Aerofit Business Case

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 and Objective

The goal is to identify the characteristics of the target audience for each type of treadmill offered by AeroFit to improve recommendations for new customers. We'll analyze customer data to profile users for each treadmill product (KP281, KP481, KP781) and compute probabilities to understand customer preferences better.

Dataset link:
https://d2beiqkhq929f0.cloudfront.net/public_assets/assets/000/001/125/original/aerofit_treadmill.csv?1639992749

Colab link:
https://colab.research.google.com/drive/150ZgfdNlFOQDcQppT0Wry3j5ol7obt8F?usp=sharing

Statistical Summary

```
numerical_summary = data.describe()
categorical_summary = data.describe(include=['object', 'category'])
print(numerical_summary)
print(categorical_summary)
```

```
              Age   Education       Usage     Fitness        Income
count  180.000000  180.000000  180.000000  180.000000    180.000000
mean    28.788889   15.572222    3.455556    3.311111  53719.577778
std      6.943498    1.617055    1.084797    0.958869  16506.684226
min     18.000000   12.000000    2.000000    1.000000  29562.000000
25%     24.000000   14.000000    3.000000    3.000000  44058.750000
50%     26.000000   16.000000    3.000000    3.000000  50596.500000
75%     33.000000   16.000000    4.000000    4.000000  58668.000000
max     50.000000   21.000000    7.000000    5.000000 104581.000000

            Miles
count  180.000000
mean   103.194444
std     51.863605
min     21.000000
25%     66.000000
50%     94.000000
75%    114.750000
max    360.000000
       Product Gender MaritalStatus
count      180    180           180
unique       3      2             2
top      KP281   Male     Partnered
freq        80    104           107
```

Insights

1. **Age**:
   - Customers' ages range from 18 to 50 years, with a mean of about 28.8 years.
   - The majority of customers fall within the 24 to 33 years age range.
2. **Education**:
   - Education level ranges from 12 to 21 years, with an average of about 15.6 years.
   - Most customers have completed some college education or higher.
3. **Usage**:
   - Customers plan to use the treadmill between 2 to 7 times per week, with an average of about 3.5 times per week.
   - The interquartile range (IQR) is between 3 to 4 times per week, indicating that most customers use the treadmill regularly.
4. **Fitness**:
   - Self-rated fitness levels range from 1 (poor) to 5 (excellent), with an average rating of 3.3.
   - The majority of customers rate their fitness level as 3 or 4.
5. **Income**:
   - Annual income ranges from $29,562 to $104,581, with an average of about $53,720.

- The IQR is between $44,058 and $58,668, indicating a middle-income customer base.
6. **Miles**:
    - Customers expect to walk/run between 21 to 360 miles per week, with an average of about 103.2 miles.
    - Most customers plan to walk/run between 66 to 114.75 miles per week.
7. **Product**:
    - KP281 is the most frequently purchased treadmill, followed by KP481 and KP781.
    - This suggests that KP281, the entry-level treadmill, is popular among customers.
8. **Gender**:
    - There are more male customers (104) than female customers (76).
    - Marketing strategies might consider this gender distribution.
9. **MaritalStatus**:
    - There are more partnered customers (107) than single customers (73).
    - This could indicate a preference for treadmill purchases among families or partnered individuals.

Recommendations

1. **Target Younger Adults**:
    - Since the majority of customers are between 24 and 33 years old, marketing efforts should focus on this age group. Social media campaigns and partnerships with fitness influencers in this age bracket could be effective.
2. **Promote KP281**:
    - Given that KP281 is the most popular product, continue to highlight its features and benefits. Consider bundling it with fitness accessories or offering financing options to make it more attractive.
3. **Gender-Specific Campaigns**:
    - With a higher number of male customers, develop marketing campaigns that resonate with men's fitness goals. Additionally, explore ways to attract more female customers, such as promoting the benefits of fitness for women's health.
4. **Family and Partner Marketing**:
    - Since many customers are partnered, emphasize the benefits of owning a treadmill for family health and fitness. Highlight testimonials from couples or families who use AeroFit treadmills together.
5. **Income-Based Promotions**:

- Most customers fall into the middle-income category. Tailor promotions and financing options to make the treadmills more affordable for this group. Highlight value-for-money aspects of each treadmill model.

6. **Fitness and Usage Education**:
   - Educate customers about the benefits of regular treadmill use. Provide fitness plans or virtual training sessions to help customers make the most of their treadmill purchase.

7. **Expand Advanced Features**:
   - While KP781 is less frequently purchased, it caters to advanced users. Highlight its advanced features in marketing campaigns aimed at fitness enthusiasts and professional runners. Offer trial periods or demonstrations to showcase its benefits.

8. **Community Engagement**:
   - Build a community around AeroFit products by creating online forums, social media groups, and local events where customers can share their fitness journeys and encourage others.

Detect Outliers
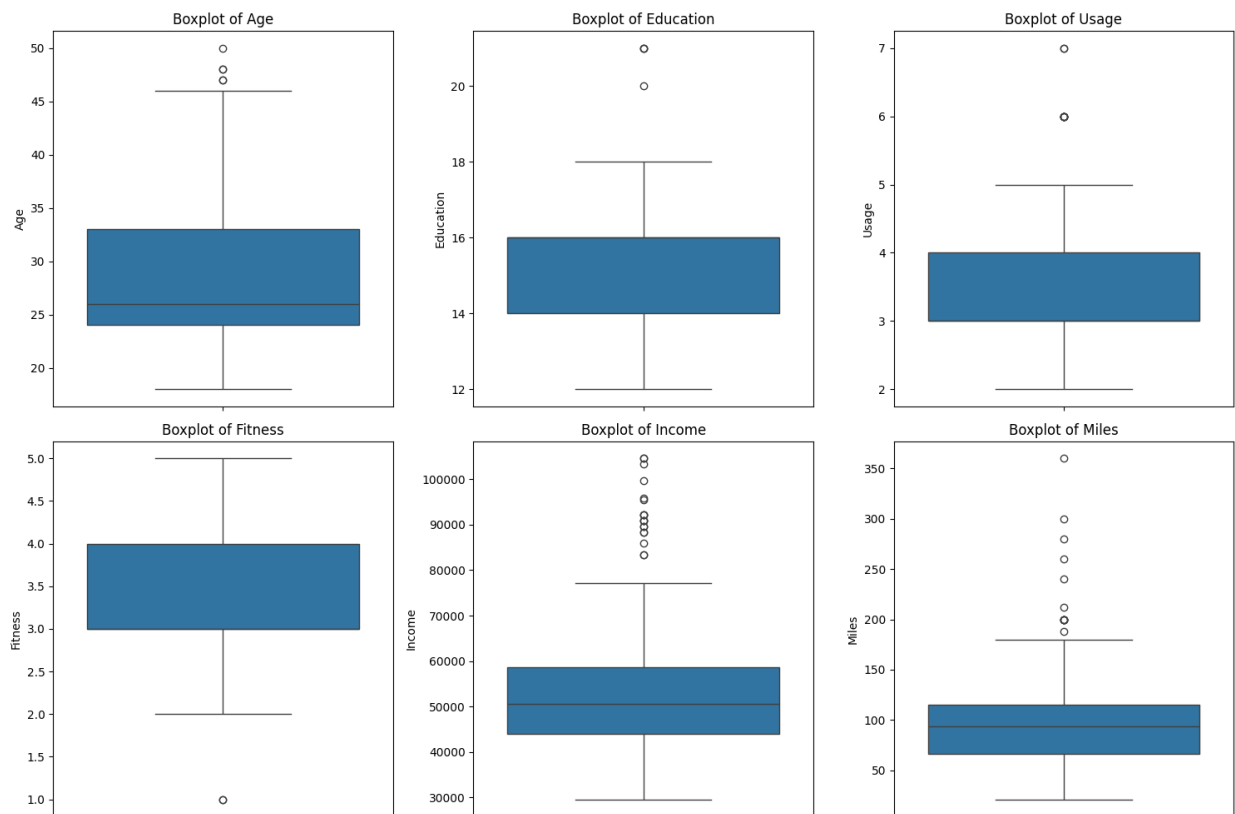
Insights

1. Age:

- **Outliers:** A few outliers are present above 45 years.
- **Distribution:** The majority of the customers are between 20 and 35 years old, with a median around 26-27 years.

2. Education:

- **Outliers:** A couple of outliers are present above 19 years.
- **Distribution:** Most customers have between 14 and 18 years of education, with the median around 16 years, indicating many have college-level education.

3. Usage:

- **Outliers:** There is one notable outlier at 7 times per week.
- **Distribution:** The usage is mostly between 2 and 4 times per week, with the median around 3 times.

4. Fitness:

- **Outliers:** One outlier at the lower end (fitness level 1).
- **Distribution:** The self-rated fitness levels are mostly between 2.5 and 4, with the median at 3, indicating moderate fitness levels among customers.

5. Income:

- **Outliers:** Several outliers above $70,000.
- **Distribution:** The majority of incomes are between $40,000 and $60,000, with the median around $50,000. The outliers represent higher-income customers.

6. Miles:

- **Outliers:** Several outliers above 200 miles per week.
- **Distribution:** Most customers plan to walk/run between 50 and 150 miles per week, with a median around 100 miles. The outliers are highly active customers.
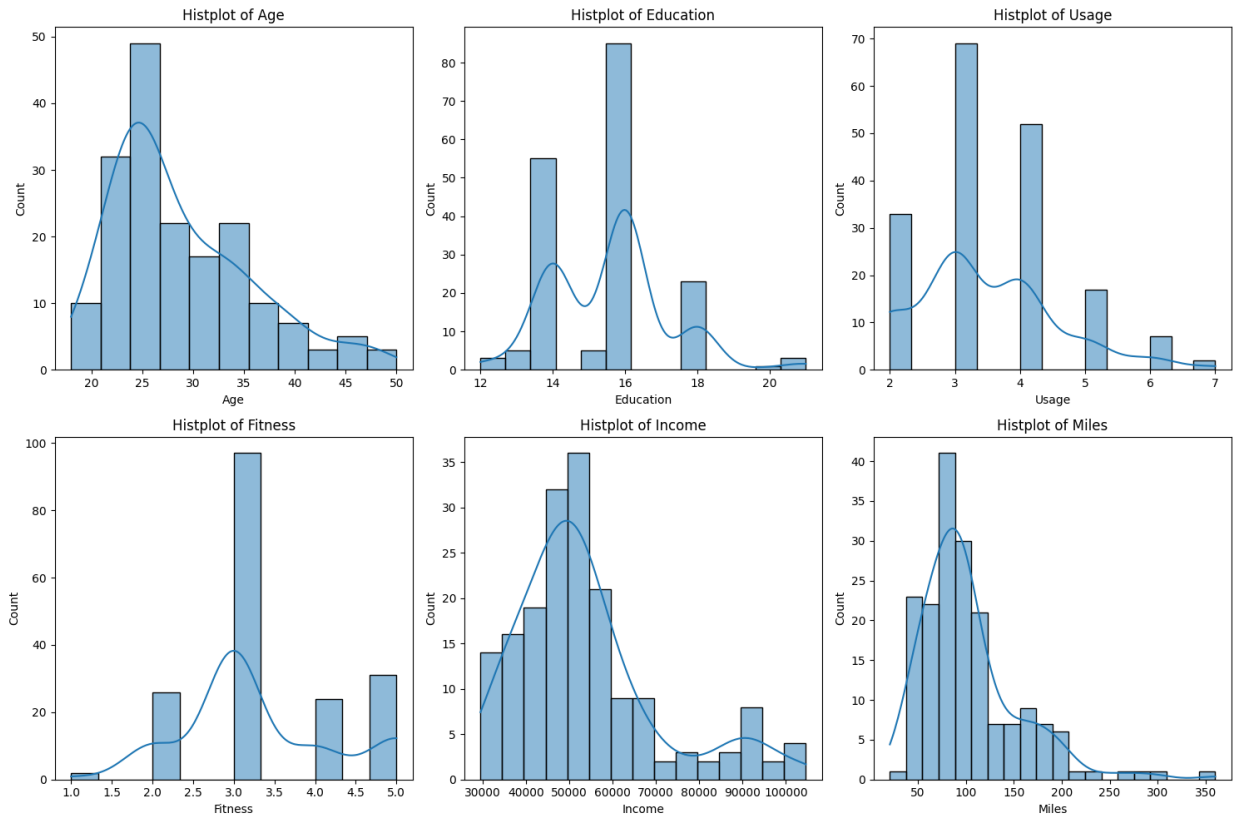
Recommendations

1. **Target Marketing Towards Middle-Aged Adults:**

- Focus marketing efforts on individuals aged 20-35, as they form the majority of the customer base. This could include advertising on platforms popular among this age group and using influencers who appeal to them.

2. **Educational Content:**
   - Given that many customers have college-level education, create detailed and informative content that explains the technical aspects and benefits of each treadmill model. This could be in the form of blog posts, webinars, or detailed product videos.

3. **Encourage Regular Usage:**
   - Develop programs or incentives to encourage customers to use their treadmills regularly. This could include fitness challenges, rewards for regular use, or virtual coaching sessions.

4. **Focus on Moderate Fitness Levels:**
   - Since most customers rate their fitness at a moderate level, create fitness programs and treadmill features that cater to moderate fitness goals. Highlight how each treadmill model can help customers improve their fitness levels gradually.

5. **Income-Based Segmentation:**
   - Offer financing options or payment plans to make treadmills more accessible to middle-income customers. Highlight value-for-money aspects, especially for the more affordable KP281 model.

6. **Address High-Usage and High-Mileage Needs:**
   - For the outliers who plan to use the treadmill very frequently and run/walk many miles, emphasize the durability and advanced features of the KP781 model. Offer targeted promotions and warranties to this high-usage segment.

7. **Family and Group Discounts:**
   - Since many customers are partnered, consider offering discounts for purchasing multiple treadmills or family packages. Promote the idea of family fitness and shared health goals.

8. **Loyalty Programs:**
   - Develop loyalty programs that reward customers for consistent use and engagement with AeroFit products. This could include discounts on accessories, free maintenance services, or exclusive content.

Univariate Analysis

Numerical Data Analisis:

Insights

Age:

- **Distribution**: The age distribution is right-skewed, with a peak around the mid-20s. Most customers are between 20 and 35 years old, with fewer older customers.
- **Recommendation**: Focus marketing efforts on the 20-35 age group. This demographic forms the core customer base, indicating that promotional activities should be tailored to their preferences and interests.

Education:

- **Distribution**: The education distribution has two peaks, one around 14 years (high school graduates) and another around 16 years (college graduates). There are fewer customers with education levels beyond 18 years.
- **Recommendation**: Highlight the benefits of the treadmills to both high school and college graduates. Educational content can be designed to appeal to both groups, with a focus on how treadmills can help them achieve their fitness goals.

Usage:

- **Distribution**: The usage distribution peaks at 3 times per week, with a gradual decline for higher usage frequencies. There is a smaller peak at 4 times per week.
- **Recommendation**: Promote fitness plans and usage tips to encourage consistent use. Offer challenges or rewards for regular usage, aiming to move customers towards more frequent use of 3-4 times per week.

Fitness:

- **Distribution**: The fitness level distribution is concentrated around the middle, with the highest peak at level 3. There are smaller peaks at levels 2 and 4.
- **Recommendation**: Tailor fitness programs and marketing messages to individuals with moderate fitness levels. Provide resources and support to help customers improve their fitness levels incrementally.

Income:

- **Distribution**: The income distribution is right-skewed, with a peak around $50,000. There are fewer customers with incomes above $70,000.
- **Recommendation**: Emphasize value-for-money in marketing materials. Offer financing options to make treadmills more accessible to customers with middle-income levels. Highlight affordable pricing and cost-effective features of the KP281 and KP481 models.

Miles:

- **Distribution**: The miles distribution peaks around 100 miles per week, with a right-skewed tail extending to higher distances. There are a few highly active customers who plan to walk/run significantly more miles.
- **Recommendation**: Create content and programs that cater to both moderate and high-mileage users. For high-mileage users, emphasize the durability and advanced features of the KP781 model. For moderate users, provide tips on how to gradually increase their mileage.

Recommendations

1. **Age-Specific Marketing**:
   - Develop age-specific marketing campaigns targeting the 20-35 age group. Utilize social media platforms and influencers popular within this demographic to increase brand visibility.

2. **Education-Focused Content**:
   - Create educational content that resonates with both high school and college graduates. Offer detailed product explanations, fitness benefits, and usage guides.
3. **Encouragement of Regular Usage**:
   - Implement loyalty programs that reward consistent usage. Organize fitness challenges that encourage customers to use their treadmills more frequently.
4. **Support for Moderate Fitness Levels**:
   - Provide fitness support and resources aimed at customers with moderate fitness levels. Offer personalized training plans and virtual coaching sessions.
5. **Value-Driven Marketing**:
   - Highlight the affordability and value-for-money aspects of the KP281 and KP481 models. Offer financing options and flexible payment plans to attract middle-income customers.
6. **Catering to High-Activity Users**:
   - Develop marketing materials that emphasize the advanced features and durability of the KP781 model for high-activity users. Offer demonstrations and trial periods to showcase the product's capabilities.

Categorical Data Analysis:

Count of Product

Count of Gender

Count of MaritalStatus
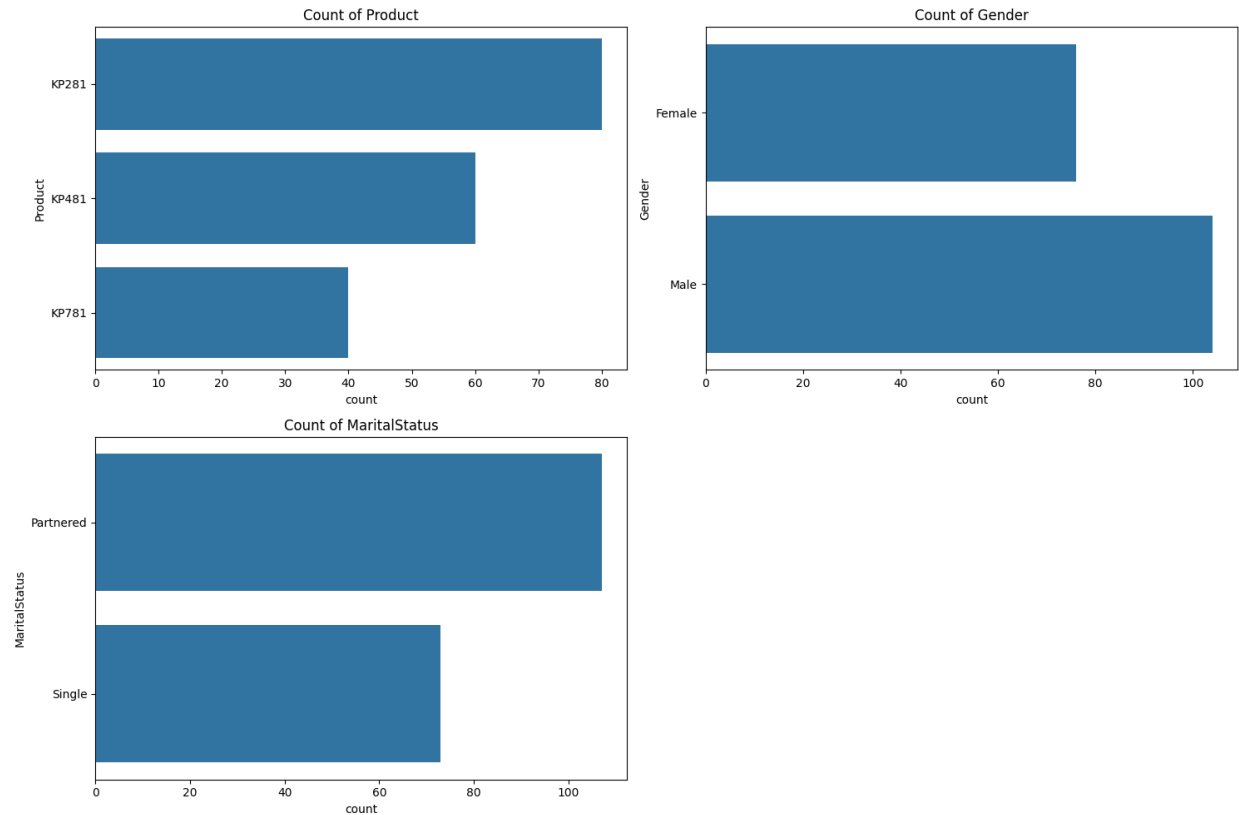
Insights

Product:

- **Distribution**: The majority of customers have purchased the KP281 model, followed by the KP481 and KP781 models.
- **Recommendation**: Since KP281 is the most popular model, continue to emphasize its value and affordability in marketing campaigns. Consider gathering feedback from KP281 customers to further improve the product. The KP481 and KP781 should be marketed to niche segments, emphasizing their advanced features and suitability for more serious fitness enthusiasts.

Gender:

- **Distribution**: There are more male customers than female customers purchasing treadmills.
- **Recommendation**: Tailor marketing strategies to appeal to male customers, as they form a larger portion of the customer base. However, there is also a significant number of female customers, so ensuring that promotional materials are inclusive and

appealing to both genders is crucial. Gender-specific advertising campaigns and partnerships with fitness influencers of both genders can be effective.

Marital Status:

- **Distribution**: Partnered individuals are more likely to purchase treadmills than single individuals.
- **Recommendation**: Develop marketing campaigns that target couples and families, highlighting the benefits of owning a treadmill for shared fitness goals. Promotions and discounts for couples can also be effective. Additionally, consider creating content that appeals to single individuals, emphasizing the personal health benefits and convenience of home fitness equipment.

Recommendations:

1. **Product-Specific Marketing**:
   - For the KP281, highlight its affordability and value. Emphasize customer testimonials and success stories to build trust and encourage purchases.
   - For the KP481 and KP781, focus on their advanced features and benefits for serious runners and fitness enthusiasts. Create detailed product comparisons and demonstrations to show their superior performance.
2. **Gender-Inclusive Strategies**:
   - Develop separate marketing campaigns that cater specifically to male and female audiences. Use gender-specific messaging and visuals to resonate with each group.
   - Partner with male and female fitness influencers to broaden the reach and appeal to a wider audience.
3. **Marital Status-Based Promotions**:
   - Create marketing campaigns that target couples and families, highlighting how the treadmill can be a shared investment in health and fitness.
   - Offer couple discounts or family packages to incentivize purchases from partnered individuals.
   - For single customers, emphasize the convenience and personal benefits of having a treadmill at home, making fitness more accessible and manageable.
4. **Feedback and Improvement**:
   - Collect feedback from customers of each treadmill model to identify areas of improvement and enhance customer satisfaction.
   - Use this feedback to make iterative improvements to the product line, ensuring that each model meets the evolving needs and preferences of customers.

Bivariate Analysis

relationships between columns
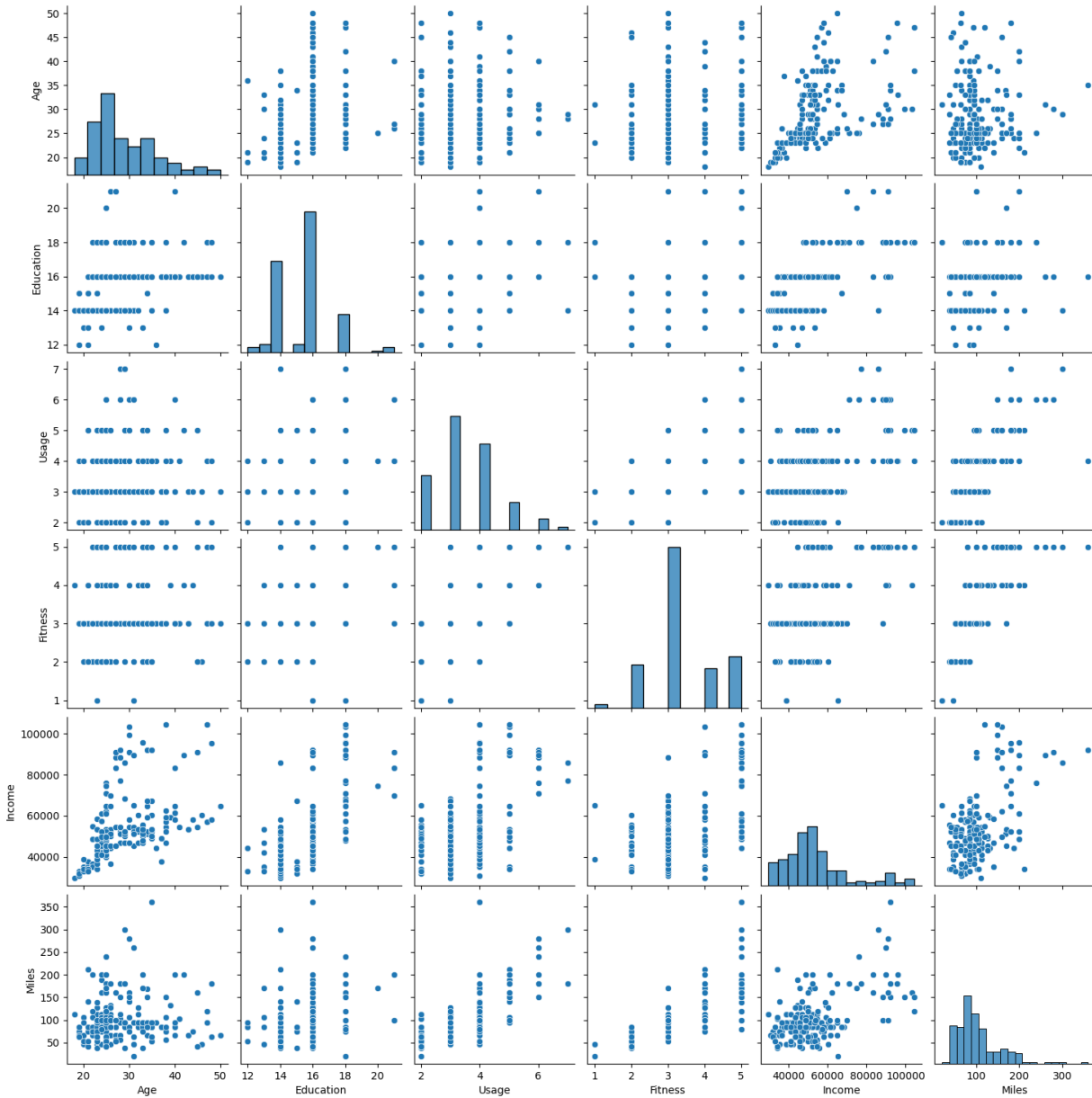
Insights

1. **Age and Income**:
   - There is a clear positive correlation between age and income, indicating that older customers tend to have higher incomes.
   - This trend is typical as income generally increases with age and work experience.

2. **Income and Miles**:
   - There is a positive correlation between income and the number of miles customers expect to run/walk weekly. Higher income individuals tend to expect to use the treadmill more extensively.
   - This could indicate that higher-income individuals are more health-conscious or have more time for fitness activities.
3. **Age and Miles**:
   - There's a slight positive correlation between age and the number of miles, suggesting that older customers might expect to cover more miles.
4. **Usage and Fitness**:
   - A positive correlation exists between treadmill usage and fitness level, indicating that those who plan to use the treadmill more frequently also rate their fitness level higher.
   - This is logical as regular exercise typically correlates with higher fitness levels.
5. **Usage and Miles**:
   - There is a strong positive correlation between the frequency of treadmill usage and the number of miles expected to be covered.
   - This suggests that customers who use the treadmill more often also expect to cover more distance.
6. **Income and Fitness**:
   - There is a mild positive correlation between income and fitness levels, indicating that higher-income individuals tend to rate their fitness levels higher.

Recommendations

1. **Segmented Marketing**:
   - Given the correlation between age and income, consider segmenting marketing campaigns by age groups. For instance, older, higher-income customers could be targeted with premium products and services.
2. **High-Income High-Usage Products**:
   - Develop and promote treadmill models that cater specifically to higher-income individuals who expect to use the treadmill extensively. These models could include advanced features and enhanced durability.
3. **Fitness Programs for Frequent Users**:
   - Provide tailored fitness programs or virtual coaching for customers who plan to use the treadmill frequently. Highlighting the correlation between regular usage and improved fitness levels could motivate more consistent use.
4. **Rewards for Higher Usage**:
   - Implement a rewards program that incentivizes higher usage, such as points for miles covered, which can be redeemed for fitness-related products or discounts on future purchases.

10. **Educational Content on Usage**:
    - Educate customers on the benefits of regular treadmill usage through webinars, articles, and videos. Emphasize the positive impact of frequent use on fitness levels.
11. **Product Features for Age Groups**:
    - Design treadmill features that cater to different age groups. For example, younger users might appreciate more tech-savvy features like app integration, while older users might prefer features focused on safety and comfort.
12. **Premium Services for High-Income Segments**:
    - Offer premium after-sales services, such as extended warranties and regular maintenance checks, to high-income customers. This could increase customer loyalty and satisfaction.
13. **Customized Fitness Goals**:
    - Utilize the positive correlation between usage and fitness to help customers set and achieve customized fitness goals. Implement a tracking system that monitors usage and provides feedback.

Correlation Analysis

Correlation Matrix
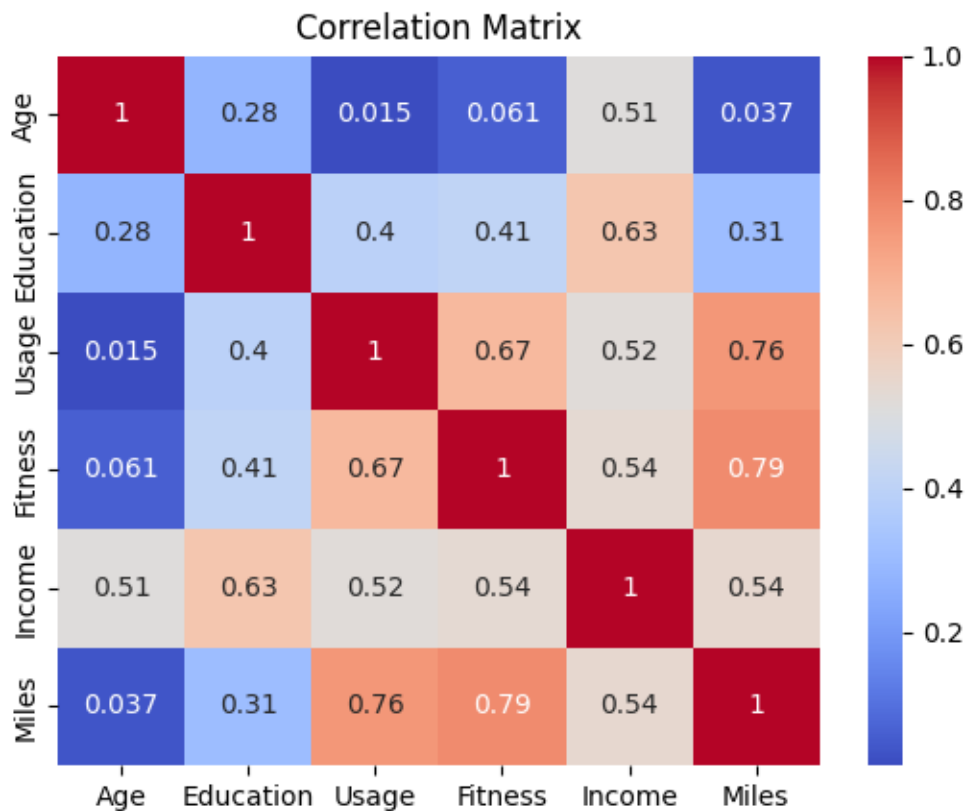
Insights

The correlation matrix provides insights into the relationships between different numerical variables in the dataset.

1. **Age**:
   - Age has a moderate positive correlation with Income (r=0.51).
   - Age also shows a moderate correlation with Education (r=0.28).
   - Other correlations with Age are relatively weak.
2. **Education**:
   - Education has a moderate positive correlation with Income (r=0.63).
   - It also has a moderate correlation with Usage (r=0.40) and Fitness (r=0.41).
3. **Usage**:
   - Usage has strong positive correlations with Fitness (r=0.67) and Miles (r=0.76).
   - It also shows a moderate positive correlation with Income (r=0.52).
4. **Fitness**:

- Fitness is strongly correlated with Miles (r=0.79).
- It has moderate correlations with Usage (r=0.67) and Income (r=0.54).

5. **Income**:
   - Income has moderate positive correlations with Usage (r=0.52), Fitness (r=0.54), and Miles (r=0.54).

6. **Miles**:
   - Miles shows strong positive correlations with Usage (r=0.76) and Fitness (r=0.79).
   - It also has moderate correlations with Income (r=0.54).

Recommendations

1. **Targeting Higher Income Groups**:
   - Given the positive correlation between Income and both Fitness and Usage, marketing efforts for higher-end products like the KP781 should focus on higher income groups. Highlight advanced features and benefits that align with their fitness goals.

2. **Promoting Frequent Usage**:
   - Since Usage is strongly correlated with Fitness and Miles, emphasizing the durability and features that support frequent use can attract more serious fitness enthusiasts.

3. **Education-Based Segmentation**:
   - The positive correlation between Education and other factors like Income and Fitness suggests that more educated customers may have higher disposable incomes and fitness aspirations. Educational content and data-driven marketing strategies can be particularly effective for this segment.

4. **Customized Fitness Plans**:
   - Considering the strong correlation between Fitness and Miles, offering customized fitness plans and progress tracking features could attract customers who are serious about improving their fitness levels.

5. **Product Bundling**:
   - Bundle treadmills with other fitness-related products or services (e.g., fitness apps, workout accessories) to appeal to customers who plan to use the treadmill frequently and have high fitness aspirations.

6. **Highlighting Value for Young Adults**:
   - Despite the weaker correlation, the moderate positive correlation between Age and Income indicates that young adults (mid to late 20s) with growing incomes are a valuable target market. Emphasize the value and long-term benefits of owning an AeroFit treadmill.

Actionable Items

1. **Marketing Campaigns**:
    *   Develop targeted marketing campaigns for higher income groups, emphasizing the advanced features and benefits of premium models.
    *   Use educational content to appeal to well-educated customers.
2. **Product Features**:
    *   Enhance product descriptions and advertisements to highlight durability and support for frequent usage.
3. **Customer Engagement**:
    *   Implement personalized fitness plans and tracking features to retain serious fitness enthusiasts.
4. **Sales Strategy**:
    *   Consider product bundling strategies to provide additional value to customers.
    *   Create promotional offers targeting young adults with growing incomes.

Contingency Tables

Insights

Gender and Product

Gender	Female	Male
Product		
KP281	0.500000	0.500000
KP481	0.483333	0.516667
KP781	0.175000	0.825000

1. **KP281**:
    *   Equal distribution between female and male customers, each constituting 50% of the purchasers.
2. **KP481**:
    *   Slightly more male customers (51.67%) than female customers (48.33%).
3. **KP781**:
    *   Predominantly male customers (82.5%) compared to female customers (17.5%).

Marital Status and Product

MaritalStatus	Partnered	Single
Product		
KP281	0.600	0.400
KP481	0.600	0.400
KP781	0.575	0.425

1. **KP281**:
   - 60% of the customers are partnered, and 40% are single.
2. **KP481**:
   - Similar distribution to KP281, with 60% partnered and 40% single customers.
3. **KP781**:
   - Slightly fewer partnered customers (57.5%) compared to KP281 and KP481, with 42.5% being single.

Recommendations

1. **Targeted Marketing by Gender**:
   - **KP781**: Focus on marketing to male customers, as they constitute a significant majority of the buyers. Highlight advanced features and high-performance capabilities that may appeal more to male customers.
   - **KP281 and KP481**: Since the gender distribution is more balanced, marketing campaigns should be inclusive and highlight features that appeal to both genders equally.
2. **Targeted Marketing by Marital Status**:
   - **All Products**: Since a higher percentage of customers are partnered across all product categories, marketing campaigns can emphasize the benefits of having a treadmill at home for family use and shared fitness goals.
3. **Product Feature Emphasis**:
   - **KP281 and KP481**: Highlight features that appeal to both single and partnered individuals, such as compact size for small living spaces (single) and durability for shared use (partnered).
   - **KP781**: Emphasize advanced features and performance, as these may be more attractive to male customers. Marketing can focus on serious fitness enthusiasts and professionals.
4. **Customer Engagement and Retention**:
   - Develop loyalty programs and referral discounts targeting partnered customers, as they represent a significant portion of the customer base.

- Offer personalized fitness plans and progress tracking features that can appeal to both single and partnered customers, enhancing customer engagement and retention.
5. **Special Promotions and Bundles**:
   - **KP781**: Consider special promotions or bundles that include fitness accessories or premium features that appeal to male customers.
   - **KP281 and KP481**: Offer bundled deals with fitness apps, online workout subscriptions, or accessories that appeal to a broader audience.

Conditional and Marginal Probabilities

The marginal probabilities give us the overall distribution of the products among all customers:

```python
product_counts = data['Product'].value_counts(normalize=True) * 100
print(product_counts)
```

```
Product
KP281    44.444444
KP481    33.333333
KP781    22.222222
```

The conditional probabilities provide insights into the distribution of products among male customers:

```python
male_counts              =              data[data['Gender']              ==
'Male']['Product'].value_counts(normalize=True)  * 100
print(male_counts)
```

```
Product
KP281    38.461538
KP781    31.730769
KP481    29.807692
```

Insights

1. **General Product Preferences**:
   - The KP281 model is the most popular overall, with nearly 44.44% of all customers purchasing this model.
   - The KP481 model is the second most popular, with about 33.33% of all customers.
   - The KP781 model, although the most advanced and expensive, is the least popular overall, with 22.22% of customers opting for this model.
2. **Male Customer Preferences**:

- Among male customers, the KP281 is still the most popular, but its proportion is lower compared to the overall customer base (38.46% vs. 44.44%).
- The KP781 sees a significant increase in preference among male customers compared to the overall customer base (31.73% vs. 22.22%).
- The KP481 is less popular among male customers (29.81%) compared to the overall customer base (33.33%).

Recommendations

1. **KP281 Marketing Strategy**:
   - Since the KP281 is the most popular model overall, continue to emphasize its affordability and value in marketing campaigns. Highlight its suitability for a wide range of users, including those new to fitness and those looking for a reliable, entry-level treadmill.
2. **KP781 Marketing Strategy**:
   - The KP781 is more popular among male customers than the overall customer base, indicating that advanced features and higher performance appeal to this segment. Target marketing campaigns towards male customers, focusing on the high-performance aspects and advanced features of the KP781. Use channels and messaging that resonate with serious fitness enthusiasts and tech-savvy users.
3. **KP481 Marketing Strategy**:
   - Given the KP481's balanced popularity, ensure marketing messages highlight its mid-range features and suitability for regular fitness routines. Position it as the best of both worlds, offering more features than the KP281 but at a lower price point than the KP781.
4. **Targeted Campaigns**:
   - Develop specific marketing campaigns aimed at male customers, leveraging the higher preference for the KP781. Highlight features such as durability, advanced technology, and performance tracking.
   - Use customer testimonials and success stories from male users who have achieved significant fitness goals with the KP781 to build credibility and appeal.
5. **Promotional Offers**:
   - Consider promotional offers or discounts for the KP781 to further attract male customers and convert interest into sales.

Business Insights

Based on the analysis of the AeroFit treadmill data, we can derive several key findings and actionable recommendations. These insights will help AeroFit tailor its marketing strategies and product offerings to better meet the needs of its customers.

Key Findings

1. **Product Distribution**:
   - **KP281** is the most popular model overall, with 44.44% of customers purchasing it.
   - **KP481** is the second most popular, with 33.33% of customers.
   - **KP781** is the least popular, with 22.22% of customers.
2. **Gender Preferences**:
   - **KP281**: Equal distribution between female and male customers (50% each).
   - **KP481**: Slightly more male customers (51.67%) than female customers (48.33%).
   - **KP781**: Predominantly male customers (82.5%).
3. **Marital Status**:
   - **KP281**: 60% partnered, 40% single.
   - **KP481**: 60% partnered, 40% single.
   - **KP781**: 57.5% partnered, 42.5% single.
4. **Correlation Analysis**:
   - Age has moderate correlations with Income and Education.
   - Usage has strong positive correlations with Fitness and Miles.
   - Fitness and Miles are highly correlated, indicating that higher fitness levels are associated with longer distances run or walked.
5. **Outlier Detection**:
   - All continuous variables (Age, Usage, Income, Miles) show right-skewed distributions, indicating a few high-value outliers in each category.

Target Customer Profiles

Based on the analysis, we can identify specific target customer profiles for each treadmill product:

1. **KP281 (Entry-Level Model)**:
   - **Demographics**: Balanced gender distribution, younger customers (mid-20s to early 30s).
   - **Income**: Lower to mid-income range.

- **Usage**: Moderate usage, suitable for beginners or those looking for a reliable, cost-effective treadmill.
- **Marital Status**: Equally appealing to both single and partnered individuals.
- **Marketing Focus**: Emphasize affordability, reliability, and value for money. Highlight its suitability for new fitness enthusiasts and families.

2. **KP481 (Mid-Level Model)**:
   - **Demographics**: Slightly more male customers, younger to middle-aged (mid-20s to late 30s).
   - **Income**: Mid-income range.
   - **Usage**: Regular usage, ideal for those who have a consistent fitness routine.
   - **Marital Status**: Equally appealing to both single and partnered individuals.
   - **Marketing Focus**: Highlight balanced features, durability, and enhanced performance compared to entry-level models. Position it as the perfect blend of affordability and advanced features.

3. **KP781 (High-End Model)**:
   - **Demographics**: Predominantly male customers, middle-aged (late 20s to 40s).
   - **Income**: Higher income range.
   - **Usage**: Frequent and intensive usage, suitable for serious fitness enthusiasts and professionals.
   - **Marital Status**: Slightly more partnered individuals.
   - **Marketing Focus**: Emphasize advanced features, high performance, and durability. Use targeted marketing campaigns focused on male customers, highlighting success stories, advanced technology, and professional-grade performance.

Recommendations

1. **Product-Specific Marketing**:
   - **KP281**: Focus on affordability and value, targeting young families and new fitness enthusiasts. Use inclusive marketing that appeals to both genders.
   - **KP481**: Highlight balanced features and value for money. Position it as a step-up from entry-level models for regular users.
   - **KP781**: Emphasize advanced features and performance. Target male customers with campaigns that highlight professional-grade use and advanced technology.

2. **Targeted Promotions**:
   - Offer discounts and bundles for KP781 to attract male customers.
   - Bundle fitness accessories or subscriptions with KP281 and KP481 to enhance value.

3. **Customer Engagement**:

- Develop personalized fitness plans and tracking features to retain customers across all product lines.
- Use customer testimonials and success stories to build credibility, especially for the KP781 model.

4. **Channel Optimization**:
   - Use digital marketing channels effectively to reach the target demographics for each product.
   - Leverage social media and influencer partnerships to promote the KP781 model among male fitness enthusiasts.

   - Bundle offers for the KP281 and KP481, including fitness accessories or subscription services, to enhance their value proposition and appeal to a broader audience.