Insights & Recommendations from the data.

❖ Insights

1. From the data we can see that

a. Product Vs Age
- The 50th percentile age or the median age is same for the KP281 and KP481.
- User buying the premium model i.e., KP781 lies between 25-30 years.

b. Product Vs Education
- User whose education is more than 16 is more likely to buy the premium model i.e., KP781.
- User buying KP281 and KP481 have same education which is between 15 to 16.

c. Product Vs Usage
- Users planning to use the treadmill between 4-5 hours are more likely to buy KP781.
- Users planning to use the treadmill between 3-4 hours are more likely to buy KP281.

d. Product Vs Fitness
- Users who rate themselves above 4 are more likely to buy KP781.

e. Product Vs Income
- For KP281- The income lies in the range 40K-50K
- For KP481- The income lies in the range 45K-55K
- For KP781- The income is above 60K
- From this we can say that higher the income the chance of buying KP781 is more.

f. Product Vs Miles
- Users planning to use the treadmill for more than 120 hours is more likely to buy KP781.

2. Co-relation in the data.
- Age & Income are slightly Co-related.
- Education & Income is also Co-related.
- Usage & Fitness and Usage & Miles are Co-related.
- Usage & Income is slightly Co-related.
- Fitness is corelated with Usage, Income, & Miles.
- Income is Co-related with all columns.
- Miles is Co-related with Usage, Fitness and slightly corelated to Income.
- All the other columns are negatively corelated.

3. Marginal Probabilities

- ▪ *On Product Column*
  - ▪ KP281 is 44%
  - ▪ KP481 is 33%
  - ▪ KP781 is 22%
- ▪ *On Gender Column*
  - ▪ Male is 58%
  - ▪ Female is 42%
- ▪ *On Marital Status Column*
  - ▪ Partnered is 59%
  - ▪ Single is 41%

4. Conditional Probabilities

- • *Purchasing Treadmill given Gender*
- • The probability of purchasing a treadmill KP281 given user is male: P(KP281|Male) is 38%
- • The probability of purchasing a treadmill KP481 given user is male: P(KP481|Male) is 30%
- • The probability of purchasing a treadmill KP781 given user is male: P(KP781|Male) is 32%
- • The probability of purchasing a treadmill KP281 given user is Female: P(KP281|Female) is 53%
- • The probability of purchasing a treadmill KP481 given user is Female: P(KP481|Female) is 38%
- • The probability of purchasing a treadmill KP781 given user is Female: P(KP781|Female) is 9%

- • *Purchasing Treadmill given Marital Status*
- • The probability of purchasing a treadmill KP281 given user is Partnered/Married: P (KP281| Partnered) is 45%
- • The probability of purchasing a treadmill KP281 given user is Partnered/Married: P (KP481| Partnered) is 34%
- • The probability of purchasing a treadmill KP281 given user is Partnered/Married: P (KP781| Partnered) is 21%
- • The probability of purchasing a treadmill KP281 given user is Single/Unmarried: P (KP281| Single) is 44%
- • The probability of purchasing a treadmill KP481 given user is Female: P (KP481| Single) is 33%
- • The probability of purchasing a treadmill KP781 given user is Female: P (KP781| Single) is 23%

5. Customer profiling based on the 3 product categories provided

➢ KP281

- Easily affordable entry level product, which is also the maximum selling product.
- KP281 is the most popular product among the entry level customers.
- This product is easily afforded by both Male and Female customers.
- Average distance covered in this model is around 70 to 90 miles.
- Product is used 3 to 4 times a week.
- Most of the customer who have purchased the product have rated Average shape as the fitness rating.
- Younger to Elder beginner level customers prefer this product.
- Single female & partnered male customers bought this product more than single male customers.
- Income range between 39K to 53K have preferred this product.

➢ KP481

- This is an Intermediate level Product.
- KP481 is the second most popular product among the customers.
- Customers Prefer this product mostly to cover more miles than fitness.
- Average distance covered in this product is from 70 to 130 miles per week.
- More Female customers prefer this product than males.
- Probability of Female customer buying KP481 is significantly higher than male.
- Three different age groups prefer this product - Teen, Adult and middle aged.
- Average Income of the customer who buys KP481 is 49K.
- Average Usage of this product is 3 days per week.
- More Partnered customers prefer this product.

➢ KP781

- Due to the High Price & being the advanced type, customer prefers less of this product.
- Customers use this product mainly to cover more distance.
- Customers who use this product have rated excelled shape as fitness rating.
- Customer walk/run average 120 to 200 or more miles per week on his product.
- Probability of Male customer buying Product KP781(31.73%) is way more than female (9.21%).
- Middle aged to higher age customers tend to use this model to cover more distance.
- Average Income of KP781 buyers is over 75K per annum
- Partnered Female bought KP781 treadmill compared to Partnered Male.
- Customers who have more experience with previous products tend to buy this product
- This product is preferred by the customer where the correlation between Education an Income is high.

❖ *Recommendation*

 • Female who prefers exercising equipment's are very low here. Hence, we should run a marketing campaign on to encourage women to exercise more
 • KP281 & KP481 treadmills are preferred by the customers whose annual income lies in the range of 39K - 53K Dollars. These models should be promoted as budget treadmills.
 • As KP781 provides more features and functionalities, the treadmill should be marketed for professionals and athletes.
 • KP781 product should be promoted using influencers and other international athletes.
 • Research required for expanding market beyond 50 years of age considering health pros and cons.
 • Provide customer support and recommend users to upgrade from lower versions to next level versions after consistent usages.
 • KP781 can be recommended for Female customers who exercises extensively along with easy usage guidance since this type is advanced.
 • Target the Age group above 40 years to recommend Product KP781.