# Trilogy for Data Processing

Pub/Sub -> Cloud Run -> Big Query

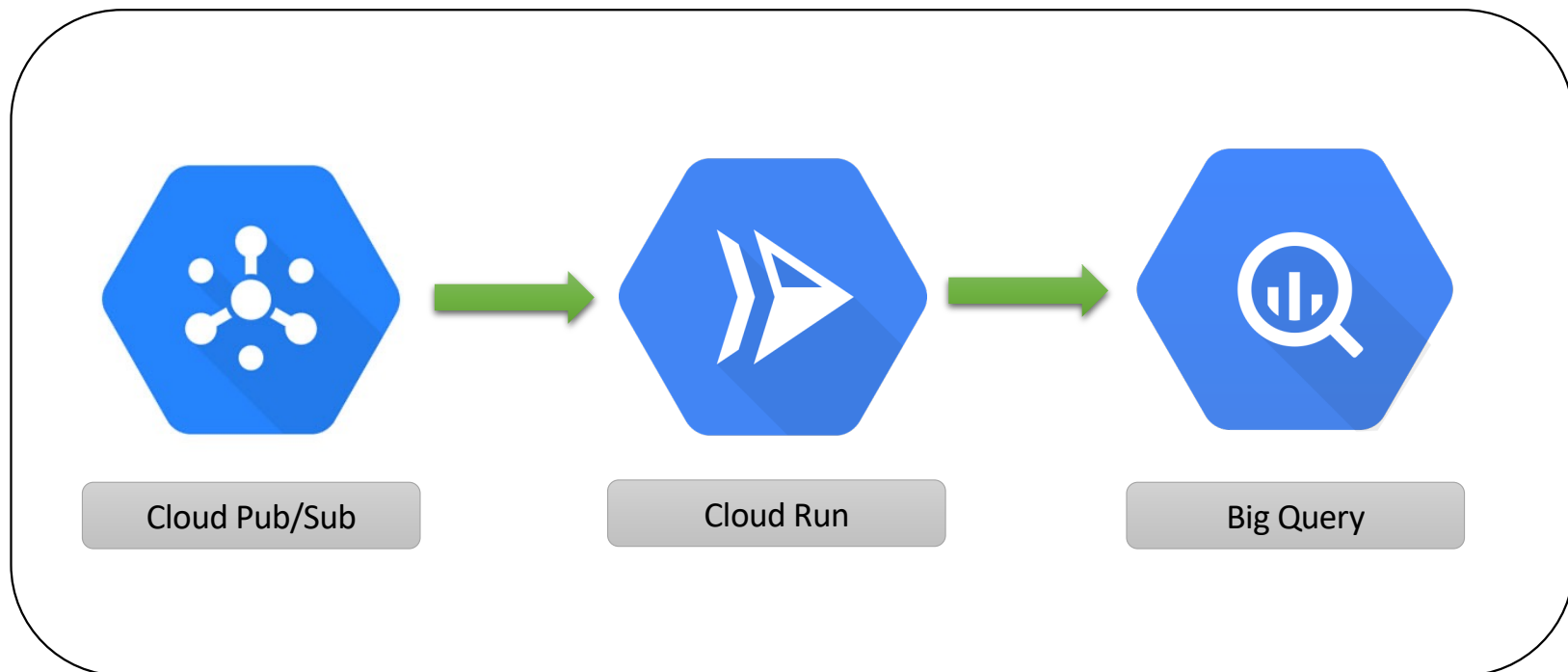# About US



Dinesh J

Senior Engineer
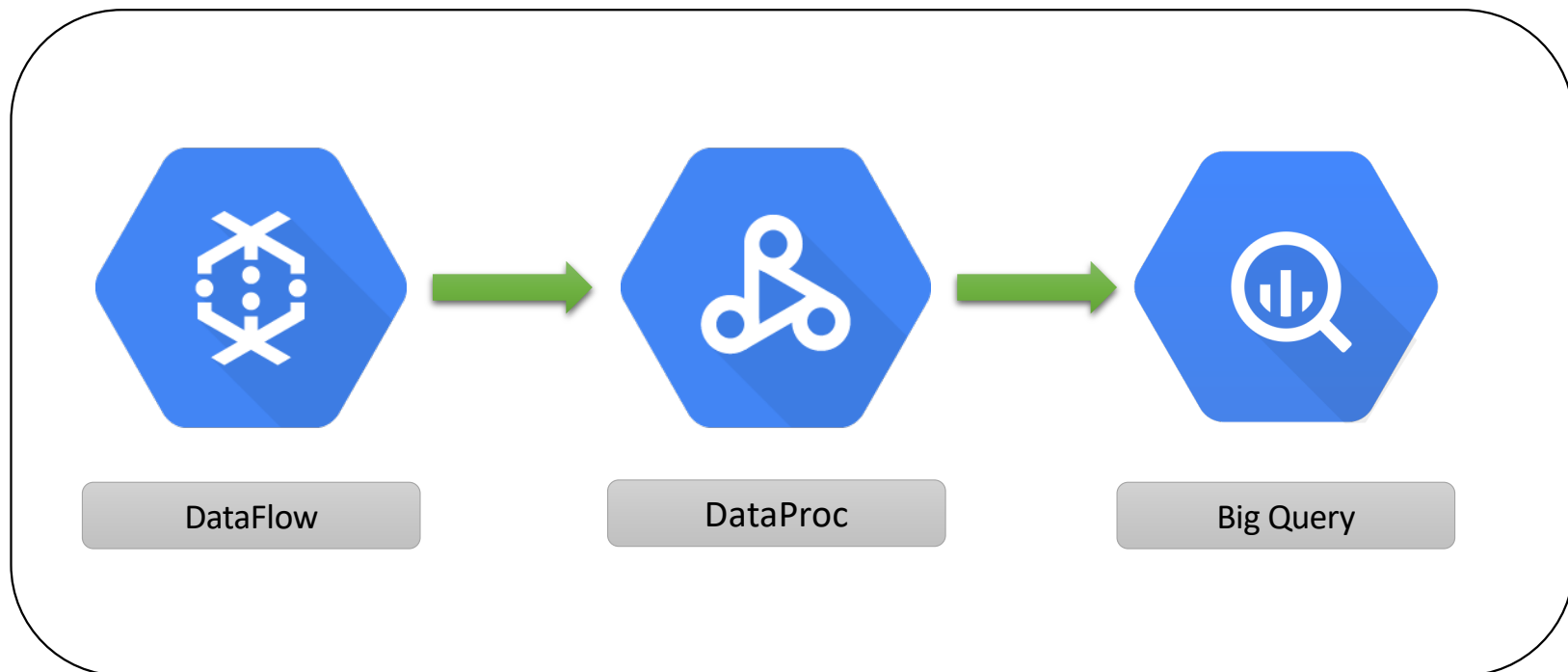
Presidio



Vignesh V

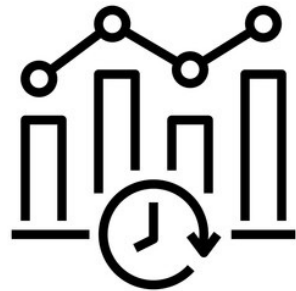Engineer

Presidio

# Not a Traditional Trilogy



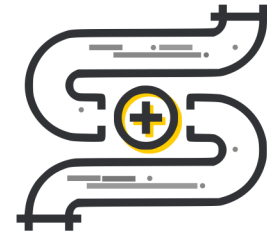| Cloud Pub/Sub | Cloud Run | Big Query |

# Traditional Trilogy
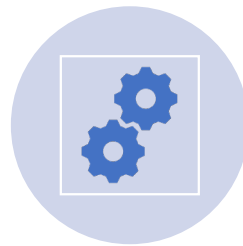
# Why?



Real Time Data

Microservices

Data analytics Pipeline

# Cloud Pub/Sub

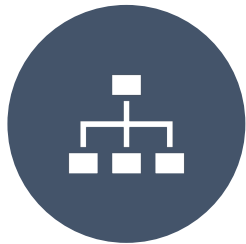Cloud native Applications

Event-driven architectures

Real time Streaming

Messaging Systems

# Cloud Run



Fully Managed

Stateless Application

Request Based Pricing
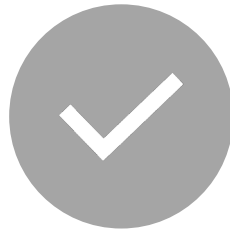
Scales Down To Zero

# Big Query

**DATA ANALYTICS**

**INTERACTIVE ANALYSIS**

**HANDLES PETABYTES OF DATA**

**MACHINE LEARNING**

# Usecases

# Event Driven ETL

Handle application events via Cloud Pub/Sub

Transform data with Cloud Run

Load transformed data into BigQuery

# Clickstream Analysis

Capture real-time user interactions with Cloud Pub/Sub

Filter and analyse trends with Cloud Run

Persist analysed data in BigQuery for user segmentation.

# Log Processing Analytics

To capture Data of resources being created from cloud logs

Filtering out the necessary details

Storing it into BigQuery

Visualizing data using Data Studio/Grafana

# Demo

| ResourceName | PrincipalEmail | Timestamp | TargetLink |
|---|---|---|---|
| namespaces/audit... | prakashd@cloudk... | 2023-09-14T14:0... | |
| brands/29999910... | admin@cloudkavin... | 2023-09-15T13:4... | |
| projects/audit-logs... | admin@cloudkavin... | 2023-09-15T14:13... | |
| projects/-/service... | admin@cloudkavin... | 2023-09-15T14:14... | |
| projects/governan... | prakashd@cloudk... | 2023-09-14T12:05... | https://www.googl... |
| projects/governan... | prakashd@cloudk... | 2023-09-14T13:0... | https://www.googl... |
| namespaces/audit... | admin@cloudkavin... | 2023-09-15T12:09... | |
| projects/audit-logs... | admin@cloudkavin... | 2023-09-15T11:06... | |
| projects/audit-logs... | admin@cloudkavin... | 2023-09-15T11:18:... | |
| projects/audit-logs... | admin@cloudkavin... | 2023-09-15T11:18:... | |

## Resource Counts



- audited_resource 30%
- service_account 20%
- gce_instance 20%
- cloud_run_revision 10%
- client_auth_config_brand 10%
- cloud_run_job 10%

# Q/A

# Thank You!