Recommendation:

After reviewing and analyzing the dataset we can observe some point, where Walmart can start to work on that point:

1. Gender Basis:

 As per transaction on average data, male customers purchasing more than female customers, so Walmart should customize its marketing strategies and product offerings to encourage higher spending among male customers while ensuring favorable pricing for female oriented products.

2. Age- Group Basis

- 26-45 years age group customers presenting the majority of sales, Walmart should serve specifically according to the preferences and needs of this demographic. This could include presenting exclusive deals or popular deals among this age group of customers.
- (0-17) years of age group of customers contributes lowest per transaction.
 Walmart offers this group more attractive discounts, coupons, or rewards programs. And it is important to increase faithfulness according to younger customers needs.
- From the data we can analyze that, customers of 18-25,26-35,46-50 age groups of similar buying criteria and so do the customers 36-45 and 55+, Walmart should segmented these groups and rearrange products according to their preferences. Walmart can use this information to adjust their pricing strategies for different age groups.
- The customer of 51-55 years age group spends highest per transaction. Walmart offer them pre sale access, provides discount or personalized products recommendation for these age group. And should introduce loyalty programs which are rewarding and to retain these 51-55 age group of customers.

3. Product Category:

 Product categories of 1, 5, 8, & 11 have highest purchasing frequency. it means these are the products in these categories are liked more by customers.
 Company can focus on selling more of these products or selling more of the products which are purchased less. Also Walmart can focus of adding more items in this product category.

4. Customer Stay in City Basis:

- Customers, whose are staying for 1 year in same city are purchasing highest in Black Friday event. So, Walmart should try to approach the new comers in city by exciting offers, discount rates and product bundles strategies.
- Customers, whose are staying in city 4+ years, they are the loyal customers of Walmart. So, Walmart need to do some loyalty programs for them. It will help to selling the products more.