

Data engineering challenges

As the volume of data within companies rapidly grows and business requirements require greater amounts of data and insights, the demand for data engineering is dramatically increasing. Data scientists and data analysts who provide insights require access to data that must be gathered, processed, and made accessible by engineers. Although third-party tools are becoming more user-friendly, it is still challenging to automate engineering processes from scratch. Organizations need data engineers to create the necessary endpoints and pipelines. Skilled data engineers can have a significant impact on a company's success by facilitating value-creating projects and driving innovation.



97%

of data engineers
'feel burned out'



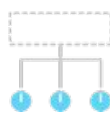
70%

say they are likely
to quit within a
year



21%

growth in data
engineering jobs
from 2018-2028



33%

of data teams
had 50+ people,
from 25% in 2022

KEY ROADBLOCKS

Shortage of experts

- A lack of subject-matter experts means that organizations' SQL queries are less efficient
- Limits the pace at which these queries can be reviewed by an expert before they are deployed into production
- Innovation slows to a crawl as more problems than solutions are introduced into production data pipelines

Bandwidth for code reviews

- Code reviews help data teams catch issues with pipelines and SQL queries early in the development lifecycle
- Many data teams have limited bandwidth to conduct these reviews
- Catching issues before they go into production helps reduce the impact on downstream use cases
- Manual code reviews can be cumbersome and slow the development lifecycle, limiting the number of new data applications that can be launched

Productivity drain

- Developers spend much of their day troubleshooting production data applications and debugging errors in test environments
- Little time to write new code for applications in development
- Long development cycles cause data teams to miss goals for the number of new applications successfully deployed

Turbocharge your data cloud

Unravel's purpose-built AI for Snowflake enables data observability and FinOps insights based on Unravel's granular visibility at the warehouse, user, and SQL query level. Unravel's AI-driven recommendations enable Snowflake data engineers to launch new cloud data applications 3x faster, run 50% more workloads on their existing warehouses, achieve $\pm 10\%$ cloud data budget forecast accuracy, simplify troubleshooting to meet 99%+ SLAs, and boost reliability. With Unravel, Snowflake data engineers can speed data pipeline development and analytics initiatives with granular and real-time cost visibility, predictive spend forecasting, and performance insights for their data cloud.



3x

Faster time to launch new applications



50%

more workloads on your existing warehouses



$\pm 10\%$

cloud data budget forecast accuracy



99%+

less firefighting to achieve SLAs

How Unravel enables data engineers

Unravel provides a purpose-built AI data observability and FinOps platform that simplifies and accelerates each phase of the [DataOps lifecycle](#)—from planning and creation to testing, deployment, and optimization. Innovative companies such as Mastercard, Equifax, and DBS Bank use Unravel for cloud cost management and FinOps. Unravel provides data teams a unified view of data pipeline and application performance, efficiency, and reliability.

Optimize your Snowflake data cloud pipelines with AI-powered insights

- Warehouse resizing / right-sizing
- Warehouse consolidation
- User-level observability
- SQL query anti-patterns
- SQL query comparison

Data engineering benefits

- 3x faster time to launch new data apps
- 50% more workloads for the same budget
- 99% less firefighting time using AI-enabled troubleshooting
- $\pm 10\%$ budget forecast accuracy

Data engineering use cases

- ELT/ETL pipeline development
- Data transformation pipeline development
- Code development and reviews
- Data pipeline debugging
- SQL query performance analysis
- Data pipeline optimization
- Troubleshooting missed SLAs