# TAKE CONTROL OF YOUR SNOWFLAKE IMPLEMENTATION
WITH ORION'S ENTERPRISE INFORMATION INTELLIGENCE GRAPH

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The advantages of incorporating a data warehousing technology like Snowflake are quite many.

The ability to use Massively Parallel Processing (MPP) to process queries, and to provide horizontal scalability with a significant reduction in infrastructure and administration overhead has made it a popular choice in data warehouse modernization.

However, while enterprises can benefit from the Snowflake data warehouse with more scalability, better performance, and cost-saving, they soon realize that its implementation could be a hurdle if they are not equipped with the right tools to help accelerate the data migration. The challenges they are facing during the migration process include:
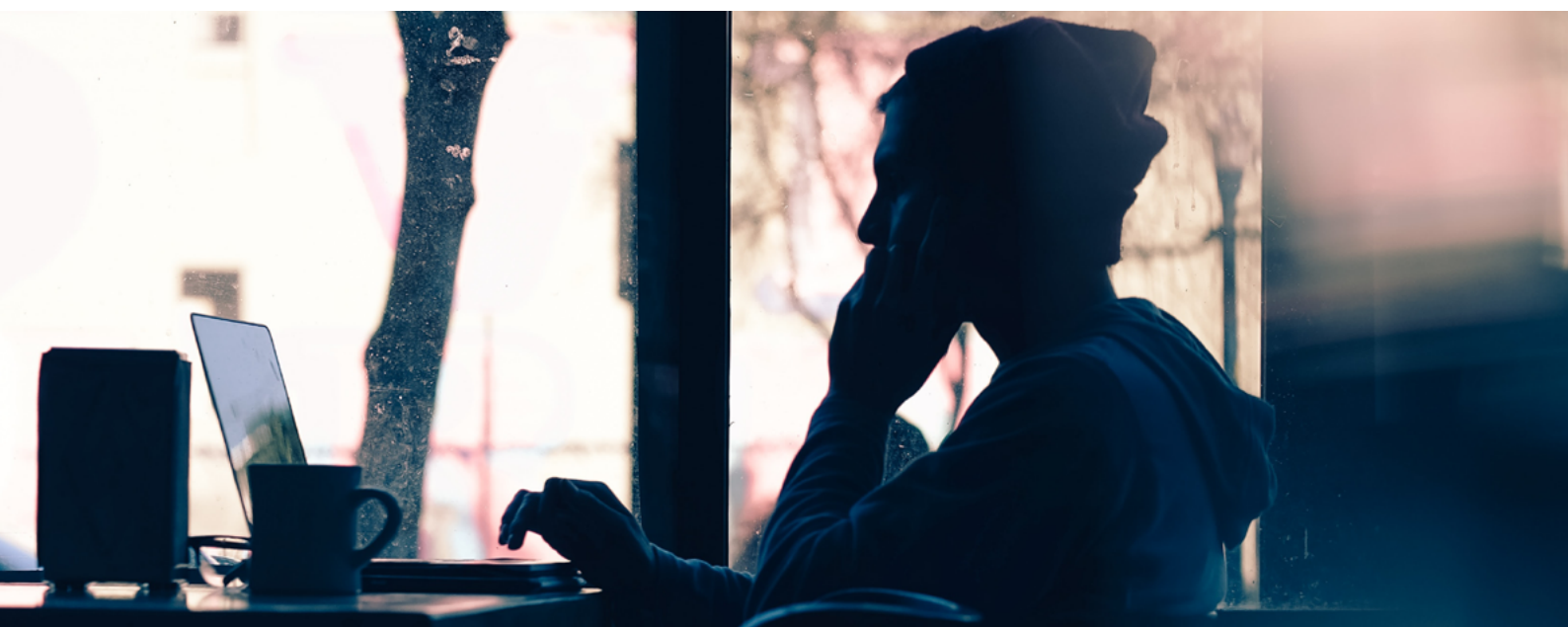
### Inefficiency in handling the complexity of legacy systems

Before the start of any migration project, enterprises need to understand the data in the legacy systems they are to migrate. This often involves a wide range of technologies, from mainframe, traditional data warehouses, ETL tools, programming languages, and BI reports. Organizations will be in for a rude awakening when they realize that they have no way to support PL/1 or COBOL in the mainframe environment or Perl codes in a Teradata data warehouse. Let us also take a closer look at ETL (Extract Transform and Load) tools and traditional database constructs such as Materialized Views, Views, Stored Procedures and Functions. Data warehouses rely heavily on both to accomplish the transformation of data. Companies that migrate their existing data warehouse codes to Snowflake need to not only update their traditional database SQL queries, but also rewrite their Stored Procedures and Functions. Snowflake uses Javascript to embody the complex logic that is otherwise written in SQL in traditional database systems. If enterprises don't have the capabilities of supporting these ETL tools and automating the update and rewriting processes, their modernization efforts will get stuck or progress slowly. You simply cannot accomplish a successful migration with uncertain manual efforts.

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Resource constraint

Hand in hand with the above-mentioned inadequacy associated with the lack of technology support is resource constraint. Snowflake offers the added flexibility of creating User Defined Functions (UDFs) in both Java and Javascript. This provides access to the functionality already available in a vast array of Java and Javascript libraries, obviating the need to write in traditional SQL. However, this flexibility in turn raises the bar in terms of the technical knowhow required within an organization to write optimal stored procedures and functions. Transitioning traditional data warehouse developers into experts who understand Javascript will be time consuming. Relying on such inexperienced code developers for the migration is also perilous since such reliance often results in the need for extensive troubleshooting. Resource constraint is usually one of the reasons for the delay of a migration project.

Lack of transparency

Another obstacle is the lack of transparency of the IT environment in general, and the data meant for migration in particular. Can you automatically discover duplicate tables, codes, and reports? Can you identify sensitive information such as PII visually and quickly? Can you find out what data can be reused? If you are not sure about the answers to these questions, you are unlikely to finish your migration initiative on time and under budget.
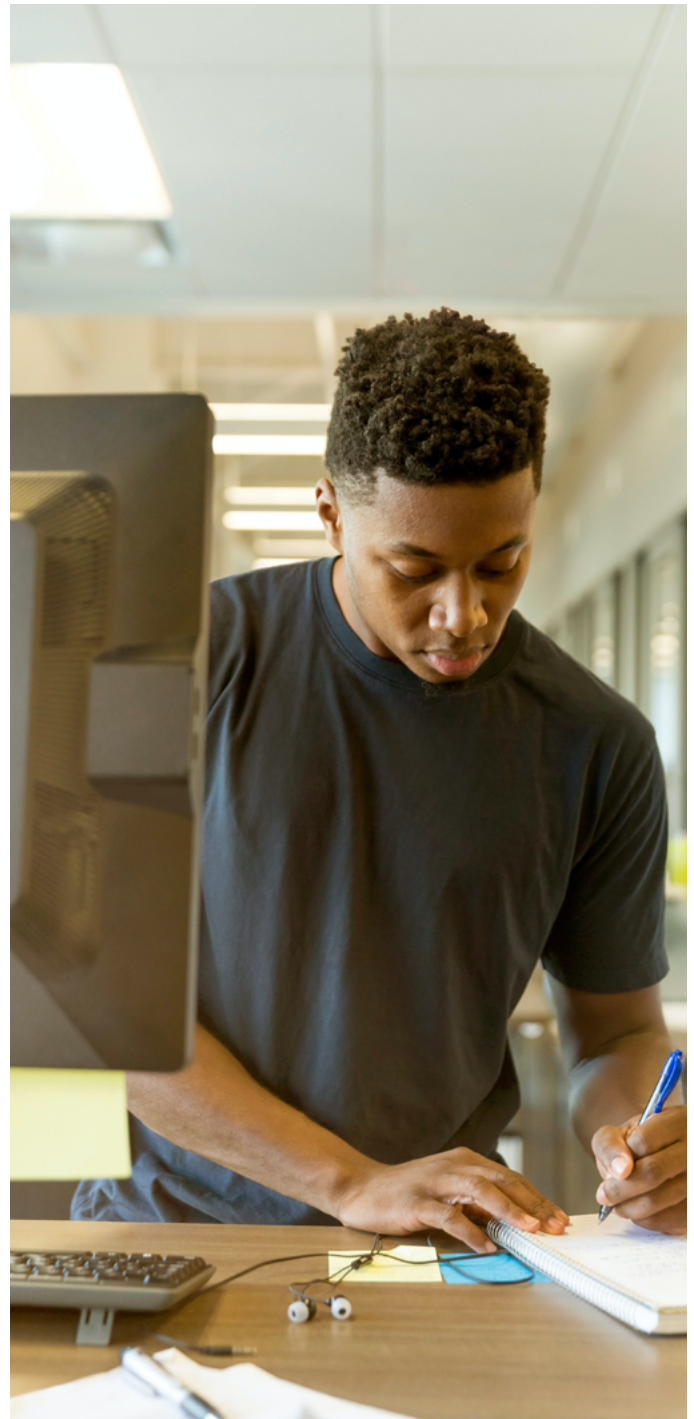
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Orion's Enterprise Information Intelligence Graph (EIIG) can help address all these challenges and enable you to take control of your Snowflake implementations by providing insights before and during the migration.

- Broad support of technologies to provide transparency and traceability: EIIG provides the ability to ingest Snowflake code (both database and Javascript) and provide seamless insight into the flow of information, at the same time automatically connecting other information assets (> 60 supported technologies), both on-premise and cloud-based, in a vendor and technology agnostic manner. With data transparency and traceability of information assets, companies can speed up the migration, while meeting all regulatory compliance requirements.

- AI/ML powered automation to reduce cost and alleviate resource constraint: With Orion's EIIG, business users will have insight into the logic that's been coded and can provide feedback to the developers of Javascript modules, without the need to understand Javascript. Business owners will have insight into the quality of the code being written, identify duplication and opportunities to reduce costs by eliminating duplication and promoting code reuse.

- Metadata analytics to enable accurate and timely decision-making: Analytical capabilities such as impact analysis allow enterprises to make the right decision during the migration process. Business owners will have insights into the quality of the code being written, identify duplication and opportunities to reduce costs by eliminating duplication and promoting code reuse.

With these capabilities, companies can ensure that their Snowflake deployment is agile, fast and cost-effective.