UBS Challenge

Datathon 2024

Task

Valuable Insights into Future Success

Monitor Brand Perception

Instagram Data

Data Understanding

Data Understanding

Data Cleaning & Preprocessing

- Data Imputation
- Data Normalization
- Duplicate Rows
- …

Assumptions on Data

- Representative Power of Brand Popularity
- Acquisitions
- …

Feature Engineering & Augmentation

- Transform data into marketing measures

Modelling Approach

Model Selection

1

2

3

Baseline

K-Means w/ Surrogate

Isolation Forest

Model Enhancement

Actionable Insights

Understanding Social Media Impact

Brand Engagement Indicators	Risk Identification	Market and Industry Trends

- Exceptional performance:
  - Strong brand
  - Loyalty
- Chance:
  - Future profitability
  - Growth opportunities

- Poor Performance:
  - Weak brand
  - Emerging crises
- Warning:
  - Enable proactive risk management

- Reveal broader consumer behavior shifts and market trends
- Useful for enhancing market models
- Integration with LLMs analyzing news/sentiment

Case Studies

Finding Unicorn	Funko	Powerade

- High Engagement Leader
  - Visual Appeal
  - Brand Image
- Action
  - Enhance visual content strategies
  - Cultivate unique brand

- Consistently Good Performer
  - Established brand presence
  - Diverse Product Range
- Action
  - Leverage brand heritage and product diversity
  - Strategic collaborations to refresh brand image

- Notable Low Performer
  - Underwhelming Social Engagement
  - High Marketing Costs
  - Contrast with Parent Company (Coca-Cola)
- Action
  - Reevaluate social media strategies
    - Lifestyle-oriented
    - Interactive campaigns