

Introductions

With the fast growth of the e-commerce retail market in the Kingdom of Saudi Arabia, the need for good analysis for online stores has become an important matter for the development of stores, improving decision-making and driving more online sales. The main function of the application is to mine the data from e-commerce stores.

Objectives

- 1) Create a web portal and AI engine to mine the data from e-commerce stores using data exploration, customer segmentation, and market basket analysis.
- 2) Assist the e-merchant in analyzing his online store data in a more in-depth manner than what is now available in Salla and Zid.

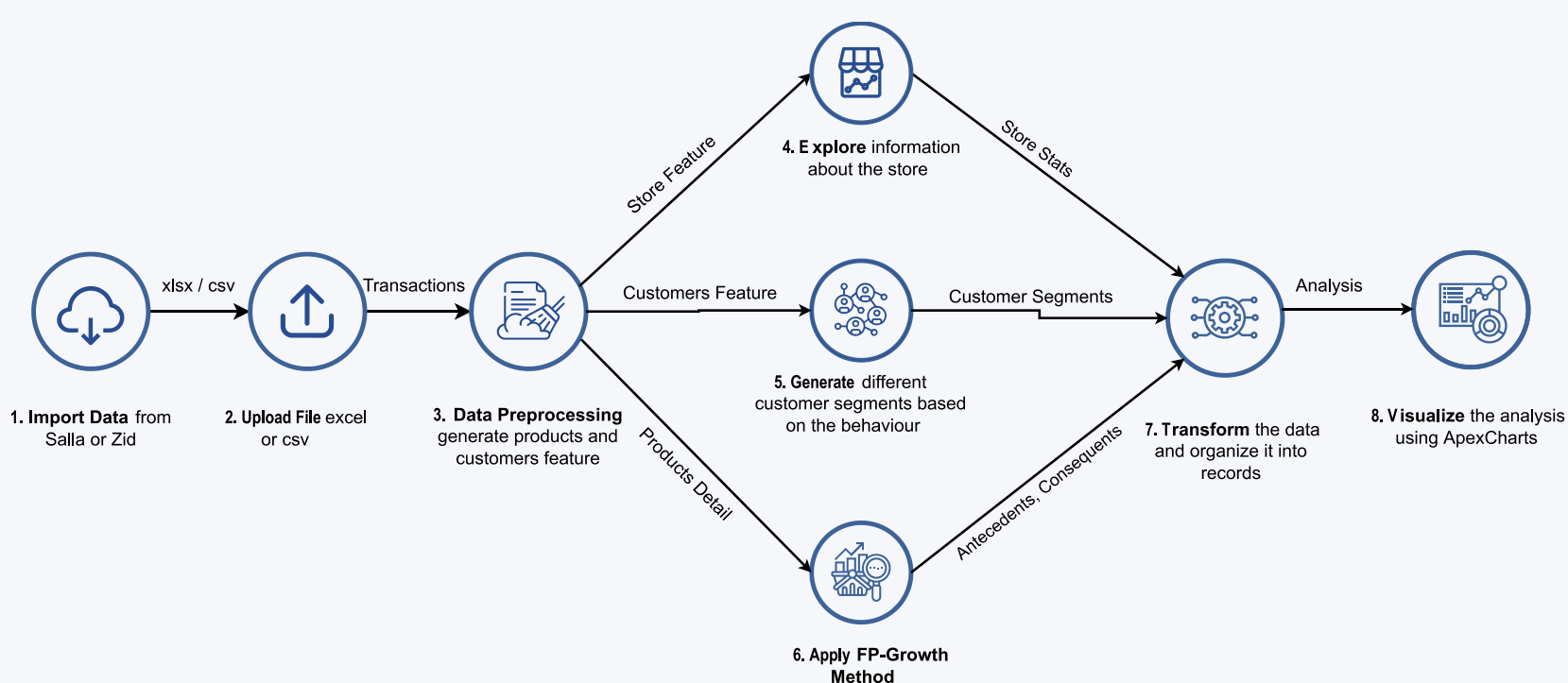
Dataset

This application was implemented using a private e-commerce store set up on Salla platform, and the store's transactional dataset was captured on 2022-01-21.

	Customers	# Unique Items	# Transactions	# Features
Dataset	12,497	666	16,125	25

Methodology

Data analyses process takes place in eight steps:



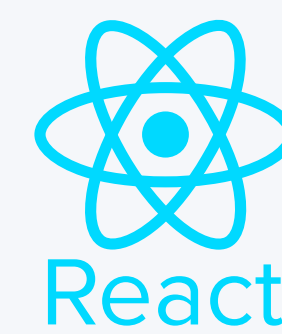
Outcomes



DETAILS provides three services which are the following:

- 1) Customer segmentation helps the store owner segment his customer into categories based on the RFM score, season, time, and discount.
- 2) Basket analysis which allows the store owner to give suggestions to his customers by looking for combinations of items that occur together frequently in transactions.
- 3) Data exploration which allows the store owner to get an overview of sales and orders data over specific periods

Tools



Conclusion & Future Works

This project was created as a web application to assist Salla and Zed platform store owners in obtaining an analysis of their store data and assisting them in making the best decision possible.

- 1) Direct integration with e-commerce systems without the necessity for the store owner to input a data file.
- 2) Giving e-store owners guidance and recommendations to assist them in making a decision based on their own data and the enumeration of regional and social aspects.
- 3) With the variety of e-commerce platforms that we will support, we will be able to offer our services on the web application for a fee.

