

Recall-System Analysis

[DAB 402]

Section:005

Group: 005

Introduction:

A product recall is referred to as a request to return, exchange, or replace a product if a manufacturer or consumer protection organisation finds flaws that might impair performance, endanger customers, or result in legal problems for the manufacturers. Products that are dangerous or have manufacturing flaws are frequently put on store shelves and sold to customers. A product recall is a process used to remove unsafe or flawed products from customer hands. These recalls may occasionally result in claims of product responsibility.

About the dataset:

This dataset is for recall-system prediction from the U.S. Food and drug administration website. This is the latest data which has an information about different product type such as Biologics, Devices, Drugs, Food/Cosmetics, Tobacco, Veterinary and their status with the reason of why they are recalled from the specific state.

Link of the dataset: [FDA Dashboards - Recalls](#)

Business Objective:

The goal of this project is to identify which is the most affecting reasons of the recalled products by their product type. As there are total 6 product type, finding most affecting reason as well as their status for all 6-product type is the hardest part. This problem is very important as nowadays many product are recalling based on their reasons so by analyzing this, it can be identified that particular reason can be resolved so that recall can be solved. There are not any ethical concerns for this analysis.

Methodology:

- Data Collection
- Data Cleaning (Excel, Python)
- Data Visualization (Tableau, Python, Excel)
- Exploratory Data Analysis (Python)
- Creating dashboard (Tableau)
- Build and apply suitable algorithms, If needed. (Python)

Evaluation:

Main focus to solve problem is to create a designed dashboard where problem can be easily identified. There are some skills like Python, Tableau, and MS-Excel are needed. As there are many records from 2012 to 2023, comparison can be easily made. With the help of different methodologies like try models if needed, creative dashboard, success of solution can be measured. Stakeholders can easily know the main reason for recalling their product.

References:

- [Why are product recalls important? - Hay & Knight Attorneys \(hayandknight.com\)](https://www.hayandknight.com/why-are-product-recalls-important/)
- [What is a Product Recall? Quality Recall Process | ASQ](https://www.asq.org/quality-resources/product-recall/what-is-a-product-recall/)
- [FDA Dashboards - Recalls](https://www.fda.gov/oc/foia/dashboards-recalls)