

YOU CAN
CHOOSE
TO SEE
DATA
DIFFERENTLY.



RED
PILL
ANALYTICS

RedPillAnalytics.com
@RedPilla



Founder & CEO Red Pill Analytics

twitter: @stewartbryson

medium: @stewartbryson

linkedin: stewartbryson

A wide-angle photograph of a mountain range under a clear blue sky. The mountains are covered in white snow, with bright sunlight reflecting off the peaks. In the foreground and middle ground, there are dark, rocky mountain faces partially covered in snow. The overall scene is majestic and peaceful.

Your Data Warehouse is elastic.
Shouldn't your team be?

ELASTIC DELIVERY

Elastic Crew



MULTIFUNCTIONAL TEAM

Each Crew has the necessary players to move from question to insight in a single sprint.

AUTONOMOUS

Whether you have an existing team or not, a Crew works autonomously to solve whatever data problems you assign to it.

SCALABLE

Scale to answer all of your data requirements by adding additional Crews.

Elastic Surge



SUPPLEMENT YOUR TEAM

Increase your delivery capacity without adding fulltime resources.

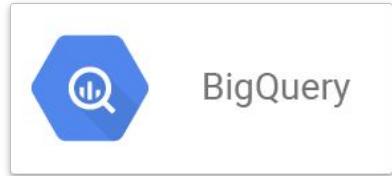
SEMI-PERMANENT

Designed as a long-term enhancement to organizations with functioning teams.

RESPOND TO DEMAND

Be more responsive to user demand: increase in size, swap out functional roles, or simply add a new technical skill for a few sprints.

Data Warehouse



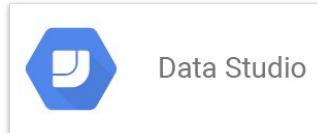
Amazon Athena



Analytics



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Data Engineering / ETL



ORACLE[®]
Cloud Infrastructure

All I Need Is SQL and a DAG



Tuesday | April 7, 2020
1:00 PM

Stewart Bryson, Red Pill Analytics
@stewartbryson

We all know what *SQL* is, but
what in the world is a *DAG*?

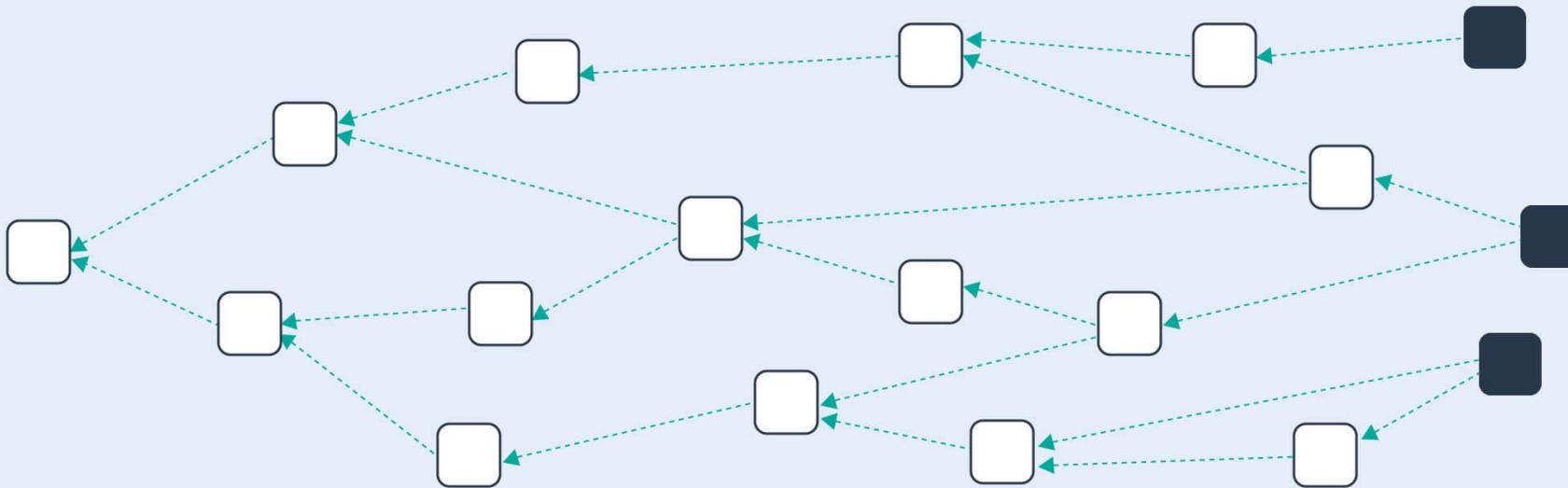


DAGS, D'YA LIKE DAGS?

Directed Acyclic Graph (*DAG*)

“A Dependency Network organizes functionality into a *directed acyclic graph (DAG)* of tasks and their dependencies on other tasks. We can navigate through a dependency network to ensure that all the prerequisite tasks necessary for the requested task are executed. We can also make sure that even if a task crops up more than once through different dependency paths, it's *still executed only once.*”

Directed Acyclic Graph (*DAG*)



Projects Using a *DAG*



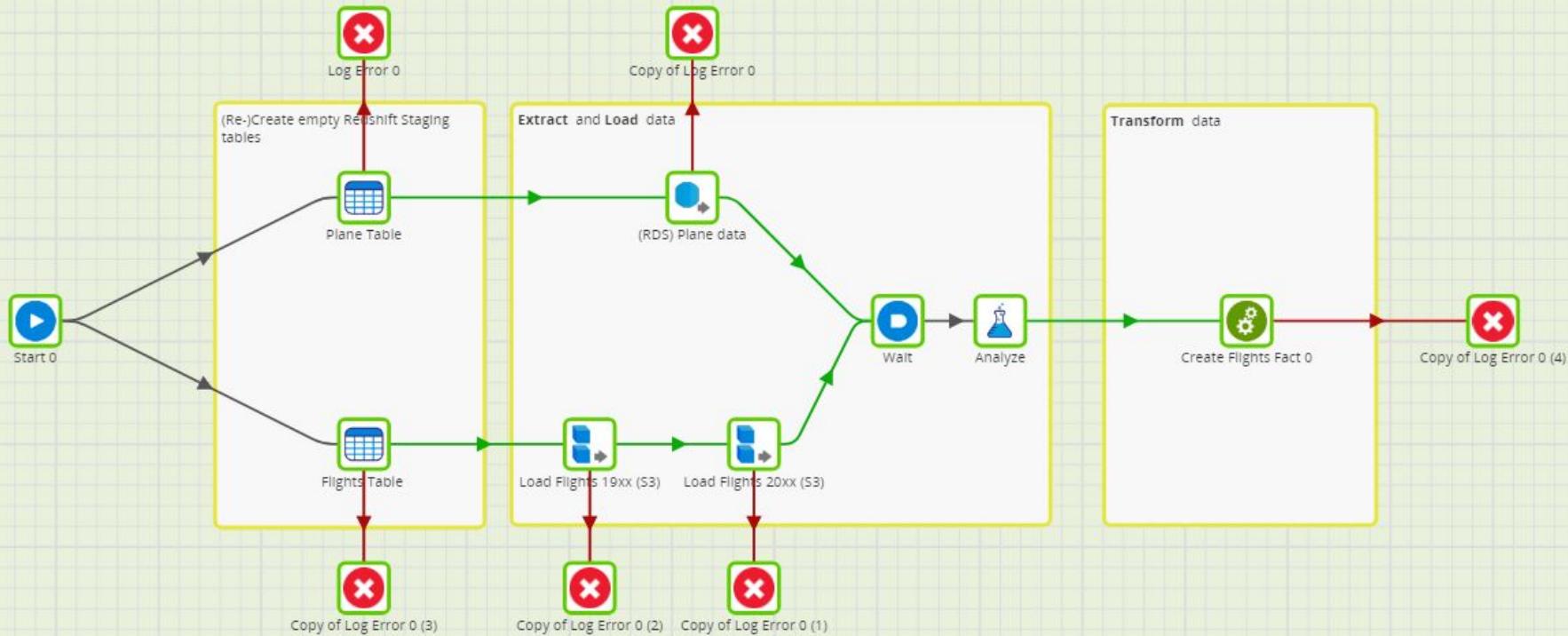
Apache
Beam



Gradle



Traditional *Orchestration*



Traditional *Orchestration*

Validate

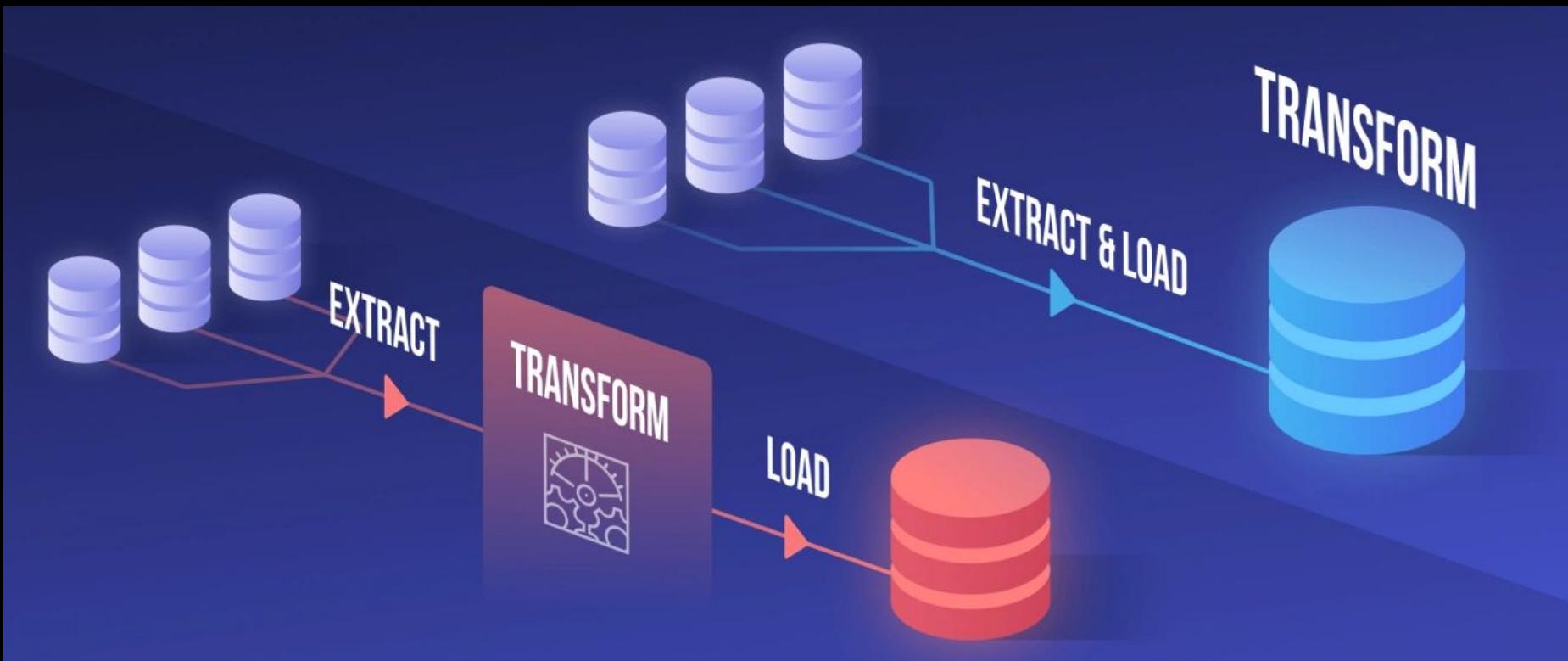
Definition Steps Exceptions Variables Privileges Version Flexfields

#	Steps Hierarchy	Enabled	Scenario/Variable	Restart
0	DATA_LINEAGE	<input checked="" type="checkbox"/>		Restart from failure
1	Dimension_ETL	<input checked="" type="checkbox"/>		Restart from failure
2	OBIEE	<input checked="" type="checkbox"/>		Restart from failure
3	SDE_DL_OBIEE_BMM_HIERARCHY	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
4	SDE_DL_OBIEE_SQLQUERY_LIST	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
5	SDE_DL_OBIEE_SQLQUERY_LIST_FILE	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
6	SDE_DL_OBIEE_SQL_PARSER	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
7	SDE_DL_OBIEE_SQL_PARSER_OUTPUT_LOAD	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
8	SDE_DL_OBIEE_SRC_DASHBOARD	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
9	SDE_DL_OBIEE_SRC_RPD	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
10	SDE_DL_OBIEE_SRC_REPORT	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
11	SIL_DL_OBIEE_DASHBOARD	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SIL_...	Restart from failed step
12	SIL_DL_OBIEE_PHYSICALCOLUMN	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SIL_...	Restart from failed step
13	SIL_DL_OBIEE_PRESENTATIONCOLUMN	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SIL_...	Restart from failed step
14	SIL_DL_OBIEE_REPORT	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SIL_...	Restart from failed step
15	ODI	<input checked="" type="checkbox"/>		Restart from failure
23	CM	<input checked="" type="checkbox"/>		Restart from failure
28	Fusion	<input checked="" type="checkbox"/>		Restart from failure
29	SDE_DL_FUSION_METADATA_EXTRACT	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
30	SDE_DL_FUSION_TEMPORARY_LOAD	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
31	SDE_DL_FUSION_VOTOTBL_ASSOCIATION_FACT_TMP	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SDE_...	Restart from failed step
32	SIL_DL_FUSION_DATASTORE_COLUMN_DIMENSION	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SIL_...	Restart from failed step
33	SIL_DL_FUSION_VO_DATASTORE_COLUMN_DIMENSION	<input checked="" type="checkbox"/>	DATALINEAGE_ETL_SIL_...	Restart from failed step

Directed Acyclic Graph (*DAG*)



Right *Tool*, Right *Job*



Data Engineering and the Death of Visual ETL



Wednesday | April 1, 2020
1:00 PM

Stewart Bryson, Red Pill Analytics
@stewartbryson

@redpilla

@stewartbryson

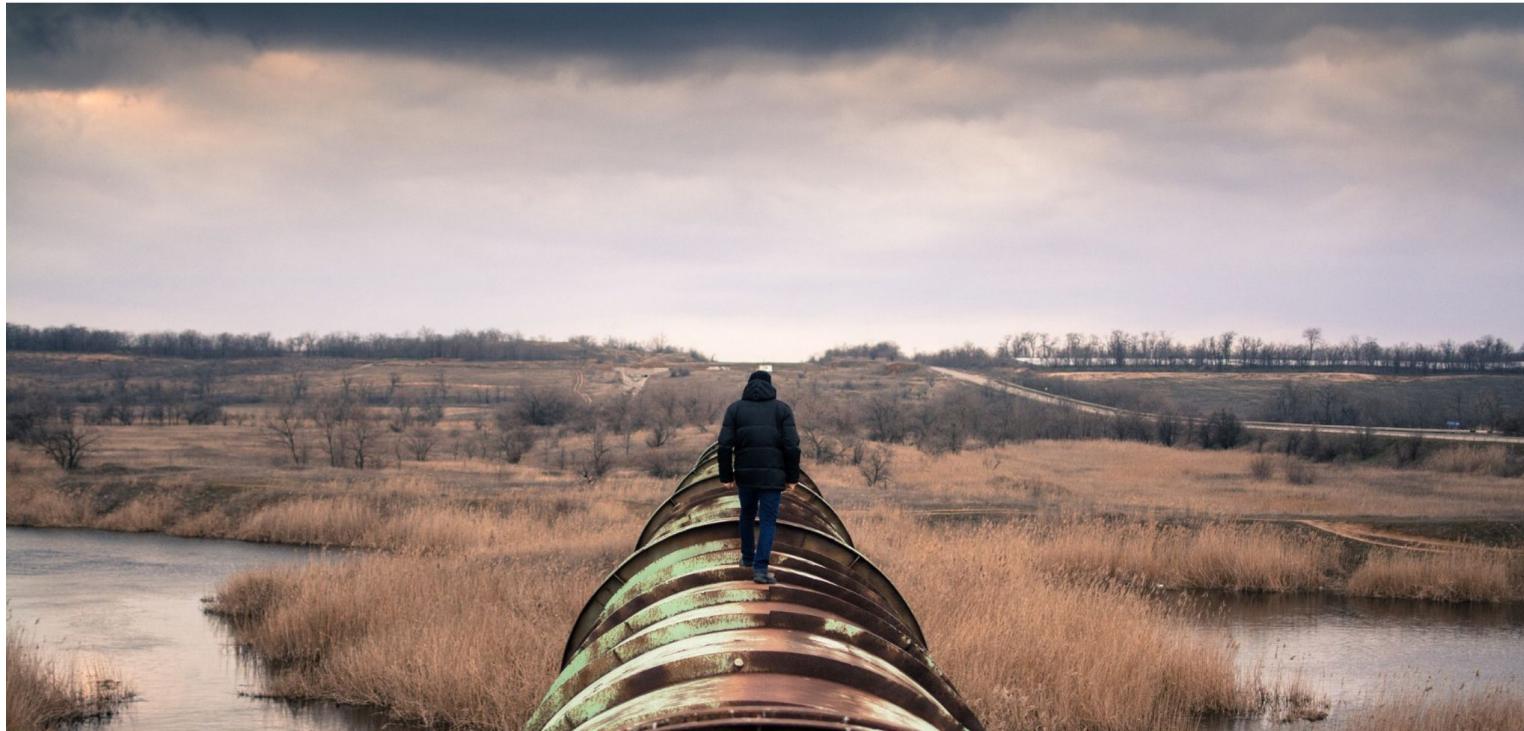
bit.ly/death-visual-etl



The Rise of the Data Engineer



Maxime Beauchemin January 20, 2017 · 12 min read



The Rise of the Data Engineer

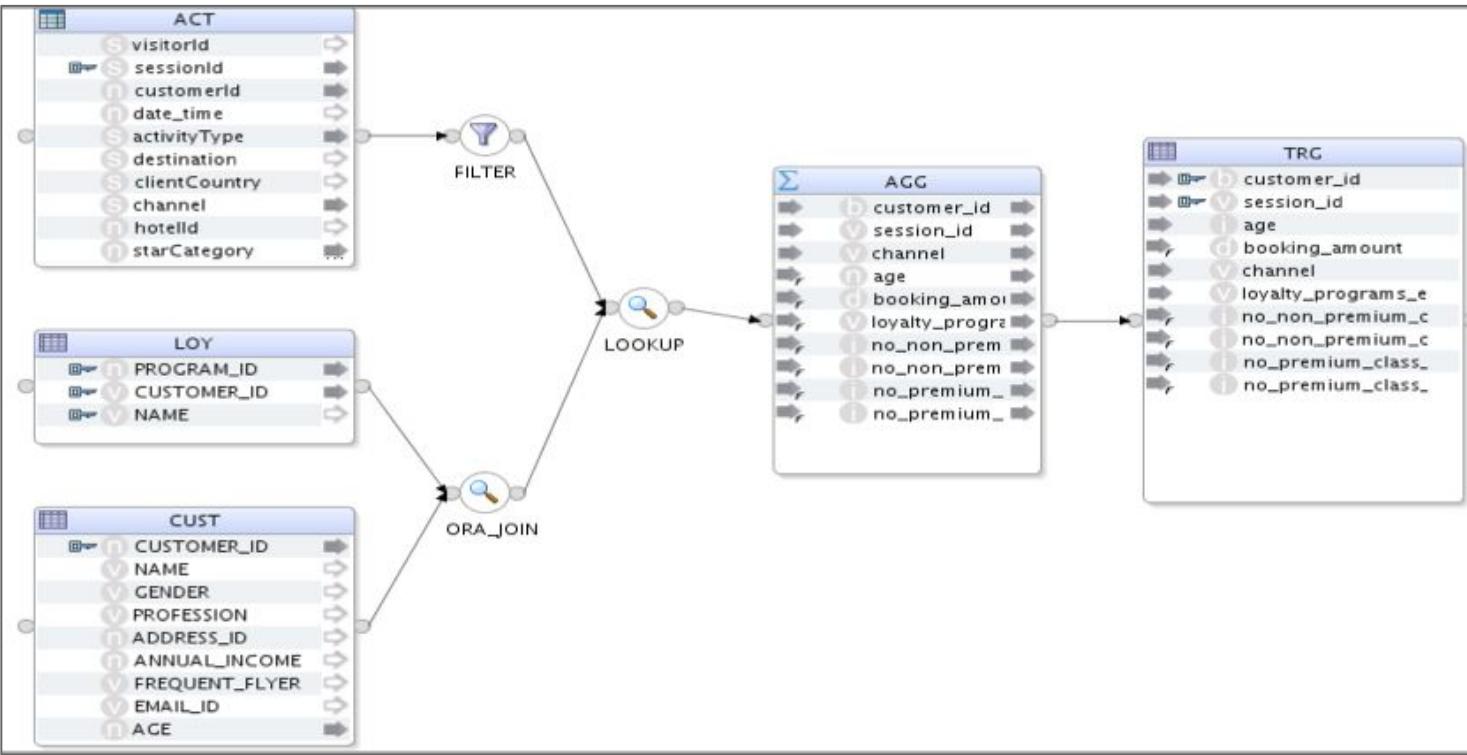


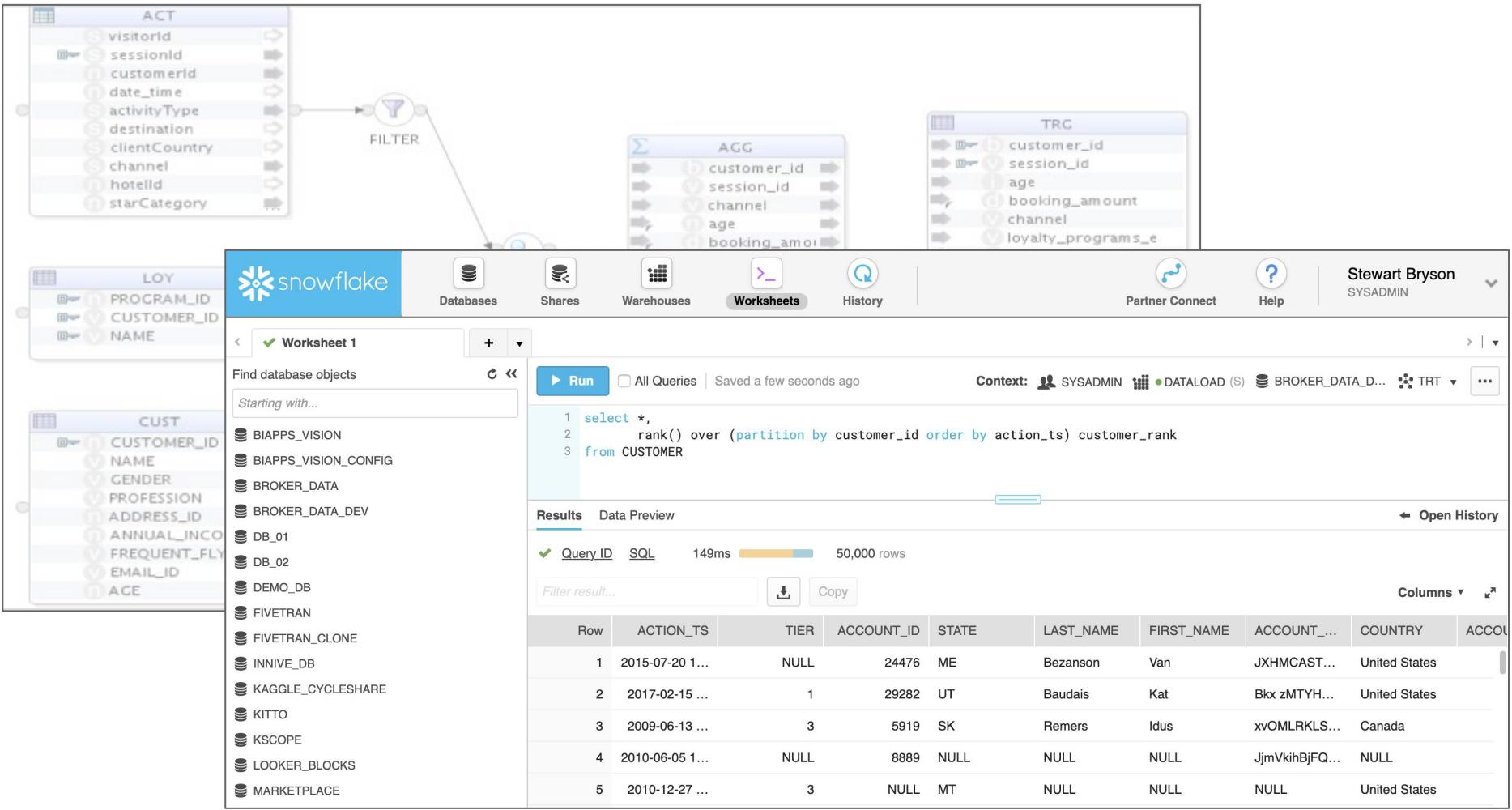
Maxime Beauchemin January 20, 2017 · 12 min read

<https://medium.com/free-code-camp/the-rise-of-the-data-engineer-91be18f1e603>



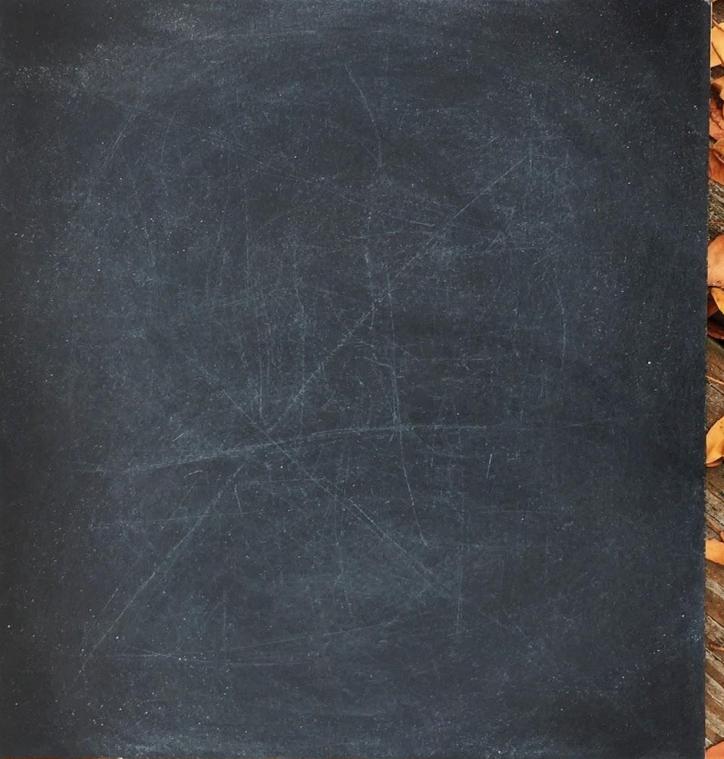
“There’s a multitude of reasons why complex pieces of software are not developed using drag and drop tools: it’s that ultimately *code is the best abstraction* there is for software.”





@redpilla

@stewartbryson



We aren't starting with a **blank slate**.



Demonstration

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