

DOCUMENT

BUSINESS INTELLIGENCE ANALYSIS FOR A SUPERMARKET SALES DATA

01

INTRODUCTION

First of all, I would like to thank the Quant team, for this opportunity and experience I really enjoyed.

In this task, I worked on data of 488,445 rows to analyze it and help supermarket owners to reduce costs, increase sales, and operate operations better.

TASK LIFECYCLE

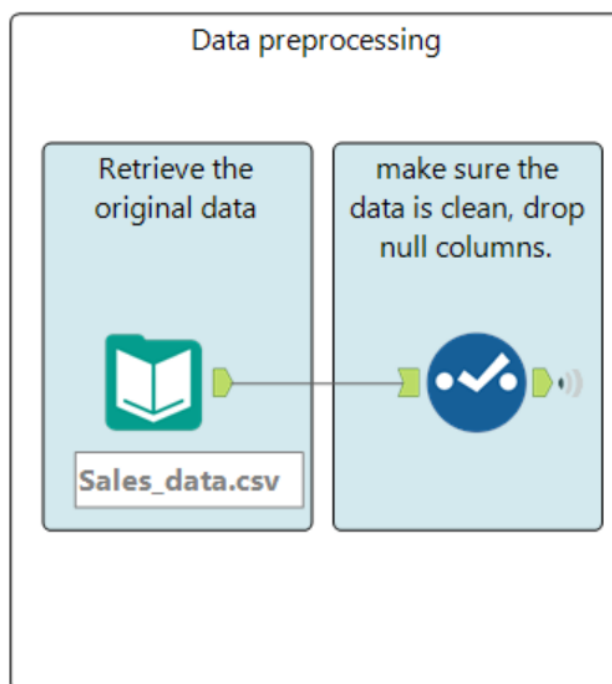
In order to achieve the task goal, I follow four key steps, First I cleaned the data, Next, I analyzed the data, and apply the MB algorithm, Third I prepare the data for export to Tableau and built dashboards, Finally, I wrote a report.

CLEAN UP DATA:

In fact, the data was clean, but there are three blank columns because it was written in Arabic. I dropped it.

At this point, I have tried several methods. first cleaning the data using python code, the experiment was easy and clear, and the results were as required. But I decided to try Alteryx it was much easier and I was able to get a general idea of the data without writing EDA code in Python. So I decided to complete all the stages using Alteryx. The results from this stage were clean data. I use it in the first dashboard.

The figure below shows the cleaning steps in Alteryx

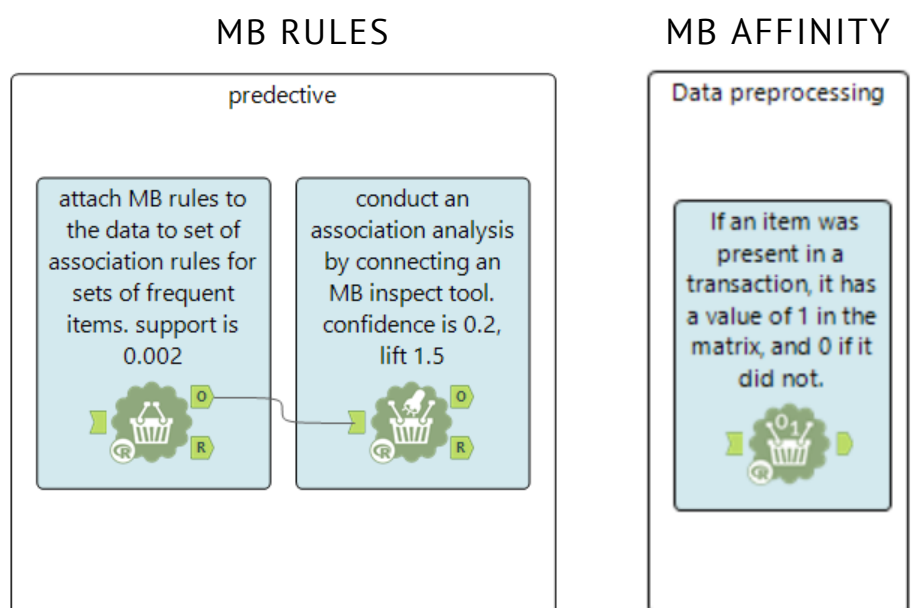


DATA ANALYSIS:

THE ANALYSIS STAGE TOOK MOST OF THE TIME

The results from this stage were MB rules analysis using all data. And Co-occurrence heatmap using MB affinity. And four charts and 6 KPIs.

The figures below show the MB analysis steps in Alteryx



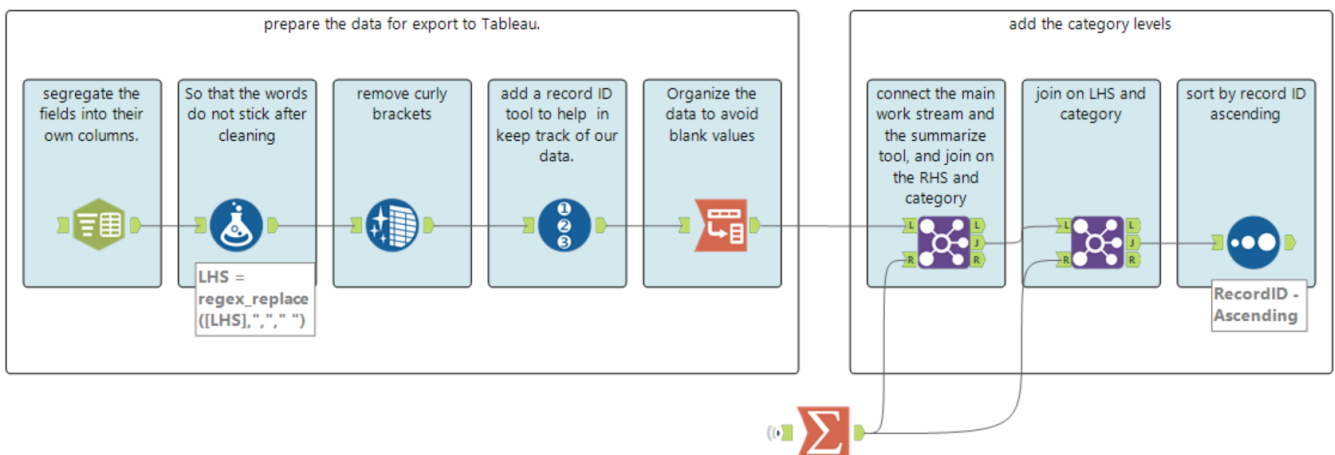
04

PREPARE THE DATA FOR EXPORT TO TABLEAU:

BY ALTERYX

At this point, I ran into some challenges in preparing my data, as it was my first time using Alteryx. But despite the challenges, I was able to prepare the data in the correct way. The results of this stage are two separate files of MB analysis

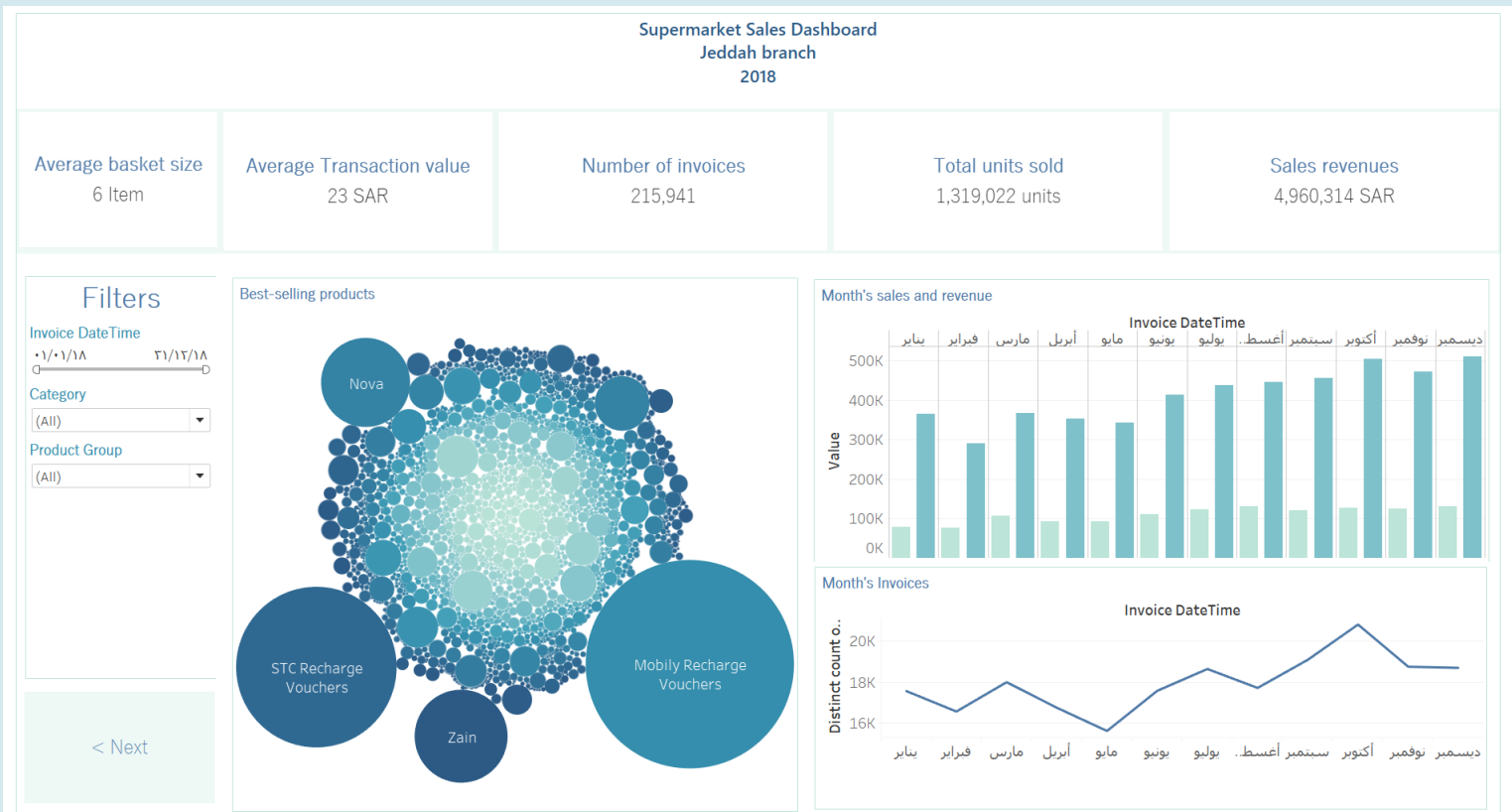
The figures below show the prepare the data for export to Tableau steps in Alteryx



05

DASHBOARD

On this dashboard, I focused on key performance indicators and trends. And I make sure the user can filter all the data by category because it is one of the most factors that will help in making a decision



DASHBOARD

In this dashboard, I analyze users' behavior through the basket. now the decision-maker can identify products that are most relevant to each other to increase sales.

