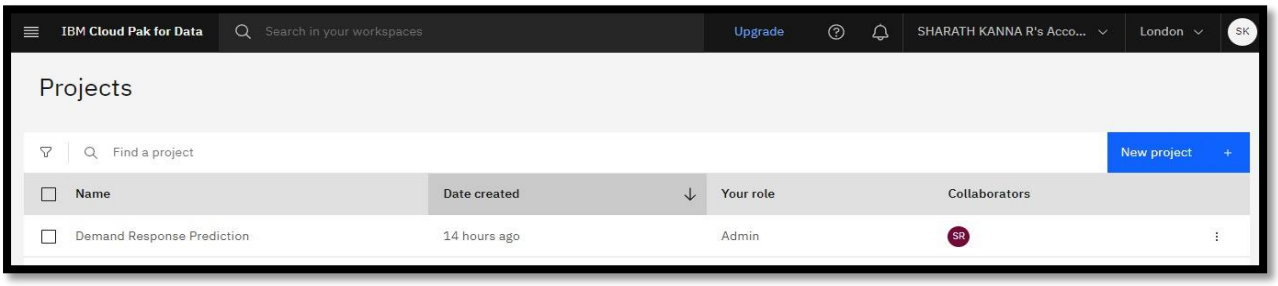
BIG DATA ANALYSIS USING IBM CLOUD

PHASE 4: DEVELOPMENT PART 2

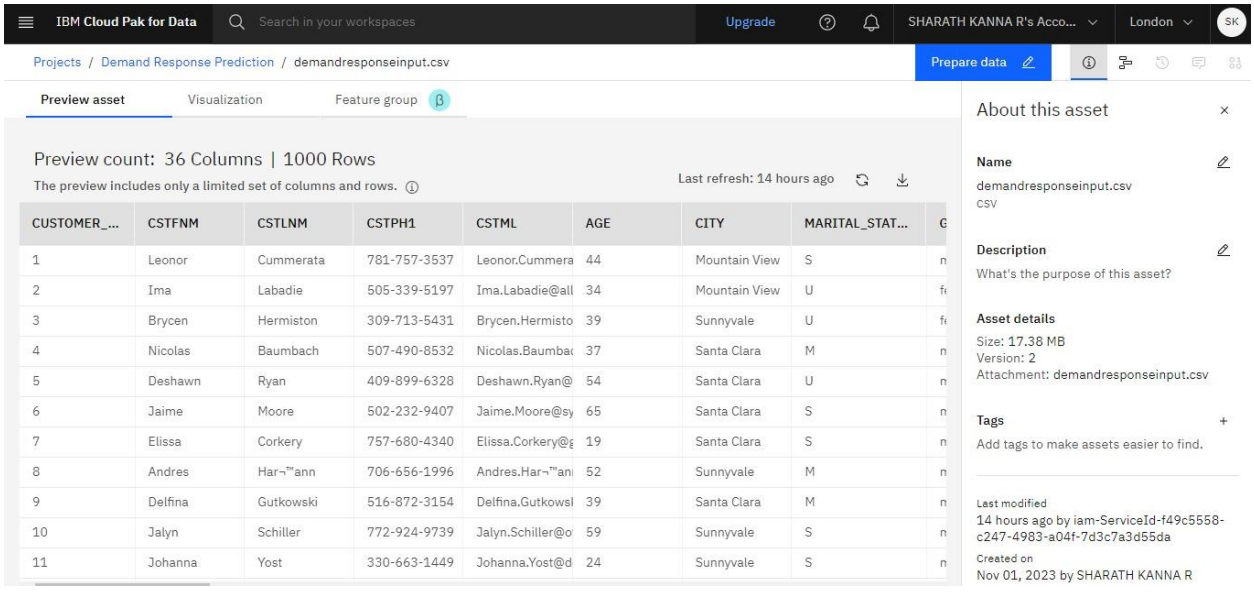
Step 1: Data Preparation and Cleaning

Ensure the social media data is cleaned and prepared for analysis. This step involves handling missing values, removing duplicates, and transforming data into a format suitable for analysis.



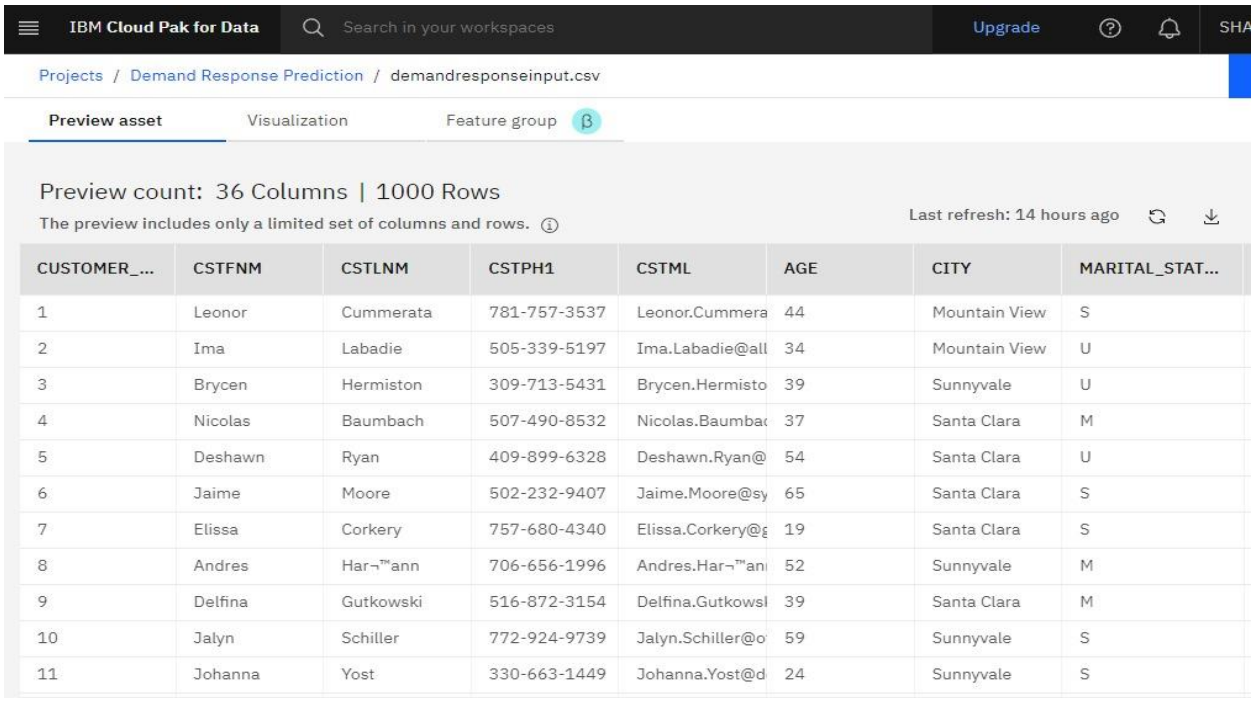
Step 2: Sentiment Analysis using Machine Learning

Apply sentiment analysis using machine learning algorithms to understand the overall sentiment of social media posts. For this example, let's use a pre-trained sentiment analysis model from a natural language processing library like NLTK in Python.



Step 3: Time Series Analysis

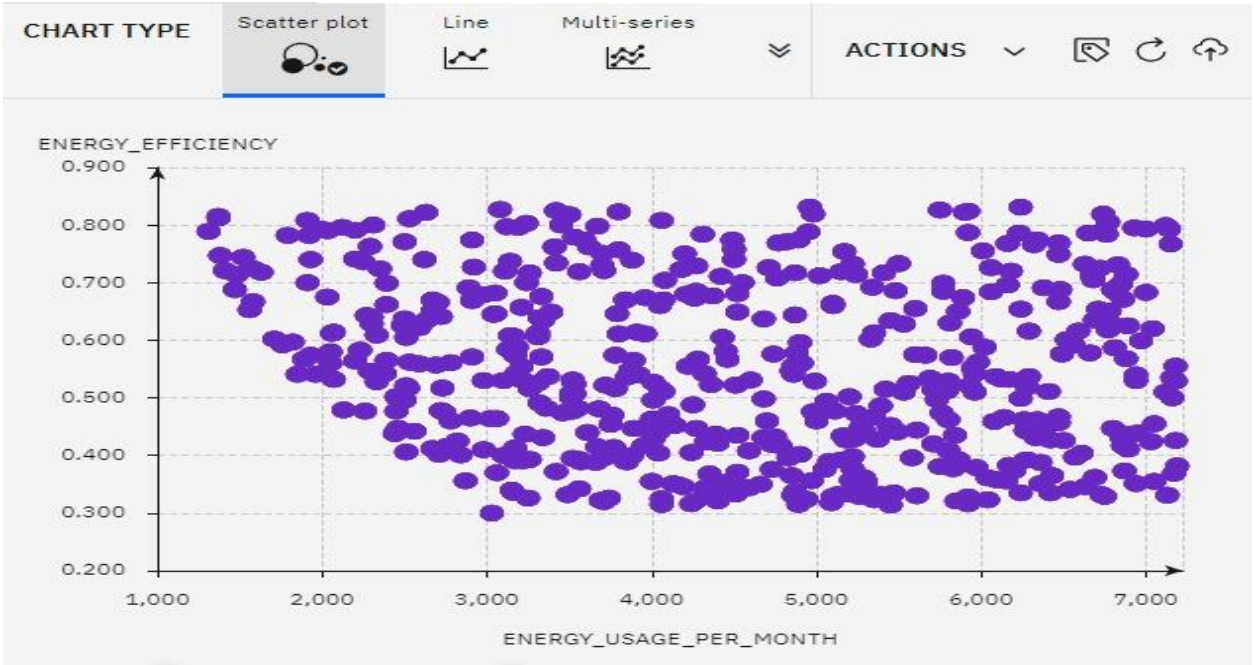
Conduct time series analysis to identify trends and patterns in social media activity over time. For this example, let's use Python's pandas library for time series analysis.

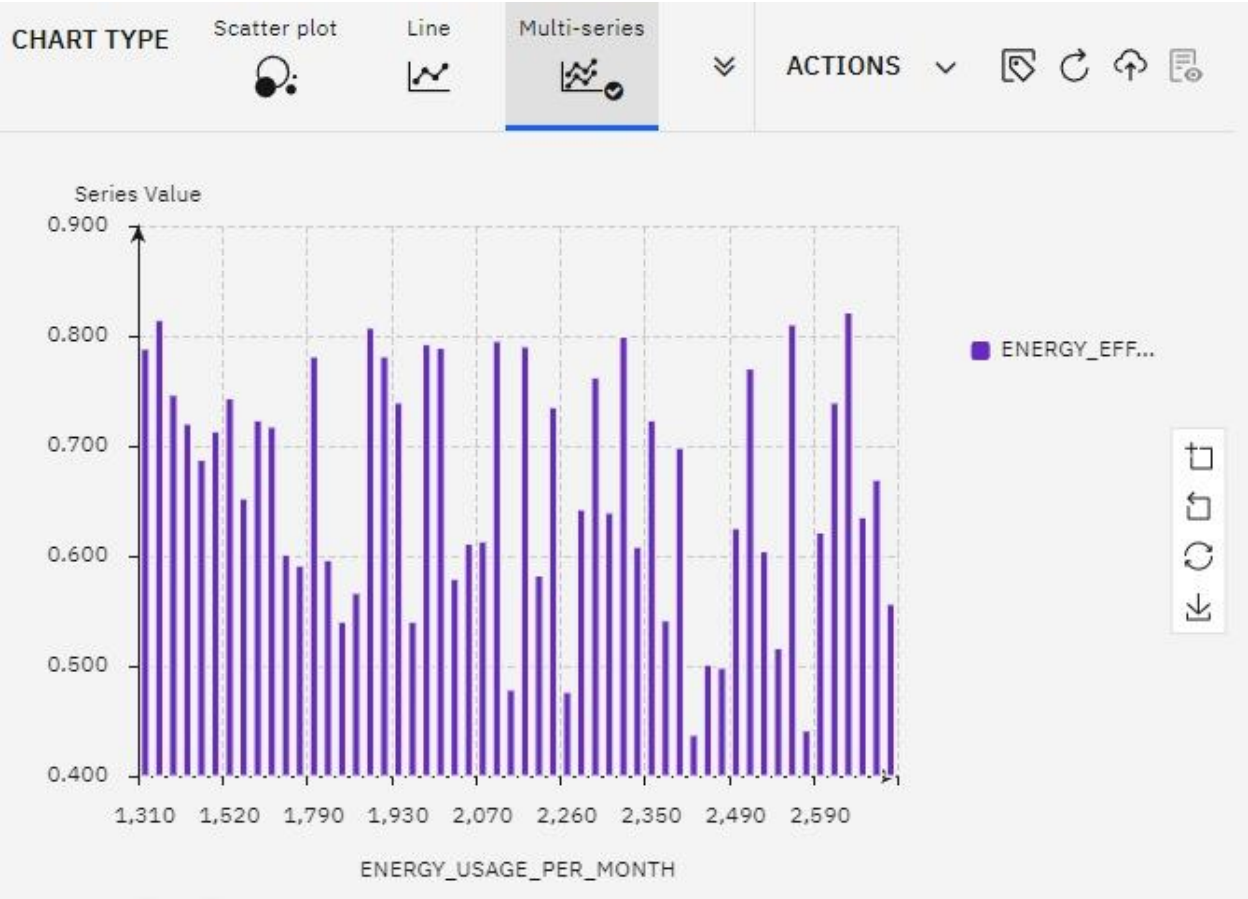


CUSTOMER_...	CSTFNM	CSTLNM	CSTPH1	CSTML	AGE	CITY	MARITAL_STAT...
1	Leonor	Cummerata	781-757-3537	Leonor.Cummera	44	Mountain View	S
2	Ima	Labadie	505-339-5197	Ima.Labadie@all	34	Mountain View	U
3	Brycen	Hermiston	309-713-5431	Brycen.Hermisto	39	Sunnyvale	U
4	Nicolas	Baumbach	507-490-8532	Nicolas.Baumbac	37	Santa Clara	M
5	Deshawn	Ryan	409-899-6328	Deshawn.Ryan@	54	Santa Clara	U
6	Jaime	Moore	502-232-9407	Jaime.Moore@sy	65	Santa Clara	S
7	Elissa	Corkery	757-680-4340	Elissa.Corkery@g	19	Santa Clara	S
8	Andres	Har¬™ann	706-656-1996	Andres.Har¬™an	52	Sunnyvale	M
9	Delfina	Gutkowski	516-872-3154	Delfina.Gutkowsl	39	Santa Clara	M
10	Jalyn	Schiller	772-924-9739	Jalyn.Schiller@o	59	Sunnyvale	S
11	Johanna	Yost	330-663-1449	Johanna.Yost@d	24	Sunnyvale	S

Step 4: Visualization using Plotly

Create interactive visualizations using Plotly to showcase the sentiment analysis results and time series data





Step 5: Integration with IBM Watson Studio

If you prefer using IBM Watson Studio for analysis and visualization, you can upload your cleaned data to IBM Cloud Object Storage and use Watson Studio's Jupyter Notebooks or Data Refinery for analysis and visualization.