Retail Sport Store Revenue

In this analysis, we aim to compare within the products itself. By examining the product data such as pricing, reviews, description, ratings, revenue and website traffic, we can gain insights to product recommendations for its marketing and sales teams. The database provided to us, in total of 5, which is "info", "finance", "traffic", "brands", "reviews".

Before started to answering the questions, let's explore the data.

## Data Exploration

"**info**" table - basic information of a products

|  |  |  |
| --- | --- | --- |
| Column | Data type | Description |
| product\_name | varchar | Name of the product |
| product\_id | varchar | Unique ID for product |
| description | varchar | Description of the product |

**Note**:

It contains 3,179 total of products, 3,120 with product's name and description and 59 products with no name and description.

"**finance**" table - price, discount and revenue of each product

|  |  |  |
| --- | --- | --- |
| Column | Data type | Description |
| product\_id | varchar | Unique ID for product |
| description | varchar | Description of the product |
| listing\_price | float | Listing price for product |
| sale\_price | float | Price of the product when on sale |
| discount | float | Discount, as a decimal, applied to the sale\_price |
| Revenue | float | Amount of revenue generated by each product, in US dollars |

**Note**:

The range of discount given is between 20%-60%.

48 products with 20% discounts; 96 products with 30% discounts;

750 products with 40% discount; 974 products with 50% discounts;

60 products with 60% discounts; 1,192 products with no discounts;

59 products with no pricing details.

"**traffic**" table – product website data

|  |  |  |
| --- | --- | --- |
| Column | Data type | Description |
| product\_id | varchar | Unique ID for product |
| last\_visited | varchar | Date and time the product was last viewed on the website |

**Note**:

In 2018, there are 1,259 of products viewed by consumer.

In 2019, the products last looked at on the website have been raised to 1,289, it might be effective on product marketing, or the improvement on the website, the reason could be explored further.

For 2020 records, is only recorded with first four months the product was last viewed is 380.

We also captured that there are 251 products missing last viewed date, a variety of reason might explain on this such as product discontinuation, inventory changes, technical issues and so on, the exact reason can be found by looking deeper into the matter.

"**brands**" table – brand of product

|  |  |  |
| --- | --- | --- |
| Column | Data type | Description |
| product\_name | varchar | Name of the product |
| product\_id | varchar | Unique ID for product |
| brands | varchar | Brand of the product |

**Note**:

Among the total 3,179 products, 'Adidas' constitutes the majority with 2,575 products, while 'Nike' accounts for 545 products, and there are 59 products with unknown brand.

"**reviews**" table – ratings and reviews of product

|  |  |  |
| --- | --- | --- |
| Column | Data type | Description |
| product\_id | varchar | Unique ID for product |
| rating | float | Product rating, scored from 1.0 to 5.0 |
| reviews | float | Number of reviews for the product |

**Note**:

Number of products with rating of 1 is 98; Number of products with rating of 2 is 318;

Number of products with rating of 3 is 797; Number of products with rating of 4 is 965,

Number of products with rating of 5 is 684; There is 258 of products with zero rating and 59 products missing rating.