

# Real-time Customer Sentiment Analysis

## WITH AMAZON WEB SERVICES

### WHY SENTIMENT ANALYSIS?



- Do you care about your customers' opinions about your brand and your products?
- Are you too busy to manually go over each review that came your way?
- Have you been struggling to prioritize your public relations effort?



**Sentiment analysis can address these problems**



- Provides insights for every single review your business receives
- Analyzes large volume of data quickly, limiting hours of repetitive work
- Reduces subjectivity and bias when assessing customer opinions, leading to more efficient outreach strategies that protects brand image



### WHY AMAZON WEB SERVICES?



#### Quick Implementation



You can get started with sentiment analysis right away with Amazon Web Services. Specifically, by using [Amazon Comprehend](#), no time or prior knowledge for model training is needed.

#### Real-time Analysis



With streaming capability available, AWS can provide uninterrupted analytical flow. You can set customized real-time alerts, making sure that you don't miss a single beat when dealing with issues that could affect your brand's image and reputation.

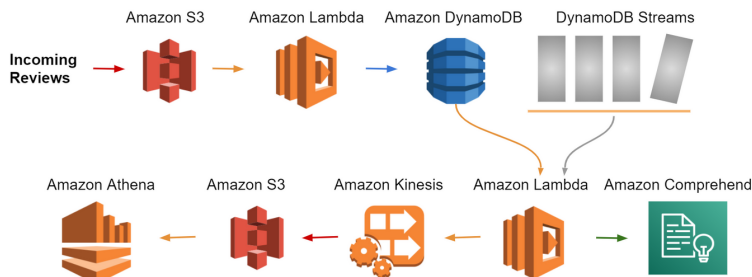
#### Cloud-based Solution



There is no requirement for on-site hardware upgrades or constant soft updates that demand large amount of time and resources. AWS offers cost-efficient services that allows access of your data and solutions anytime, anywhere.



## Data Pipeline Overview



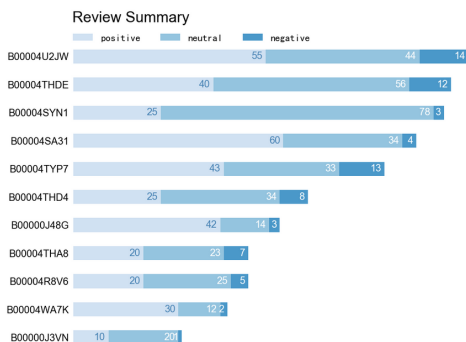
## Step-by-Step Process

1. Store incoming reviews in Amazon S3
2. Use the first Lambda function to create data flow from S3 to DynamoDB
3. Each record from DynamoDB Streams is fed into a second Lambda function
4. The Lambda function calls Amazon Comprehend's API with the review text
5. The API returns sentiment: positive, negative, neutral, or mixed
6. Information is fed back to DynamoDB table to update the product's review sentiment summary, or create a summary for the product if one did not exist
7. Use Amazon Kinesis Firehose to load updated DynamoDB streaming data to Amazon S3 for further analysis
8. Connect the S3 bucket to Amazon Athena for ad hoc analysis

## USE CASE



### Real-time Amazon Product Review Sentiment Summary



- Vendors could obtain text review data and implement the pipeline in AWS
- Quickly respond to increased percentage of reviews with negative sentiment
- Efficient inventory planning for products with growing positive reviews
- Easily connect to your favorite web apps to share real-time updates



## CONTACT US

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