**Customer Segmentation Report for Marketing Offer Strategy**

**Overview:** This analysis segments customers into three distinct clusters using K-Means clustering on behavioral and transactional data. Our goal is to identify actionable marketing offers to improve customer retention and engagement.

**Cluster Profiles & Recommendations**

**▶ Cluster 0 – Moderate Travelers  
Customer Traits:**

* Average number of sessions (~ 31) and bookings (~16)
* Moderate spenders (~$17,731 total)
* Families (36% have children)
* Moderate bag usage (~4.25 checked bags)
* Slight discount sensitivity

**Recommended Offer:  
✅ Free Checked Bag**This segment travels regularly and would appreciate practical savings. A free bag can boost trip satisfaction without significant cost impact.

**▶ Cluster 1 – Heavy Spenders & Frequent Flyers  
Customer Traits:**

* Very high engagement (~ 81 sessions, ~64 bookings)
* Extremely high spend (~$65,450 total)
* Long session times and high loyalty
* No significant discount sensitivity

**Recommended Offer:  
✅ 1-Night Free Hotel with Flight**This is a premium segment that values high-quality rewards. The offer encourages extended trips and reinforces loyalty.

**▶ Cluster 2 – Light Users & Budget-Conscious  
Customer Traits:**

* Low number of sessions (~ 21) and bookings (~9)
* Lowest total spend (~$7,038)
* Family travel present (37%)
* High churn risk and price sensitivity

**Recommended Offer:  
✅ Exclusive Discounts or No Cancellation Fees**This group needs motivation to engage. Price-based incentives and flexible booking terms can activate and convert them.

**Additional Optional Offers by Cluster:**

| **Offer** | **Ideal Cluster** | **Rationale** |
| --- | --- | --- |
| Free Hotel Meal | Cluster 0 | They stay in hotels often |
| Free Checked Bag | Cluster 0 | Families, practical incentive |
| No Cancellation Fees | Cluster 2 | Risk-averse, low-confidence bookers |
| Exclusive Discounts | Cluster 2 | Price-sensitive, low loyalty |
| 1-Night Free Hotel | Cluster 1 | Premium-tier, loyalty reinforcement |

**Summary:** K-Means clustering has effectively divided customers into meaningful segments. Cluster 1 is the highest value group and should be rewarded. Cluster 2 presents an opportunity for reactivation, and Cluster 0 can be nudged toward higher engagement with practical offers.

**Preferred Model:** K-Means  
**Silhouette Score:** 0.29  
**(DBSCAN not recommended due to poor performance.)**