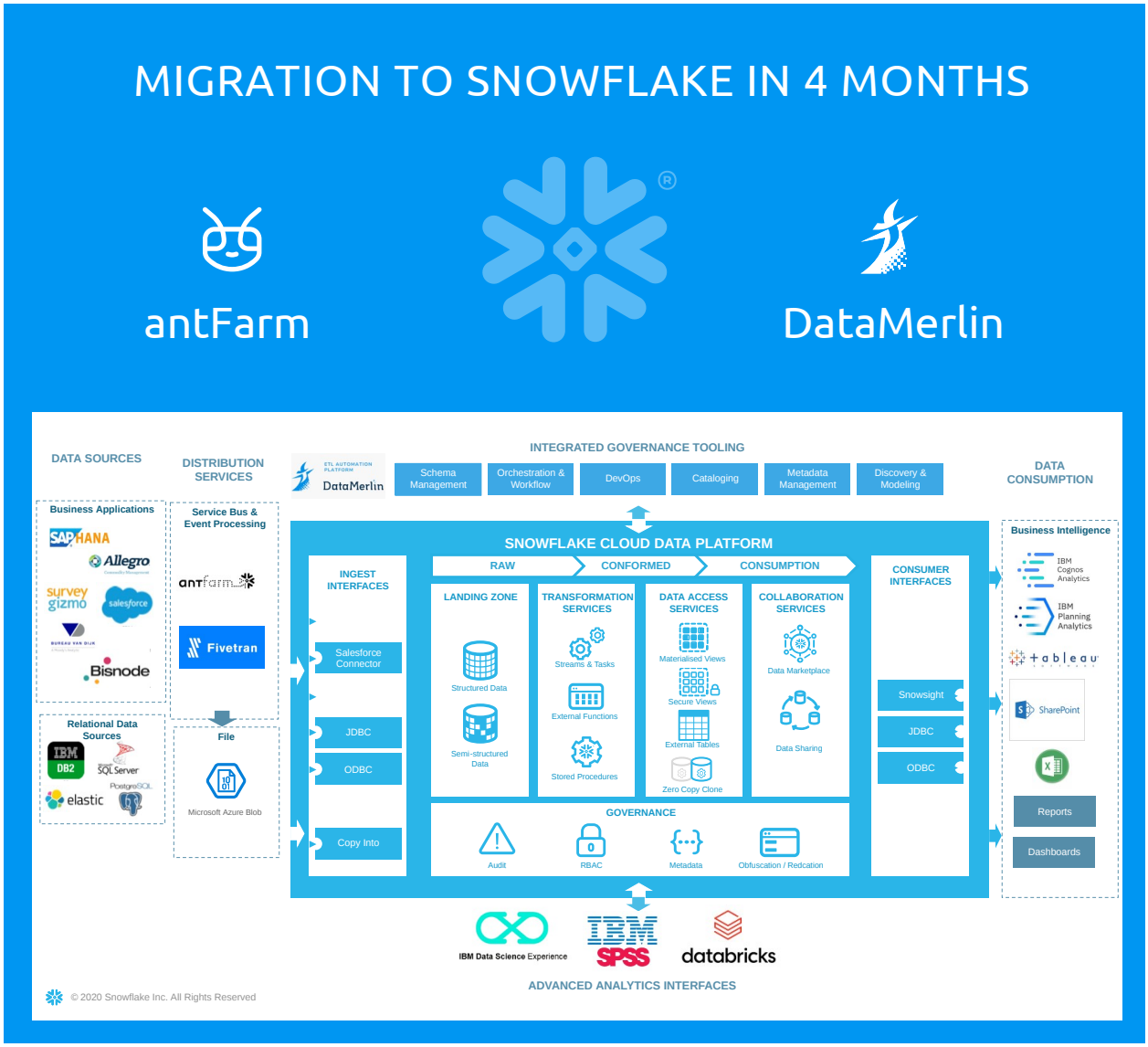
Door opener for data-driven initiatives

With Snowflake as the centralized data platform, departments across Petrol are able to access valuable live and historic data, which they can leverage for relevant analytics or predictions to drive business initiatives.

In516ht and Petrol are constantly looking into implementing new use cases to increase Snowflake usage within their organisation.

Outcomes:

- Understanding client needs, therefore increasing customer satisfaction
- Monitor the impact of new products / business lines increasing the value of customer lifecycle
- Improved processes and productivity
- Increase the profitability of products and sales channels (the company owns over 500 gas stations)
- Reduced TCO by 40%
- Operational burden of administration reduced by 80%
- Daily data transformation time reduced for 70%, now taking only 3 hours



> *Many thanks goes to In516ht for helping us accomplish our mission to migrate to Snowflake in less than 4 months.*

Why this partnership?

In516ht and Snowflake have successfully implemented multiple data warehouse greenfield and migration projects and automated the data processing flow from any source, reduced TCO and development/migration, dependency on development resources and time to market on average by 40%. This way customers are able to reap the benefits of Snowflake much faster.

Snowflake delivers the Data Cloud — a global network where thousands of organizations mobilize data with near-unlimited scale, concurrency, and performance.

Inside the Data Cloud, organizations unite their siloed data, easily discover and securely share governed data, and execute diverse analytic workloads.

Wherever data or users live, Snowflake delivers a single and seamless experience across multiple public clouds. Snowflake's platform is the engine that powers and provides access to the Data Cloud, creating a solution for data warehousing, data lakes, data engineering, data science, data application development, and data sharing. Join Snowflake customers, partners, and data providers already taking their businesses to new frontiers in the Data Cloud.

Learn more at www.snowflake.com

In516ht helps their customers optimize and adopt Snowflake best practices, through their strategic focus on cloud-first data platform modernization. As such, they've become one of the leading Snowflake partners in Europe and one of the first Premier Snowflake partners with close to twenty certified experts.

In516ht helps energy retailers to overcome digital challenges by providing future proved solutions and find ways to leverage high volumes of data and effectively manage their infrastructure, regulation reporting, billing and customer service by providing informative decision making.

Interested in learning more about In516ht's Data Integration Solution? Find out more at www.in516ht.com. For solution-specific information, please refer to DataMerlin and antFarm.