Dataset Overview: **Brewery Operations and Market Analysis Dataset**

Comprehensive Analysis of Brewing Parameters, Sales Trends, and Quality Metrics in Craft Beer Production (2020-2024)**

This dataset provides a detailed view of a craft beer brewery's operations from January 2020 to January 2024. It covers a wide range of brewing parameters, sales performance, and quality metrics, offering a holistic understanding of the brewing process and its market impact.

Total number of rows in the Dataset: 10000000

Total number of columns in the Dataset: 20

File name: **brewery_data_complete_extended**

File type: **.csv**

File Size: 2.62 GB

Column names: 'Batch_ID', 'Brew_Date', 'Beer_Style', 'SKU', 'Location', 'Fermentation_Time', 'Temperature', 'pH_Level', 'Gravity', 'Alcohol_Content', 'Bitterness', 'Color', 'Ingredient_Ratio', 'Volume_Produced', 'Total_Sales', 'Quality_Score', 'Brewhouse_Efficiency', 'Loss_During_Brewing', 'Loss_During_Fermentation', 'Loss_During_Bottling_Kegging'

Dataset Contents:

- Brewing Parameters: Key brewing factors such as fermentation time, temperature, pH level, gravity, and ingredient ratios, which are crucial for understanding how brewing conditions influence the final product.

- Beer Styles & Packaging: Categorization of beers by styles (IPA, Stout, Lager, etc.) and packaging types (kegs, bottles, cans, pints), providing insights into product variety and packaging preferences.

- Quality Scores: Each batch is evaluated with a quality score, reflecting the success and consistency of different brewing methods.

- Sales Data (USD): Detailed sales records by beer type and location in Bangalore, offering insights into market performance and consumer preferences.

- Supply Chain & Efficiency Metrics: Tracks production volumes, sales figures, brewhouse efficiency, and losses during brewing, fermentation, and bottling, essential for optimizing supply chain operations.

Data Format & Structure:

- Provided as a CSV file for seamless integration with data analysis tools.

- Contains over 10 million records, with each row representing a unique batch and its associated features.

Intended Audience:

This dataset is valuable for data scientists, brewing process engineers, market analysts, supply chain experts, and quality control professionals. It's also highly relevant for academic research in food technology, fermentation science, and business analytics.

Disclaimer:

This is a synthetic dataset created for educational, analytical, and simulation purposes. Users should apply appropriate data processing techniques for meaningful insights.

This dataset offers a comprehensive resource for analyzing the nuances of brewing science, market trends, and operational efficiencies in the craft beer industry.