Serverless Data Processing (CSCI 5410)

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Outline

Amazon Kinesis Data Streams

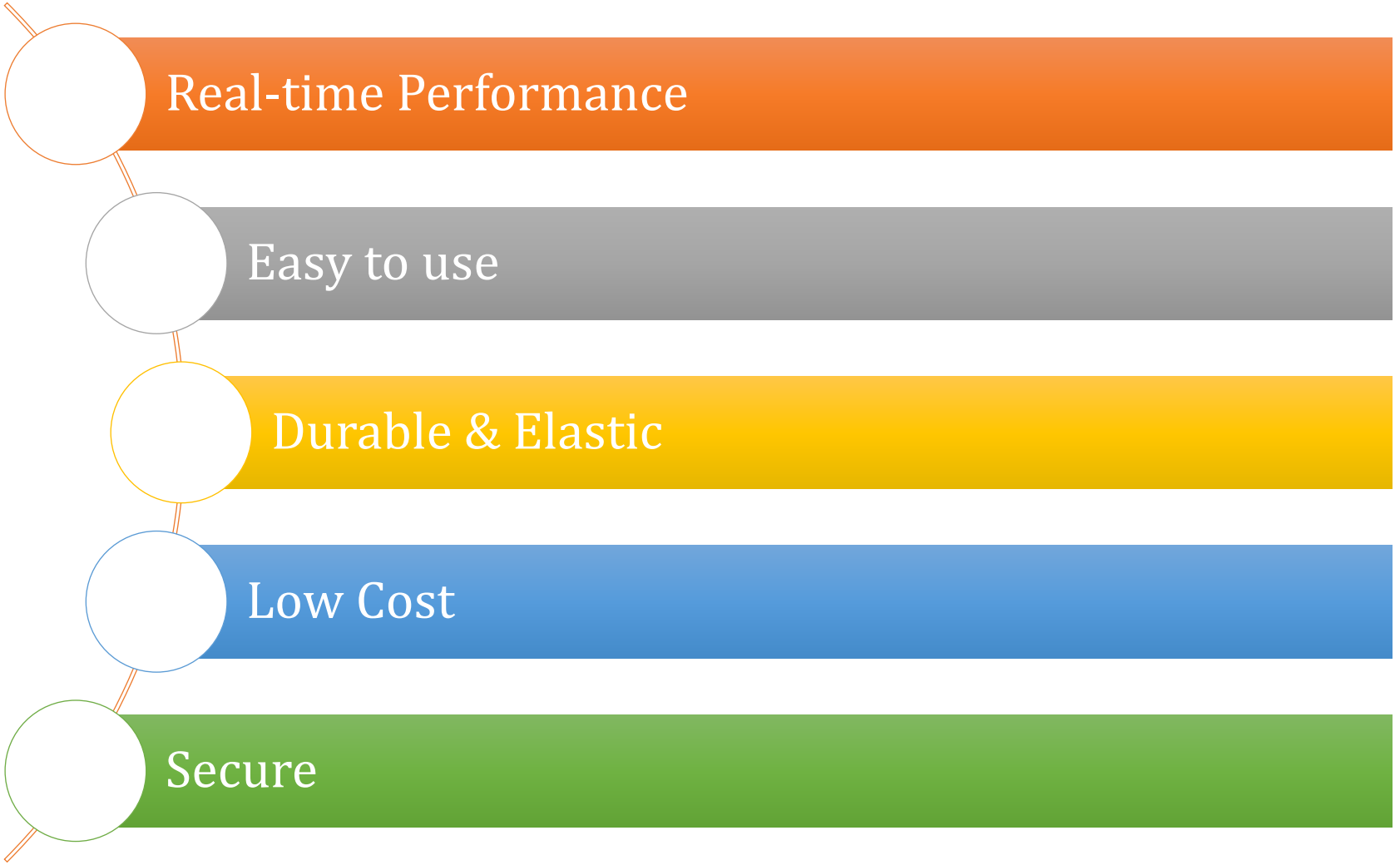
Introduction to Amazon Kinesis Data Streams

- Kinesis Data Streams application reads data from a data stream as data records.
- These applications can use the Kinesis Client Library, and they can run on Amazon EC2 instances.
- Processed records to dashboards, use them to generate alerts, dynamically change pricing and advertising strategies, or send data to a variety of other AWS services.

Why Amazon Kinesis?

video from Amazon Web Services

Benefits of Amazon KDS



Case Studies

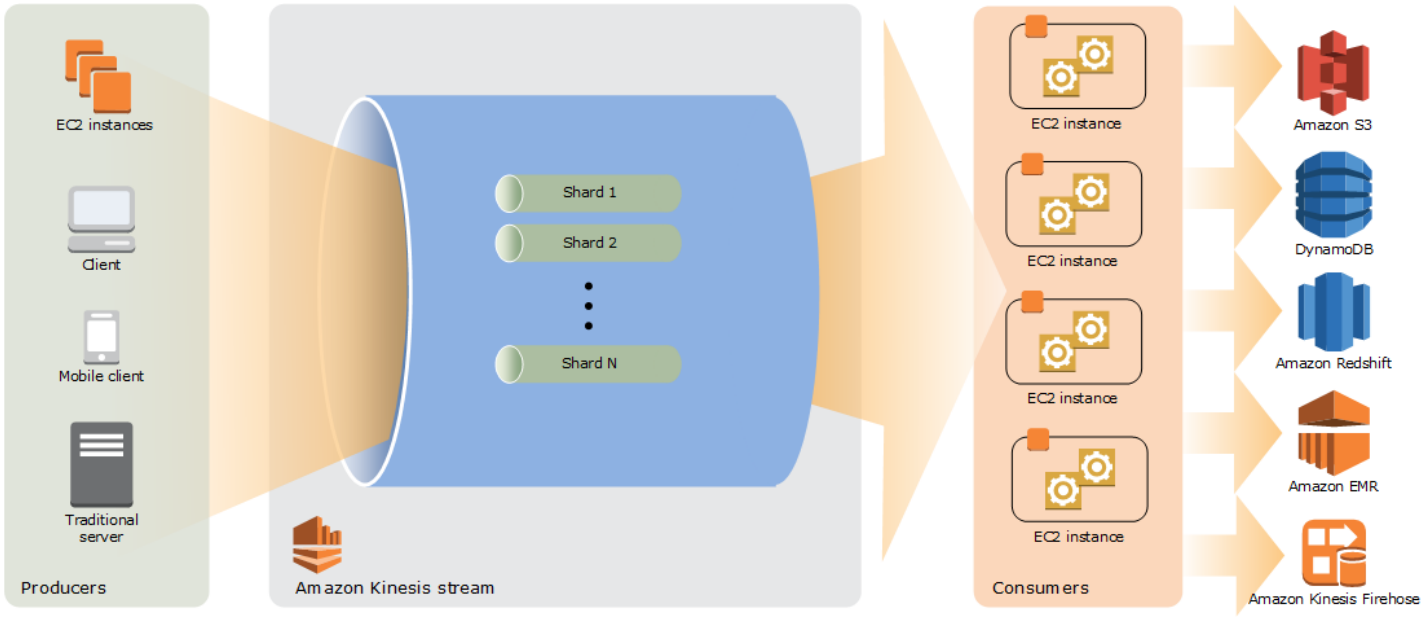
Netflix uses Kinesis to monitor the communications between all of its applications so it can detect and fix issues quickly

Thomson Reuters built a solution using Amazon Kinesis to gain insights from data generated by its offerings and continuously improve the user experience.

How it works

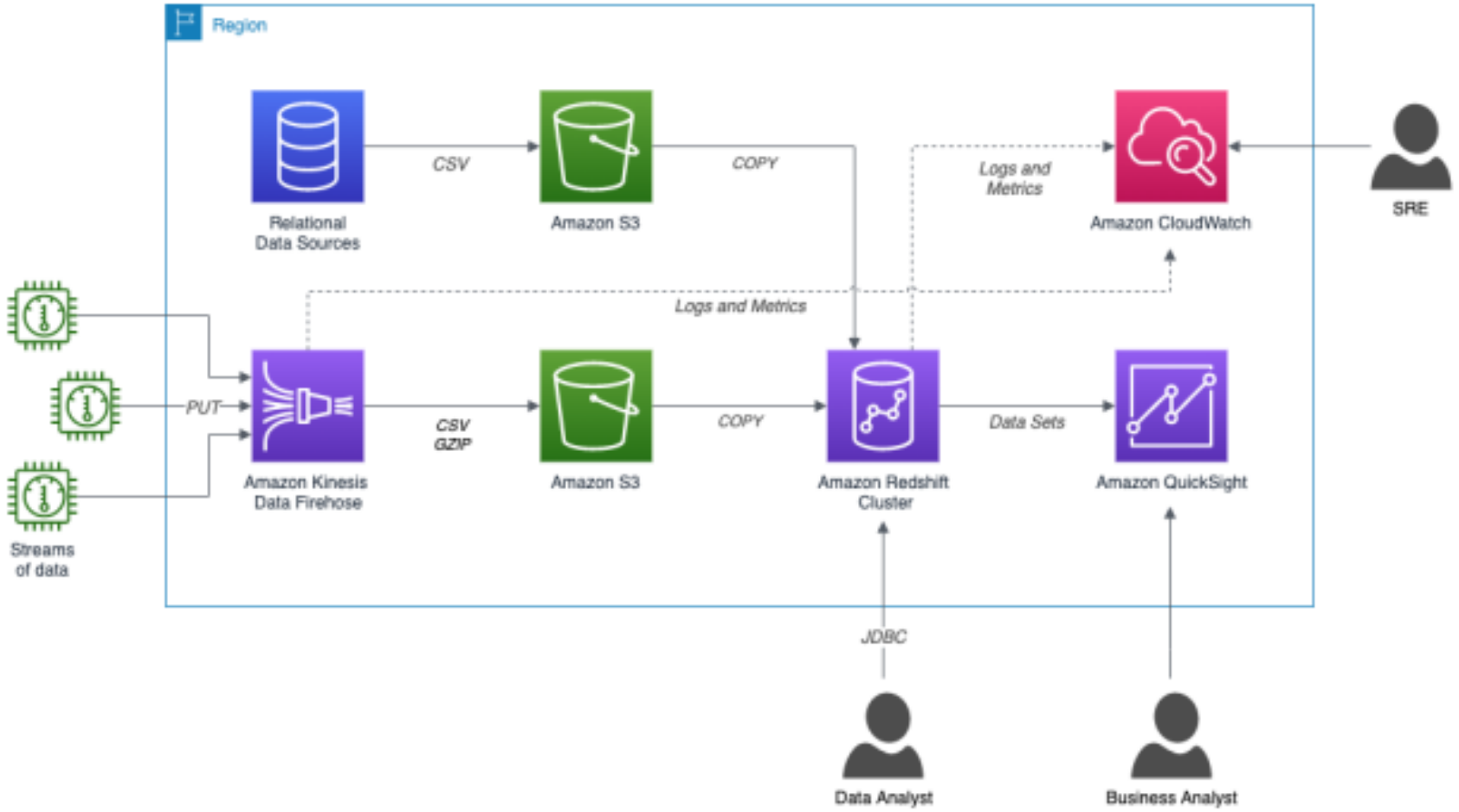
- Collect from sources. Amazon Kinesis Data Streams provides two APIs for putting data into an Amazon Kinesis stream **PutRecord** and **PutRecords**. PutRecord allows a single data record within an API call and PutRecords allows multiple data records within an API call.

- Amazon Kinesis Data Firehose is the easiest way to reliably transform and load streaming data into data stores and analytics tools. You can use a Kinesis data stream as a source for a Kinesis data firehose.



Use Case

- https://programmaticponderings.com/category/software-development/sql/



Questions to Consider

- For designing a real-time smart security system, will you consider using Amazon kinesis data firehose? If so, what would be your use case?

Thank You