

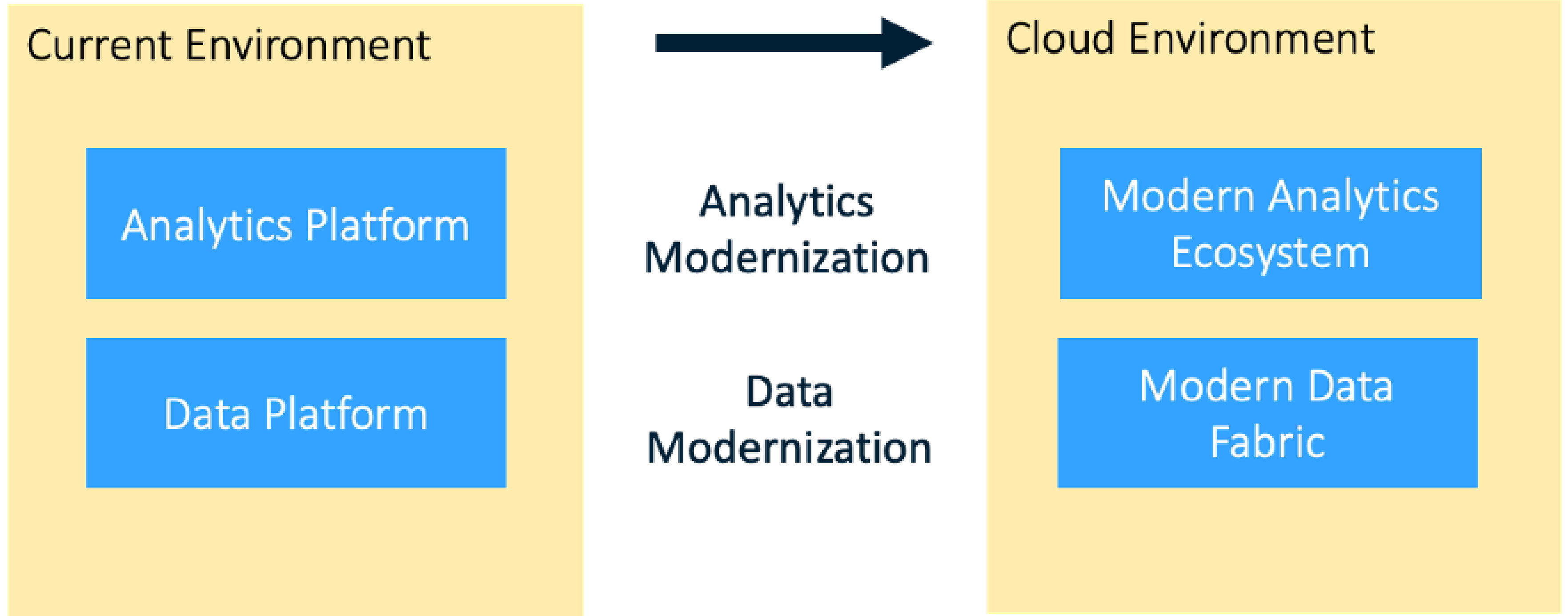
# Migrating DI Studio to SAS Studio flows with Data to the cloud

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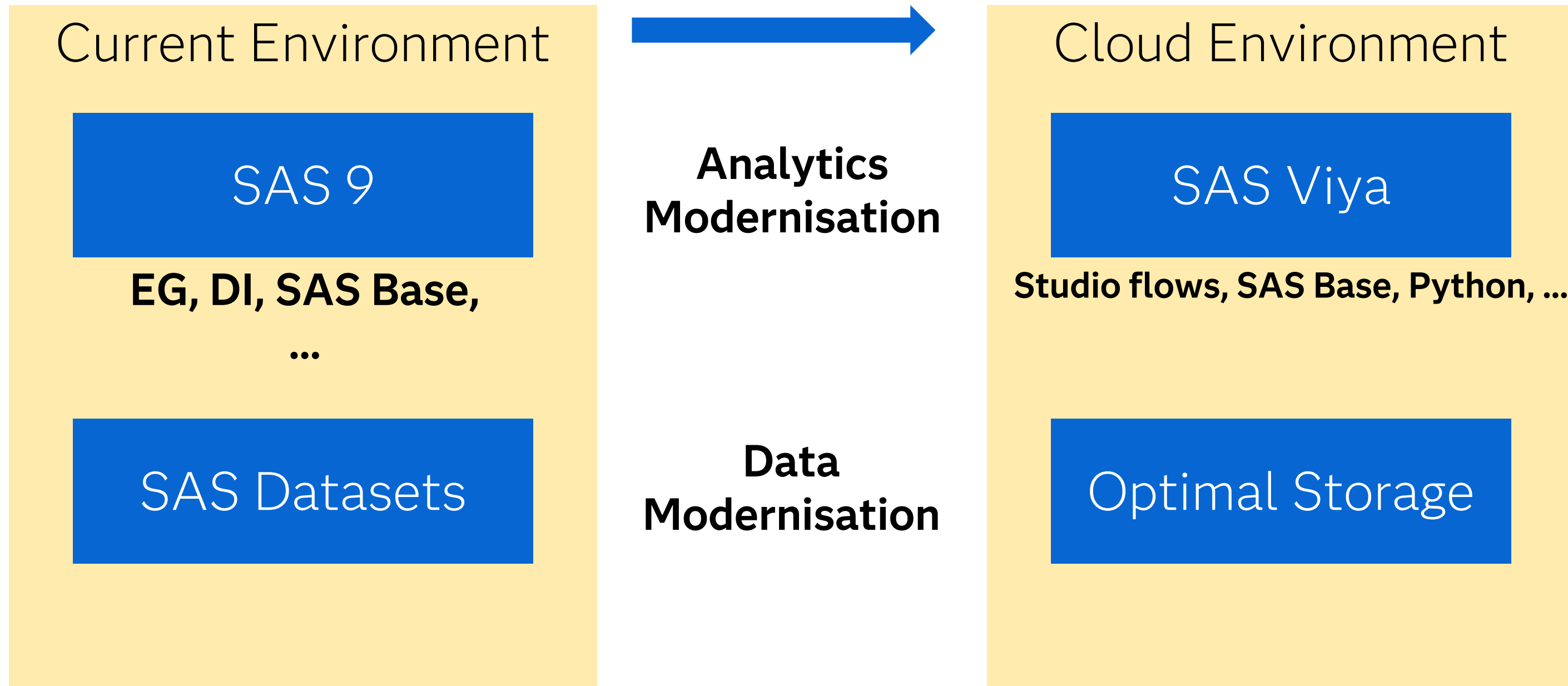


# Moving to Cloud



Source: Jeff Stander @ SAS

# Moving SAS to the cloud



Source: Jeff Stander @ SAS

Inventory Transformations

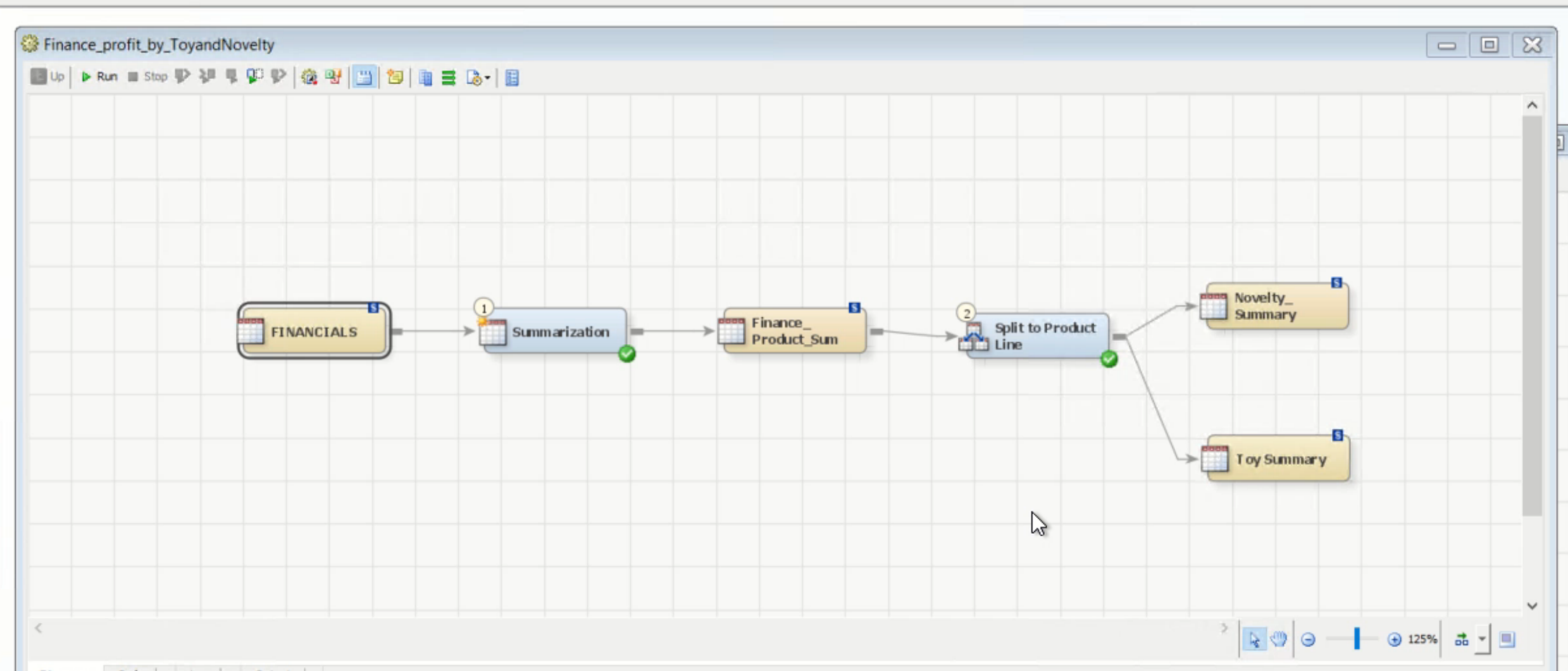
- Finance Profit by Company
- Finance\_Analysis
- Finance\_Analysis\_V2
- finance\_djob\_1
- Finance\_Flow1
- Finance\_Flow2
- Finance\_map1
- Finance\_profit\_by\_product
- Finance\_profit\_by\_product
- Finance\_profit\_by\_ToyandNovelty
- Finance\_profit\_by\_ToyandNovelty
- FinanceDataQuery1
- FinanceLASRAppendTables1
- Forecast as Graphic
- Summary Table and Vertical Bar Chart

Reports

- hrcontent
- salescontent

Basic Properties

Name	Value
Name	FINANCIALS
Description	
Folder Location	/gclcorp/financecontent/Data/Source Data
Checked Out By	
Table Name	FINANCIALS
Library	FINDATA (FINDATA)
BMS	SAS Table
Number of Rows	Row count is disabled
Number of Columns	46
Last Modified By	sasadm
Metadata Modified	Feb 7, 2020 10:17:41 AM
Metadata Created	Feb 7, 2020 10:17:41 AM
Logical Type	Table
Metadata ID	A5ELUBD6.BG00003I
Package Version	1.0



Details

Columns: Status Warnings and Errors Statistics Control Flow

Last Run: Aug 23, 2023 4:02:49 AM Clear All

Order	Name	Status	Details
1	Precode	Completed successfully	
2	Summarization	Completed successfully	
3	Split to Product Line	Completed successfully	
4	Postcode	Completed successfully	
	Finance_profit_by_ToyandNovelty	Completed successfully	

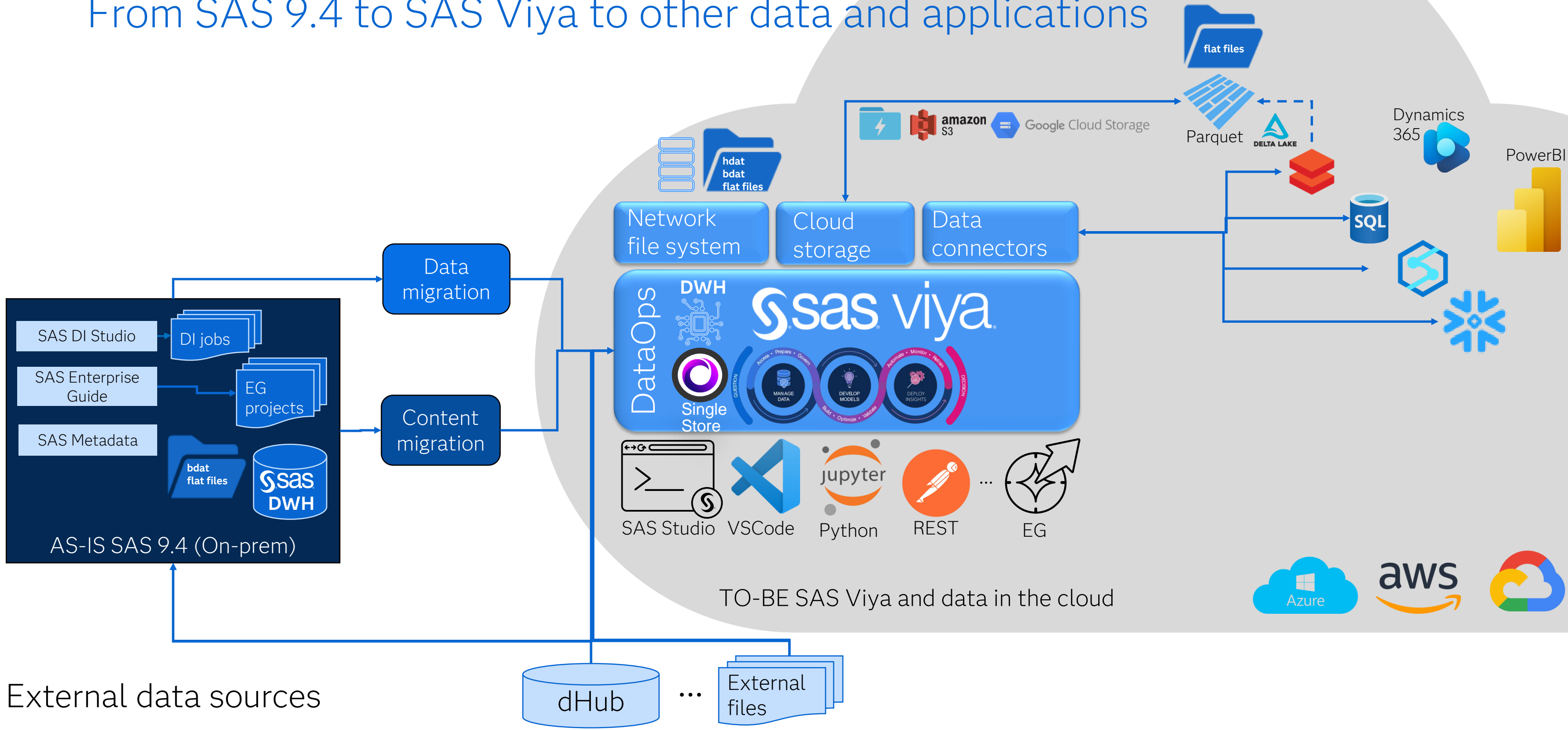
Completed successfully

4	Postcode	Completed successfully	
	DIFT Parameterized Job for Company Profit Forecasts	Completed successfully	

Completed successfully

# Data, analytics and AI architecture to the cloud

From SAS 9.4 to SAS Viya to other data and applications



# Migration demo

- Almost as-is, use netapp – fast network filesystem mounted to SAS Viya
- Change target to CAS to support fast analytics
  - A nice side effect – save to Parquet files in cloud blob storage for bottomless cost-effective storage
- Change target to Singlestore for a fast cost-effective storage while making data available for others
- Change target to Snowflake for storage at an external cloud-based datawarehouse (efficient, expensive with compute, scale to save cost)
- Change target to Databricks for storage at an external cloud-based data lakehouse (based on Parquet, deltalake and spark)
  - Also comes with a cost for compute – scale down or shutdown to save cost
- DuckDB?

# Alternatives?

- Reengineer / recode existing ETL with other tools / languages
- Use scripts or other technologies to support automation of reengineering where possible
- Emulate missing capabilities in the target platform through code or rewrite
  
- OR
  - Simply migrate with built-in migration support inside SAS Viya to a cloud-native optimized platform for Data & AI
  - Reuse existing IP and code – less risk, save time and effort
  - As an agnostic Data & AI platform you have full flexibility on data platforms and can easily make data available outside of the platform – Data Mesh

# Why?

## Rational behind this approach



### Faster

Shorter time to value by less work compared to rewriting

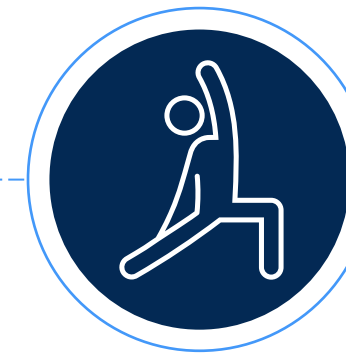
Small changes (refactor) in order to optimize for the cloud from existing and proven data pipelines



### Cheaper

5-10 times less work by reusing existing and proven data pipelines in DI Studio means less cost

Automating testing and delivery through CICD pipeline cost less than manual work



### Better

Improved accessibility to analytical data by writing them to accessible storage

Reduced risk and complexity when working from proven data pipelines in a productive environment

Free up resources to business dev