# Aerofit - Descriptive Statistics & Probability

## About Aerofit:-

Aerofit is a leading brand in the field of fitness equipment. Aerofit provides a product range including machines such as treadmills, exercise bikes, gym equipment, and fitness accessories to cater to the needs of all categories of people.

## Business Problem

The market research team at AeroFit wants to identify the characteristics of the target audience for each type of treadmill offered by the company, to provide a better recommendation of the treadmills to the new customers. The team decides to investigate whether there are differences across the product with respect to customer characteristics.

1. Perform descriptive analytics to create a customer profile for each AeroFit treadmill product by developing appropriate tables and charts.
2. For each AeroFit treadmill product, construct two-way contingency tables and compute all conditional and marginal probabilities along with their insights/impact on the business.

## Dataset

The company collected the data on individuals who purchased a treadmill from the AeroFit stores during the prior three months. The dataset has the following features:
Dataset link: Aerofit_treadmill.csv

| | |
|---|---|
| Product Purchased: | KP281, KP481, or KP781 |
| Age: | In years |
| Gender: | Male/Female |
| Education: | In years |
| MaritalStatus: | Single or partnered |
| Usage: | The average number of times the customer plans to use the treadmill each week. |
| Income: | Annual income (in $) |

Fitness:    Self-rated fitness on a 1-to-5 scale, where 1 is the poor shape and 5 is the excellent shape.

Miles:    The average number of miles the customer expects to walk/run each week

**Product Portfolio:**

- The KP281 is an entry-level treadmill that sells for $1,500.
- The KP481 is for mid-level runners that sell for $1,750.
- The KP781 treadmill is having advanced features that sell for $2,500.