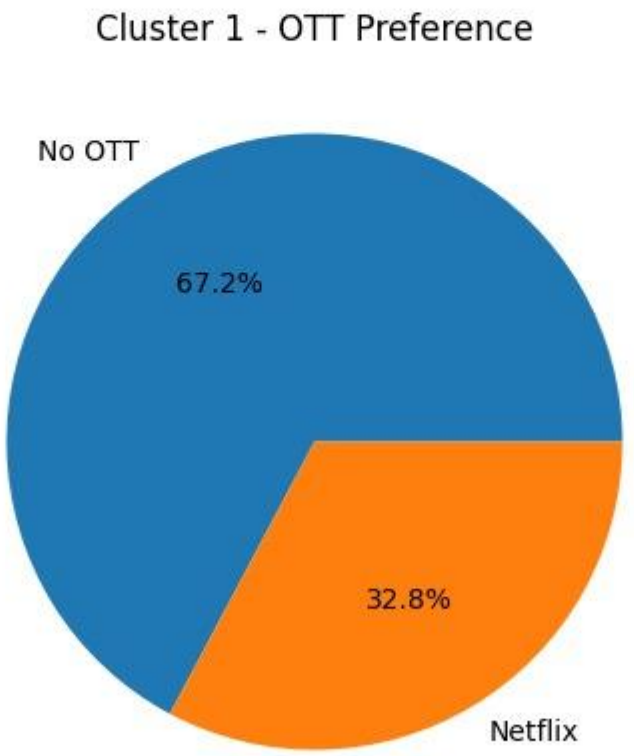
The **average preferred data** among customers is relatively **low (≈ 2.5 GB)**.

The **average preferred validity period** is much **higher (≈ 143 days)**.

This shows that customers prioritize **longer validity plans** over **high data volumes**.

Most users are inclined towards plans that **last longer** rather than those offering **large daily data packs**.

This insight suggests that telecom providers should focus on **long-validity recharge options** as they align more closely with customer preferences.



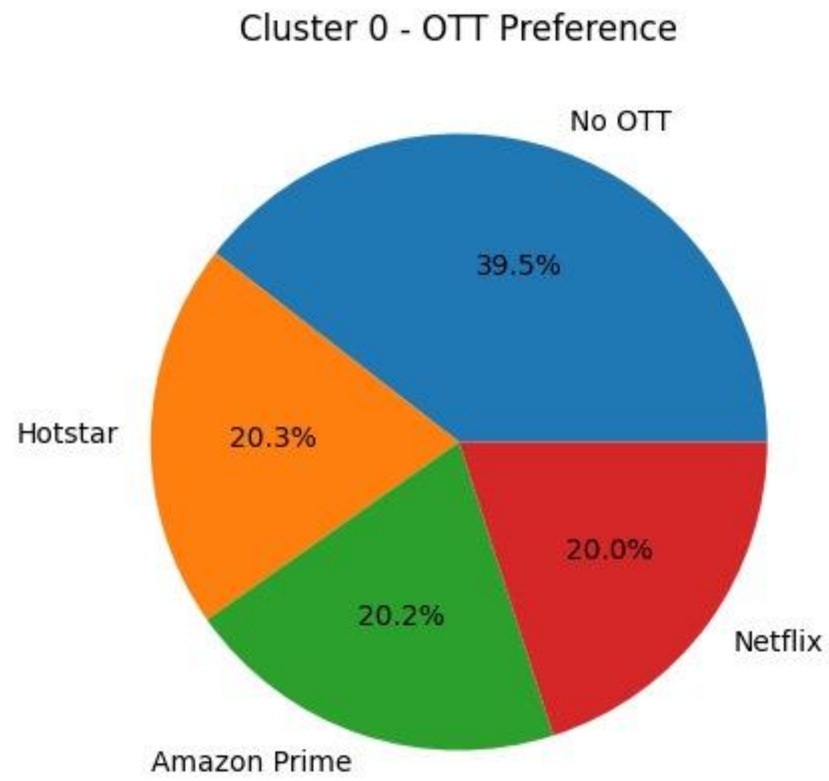
OTT Preference Analysis

From the dataset, customers show diverse **OTT (Over-The-Top) platform preferences**:

- **No OTT**: ~39.8%
- **Hotstar**: ~20.4%
- **Amazon Prime**: ~20.3%
- **Netflix**: ~19.6%

The pie chart you provided highlights a **comparison between "No OTT" and "Netflix"**:

- **67.2% of users prefer no OTT add-ons** with their plans.
- **32.8% of users prefer Netflix** as an OTT add-on.



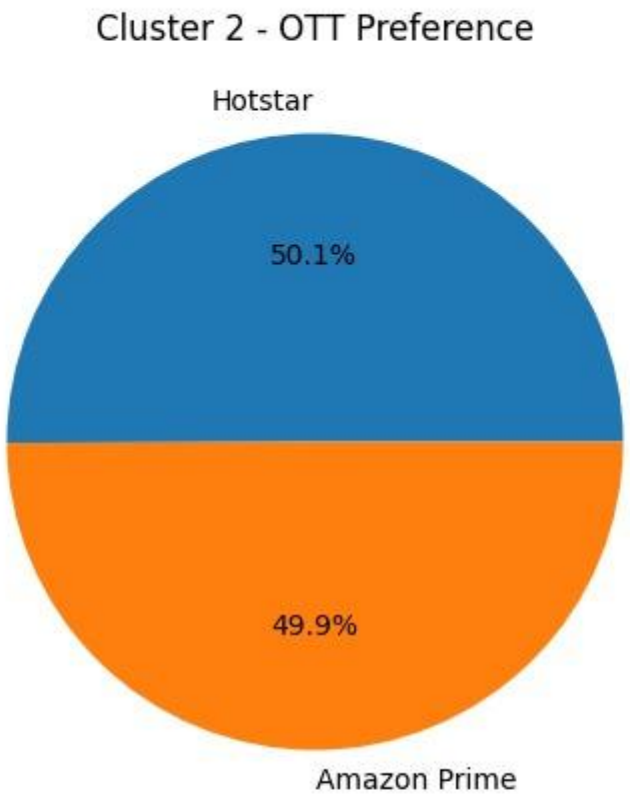
The pie chart shows the **OTT preference distribution for Cluster 0**.

A large portion of users (39.5%) prefer **No OTT** subscriptions with their plans.

Hotstar (20.3%), shown in orange, has the highest share among OTT options.

Amazon Prime (20.2%) and **Netflix (20.0%)** are nearly equal in preference.

This indicates that while OTT demand is split fairly evenly, **Hotstar holds a slight edge**, but overall, many users still prioritize cost-effective plans without OTT.



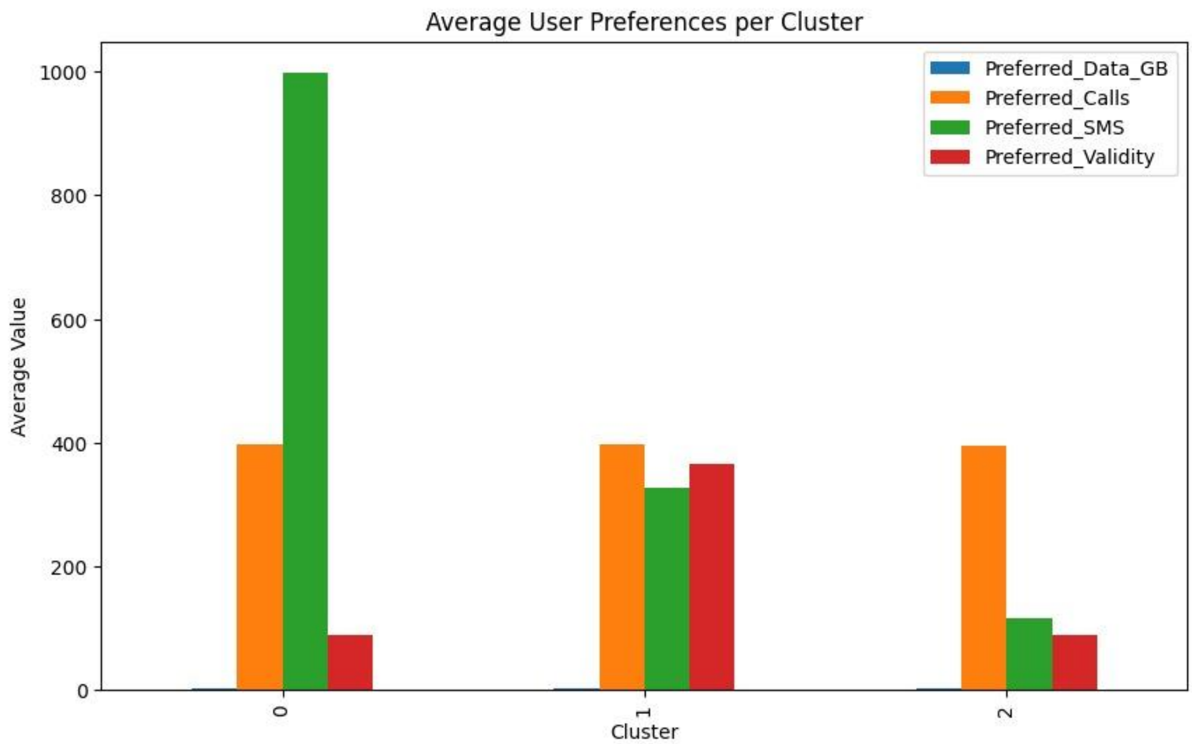
The chart represents **Cluster 2 OTT preferences**.

The distribution is almost evenly split between **Hotstar (50.1%)** and **Amazon Prime (49.9%)**.

This suggests that customers in this cluster are **highly divided between the two OTT platforms**.

Both platforms are equally attractive, making **content variety and pricing key factors** in their selection.

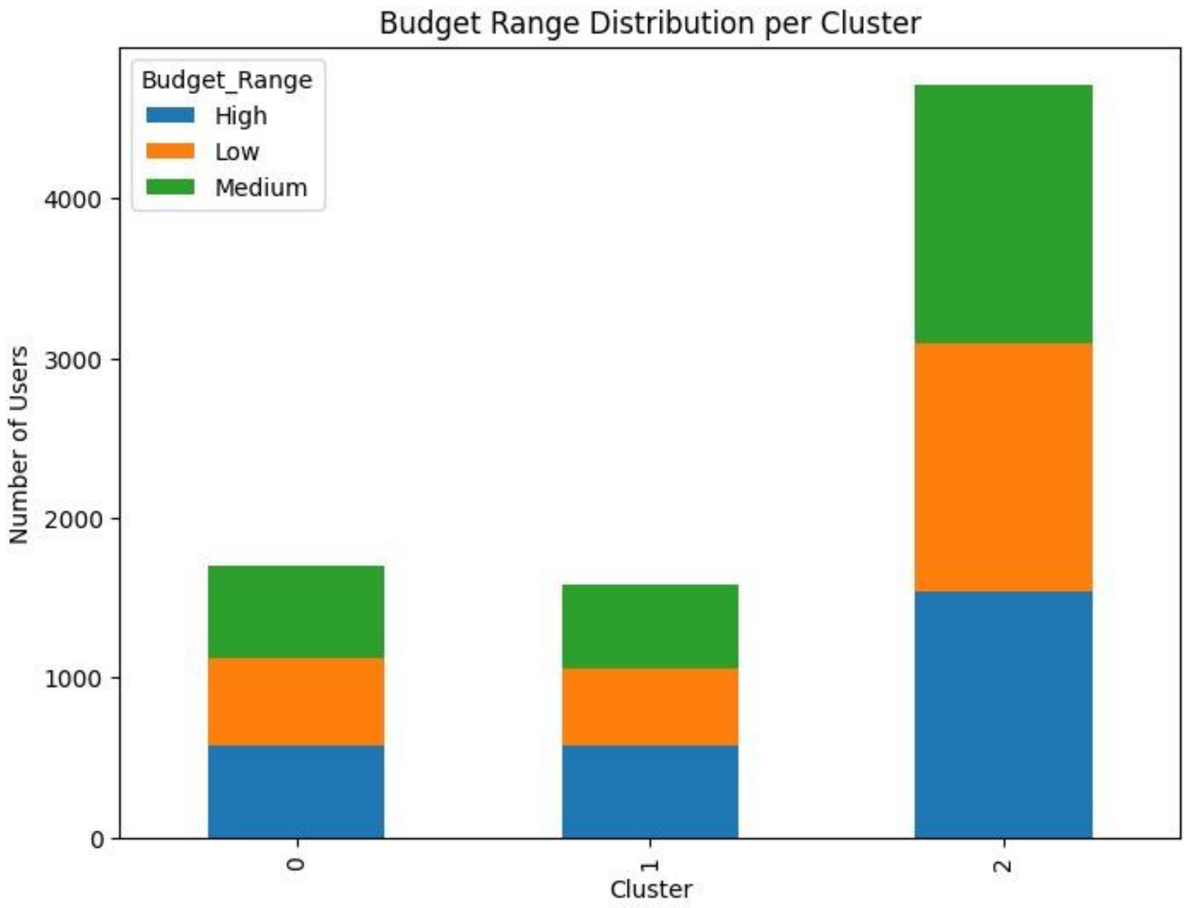
For telecom providers, offering bundled plans with either **Hotstar or Amazon Prime** would cater effectively to this segment.



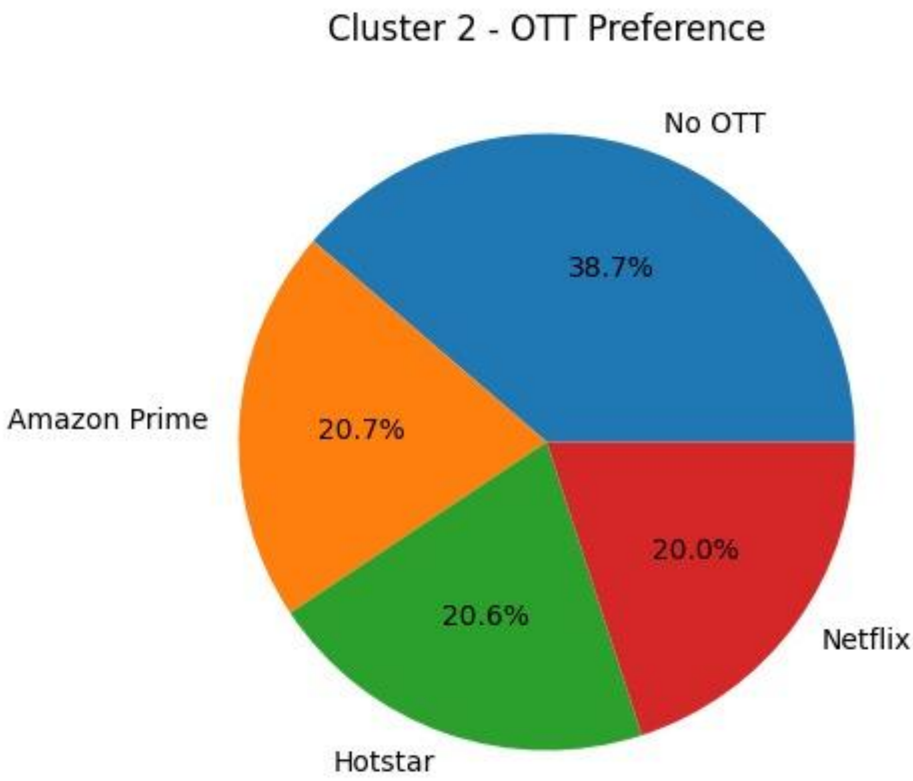
Cluster 0 → Small, balanced budget distribution.

Cluster 1 → Small, balanced budget distribution.

Cluster 2 → Largest cluster, with **Medium and Low budget dominance**.

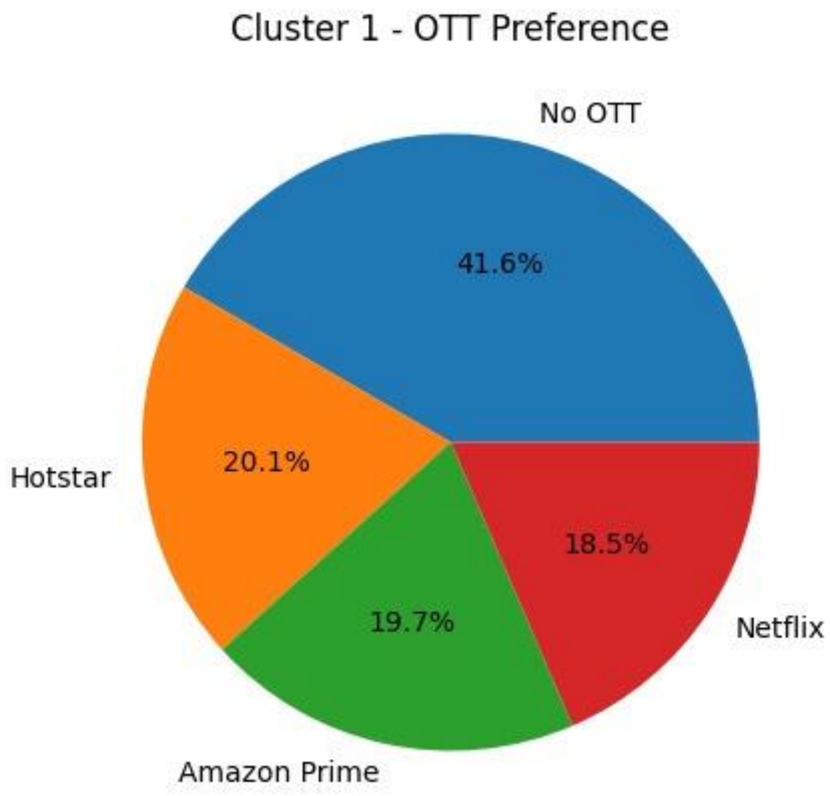


- Cluster 0 → SMS-focused customers
- Cluster 1 → Balanced customers
- Cluster 2 → Call-focused customers



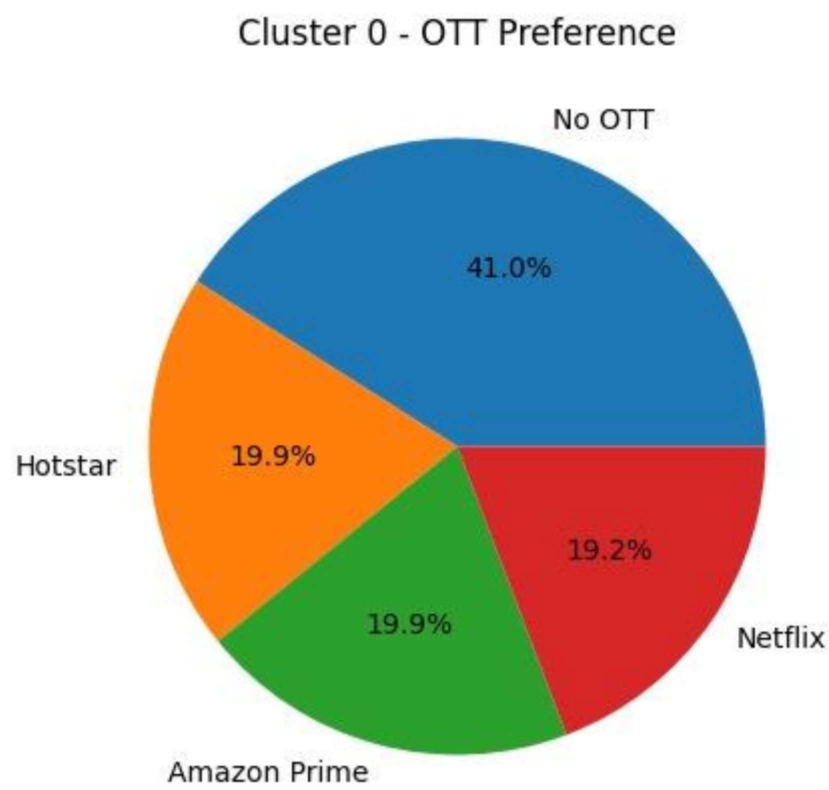
his pie chart shows the **OTT platform preferences** of users in **Cluster 2**.

- **No OTT – 38.7%**
  - The largest share of Cluster 2 users prefer **no OTT services** bundled with their plans.
- **Amazon Prime – 20.7%**
  - About one-fifth of users prefer Amazon Prime.
- **Hotstar – 20.6%**
  - Almost equal to Amazon Prime, showing similar popularity.
- **Netflix – 20.0%**
  - Slightly less than the other OTT options but still holds a significant share.



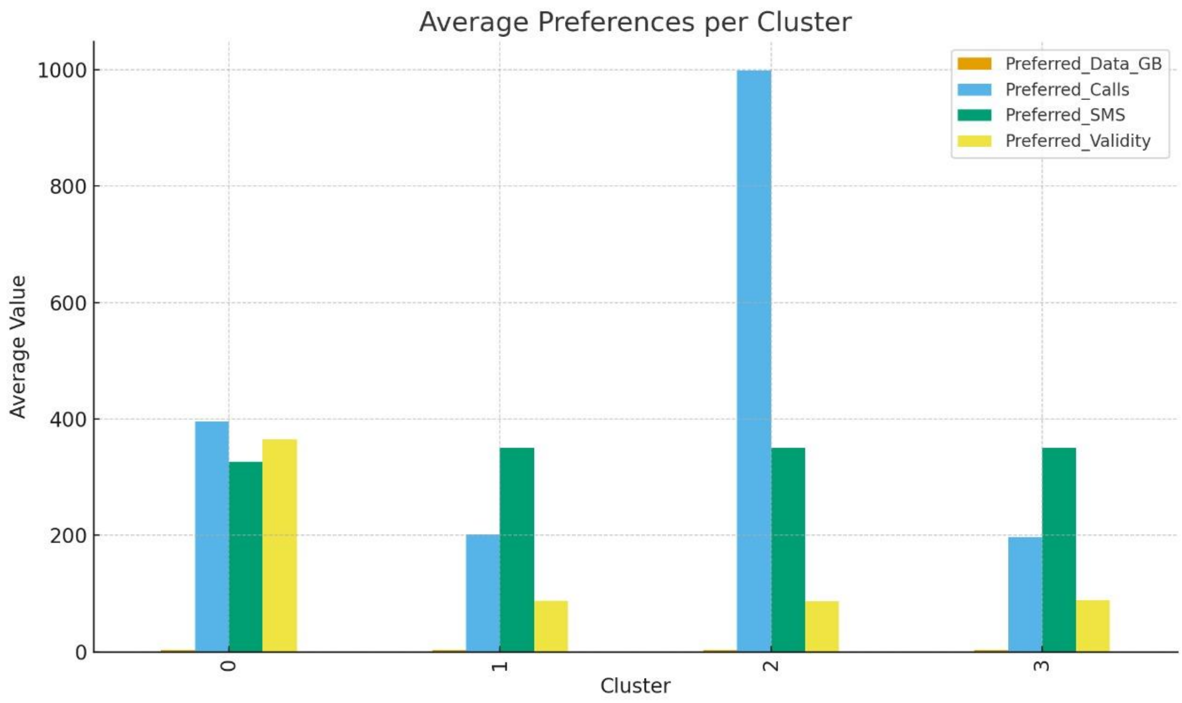
OTT Preference

- **No OTT**: 41.6% (largest share)
- **Hotstar**: 20.1%
- **Amazon Prime**: 19.7%
- **Netflix**: 18.5%



OTT Preference

- **No OTT**: 41.0% (largest share)
- **Hotstar**: 19.9%
- **Amazon Prime**: 19.9%
- **Netflix**: 19.2%

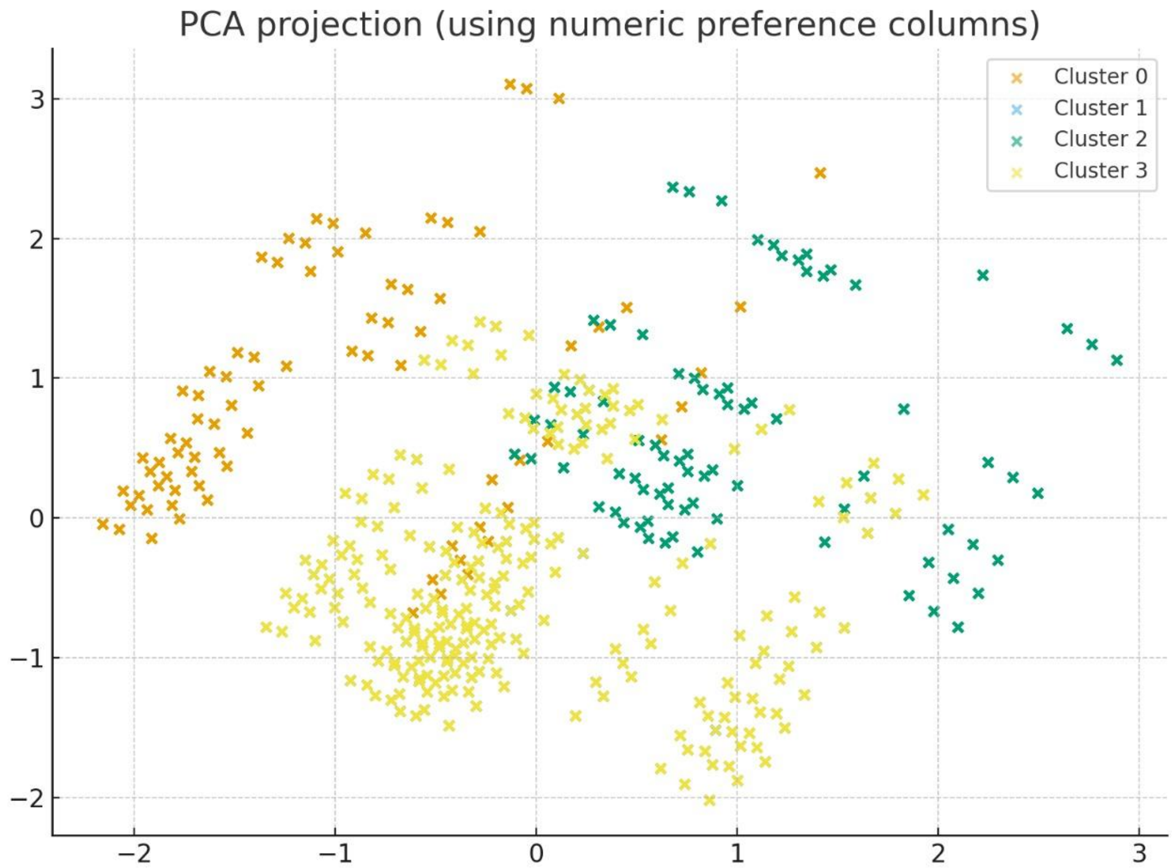


- **Cluster 2** → Call-heavy users (dominant).
- **Cluster 0** → Call + Validity focused.
- **Cluster 1 & 3** → Balanced but still **call-oriented**.
- Across all clusters → **Data usage remains minimal compared to Calls, SMS, and Validity.**

Clusters 1 & 3 → Largest clusters with **even spread across budget ranges**.

Cluster 0 & 2 → Smaller clusters with a **slight tilt towards low-budget users**.

Overall → No cluster is dominated by only one budget category → customer base is **well-diversified in spending capacity**.

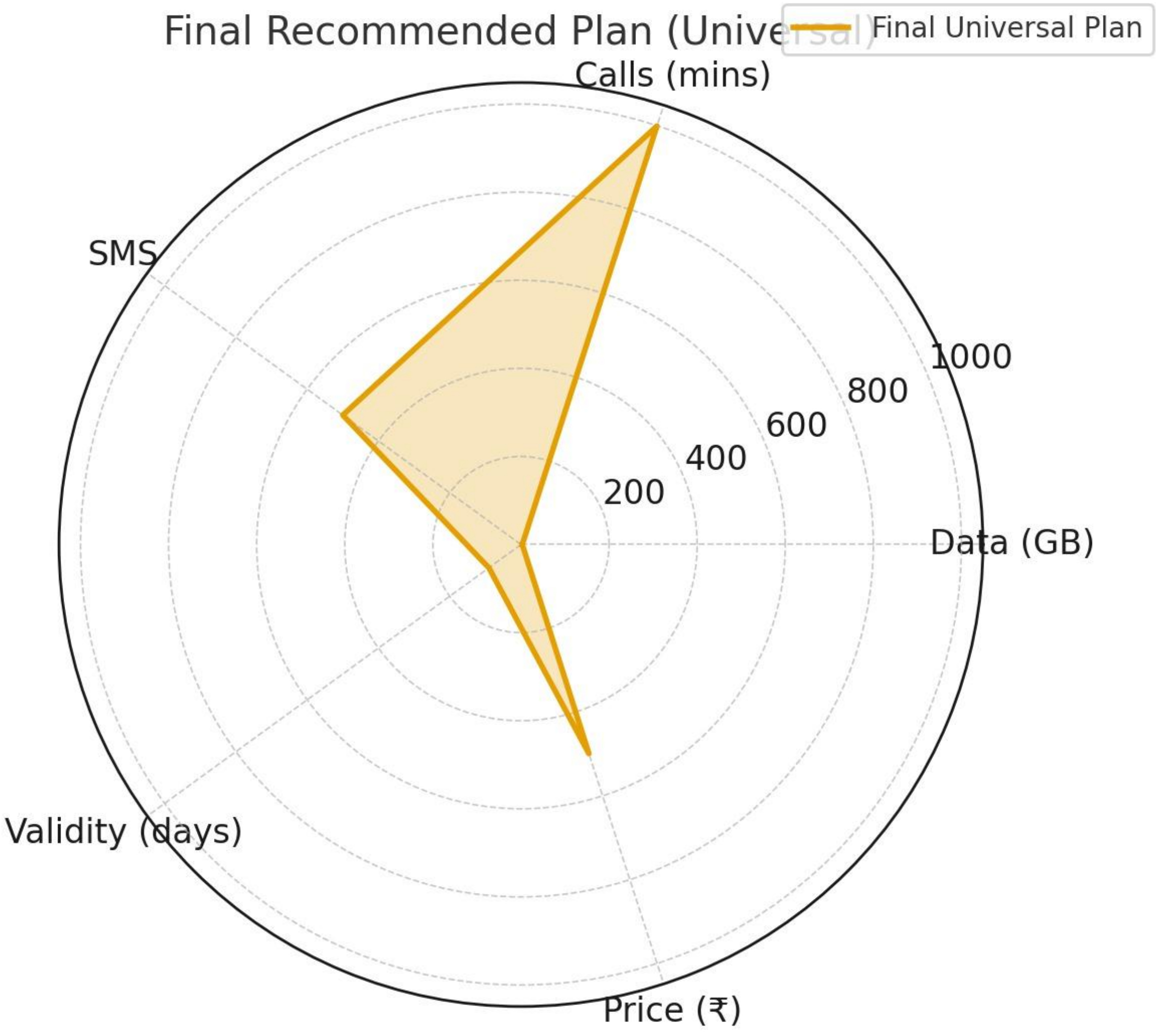


PCA confirms that clustering is **effective but not perfectly separated**.

Cluster 2 stands out with unique patterns.

Cluster 1 is highly compact → strong internal similarity.

Cluster 0 & 3 overlap → may share common traits.



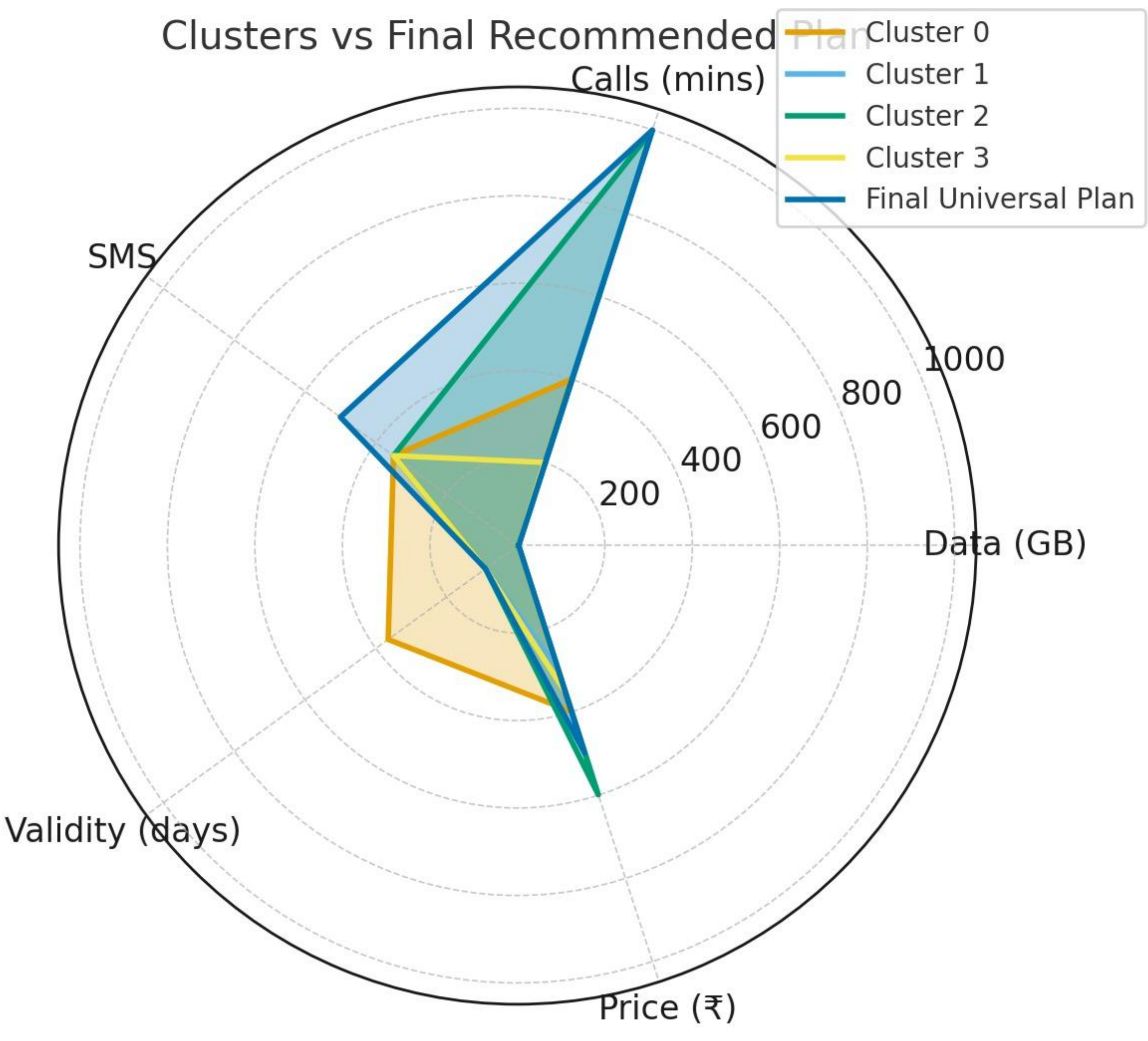
This **radar chart** compares the preferences of different customer clusters (0, 1, 2, 3) with the **final universal recommended plan**.

- **Calls (mins):**
  All clusters show a high preference for calls, with the universal plan (~1000 mins) aligning closely across clusters.

- **SMS:**
  Cluster 0 and Cluster 2 show moderate SMS needs (~400–500), while others are lower. The universal plan balances at ~450 SMS.

- **Data (GB):**
  Data preference is very low across all clusters, and the universal plan reflects this with minimal data allocation.

- **Validity (days):**
  Cluster 1 shows higher validity needs (~200+ days), while others are much lower. The universal plan opts for a standard ~30 days.
- **Price (₹):**
  Clusters differ slightly, but most fall in the **mid-range (~₹500)**. The universal plan maintains affordability.



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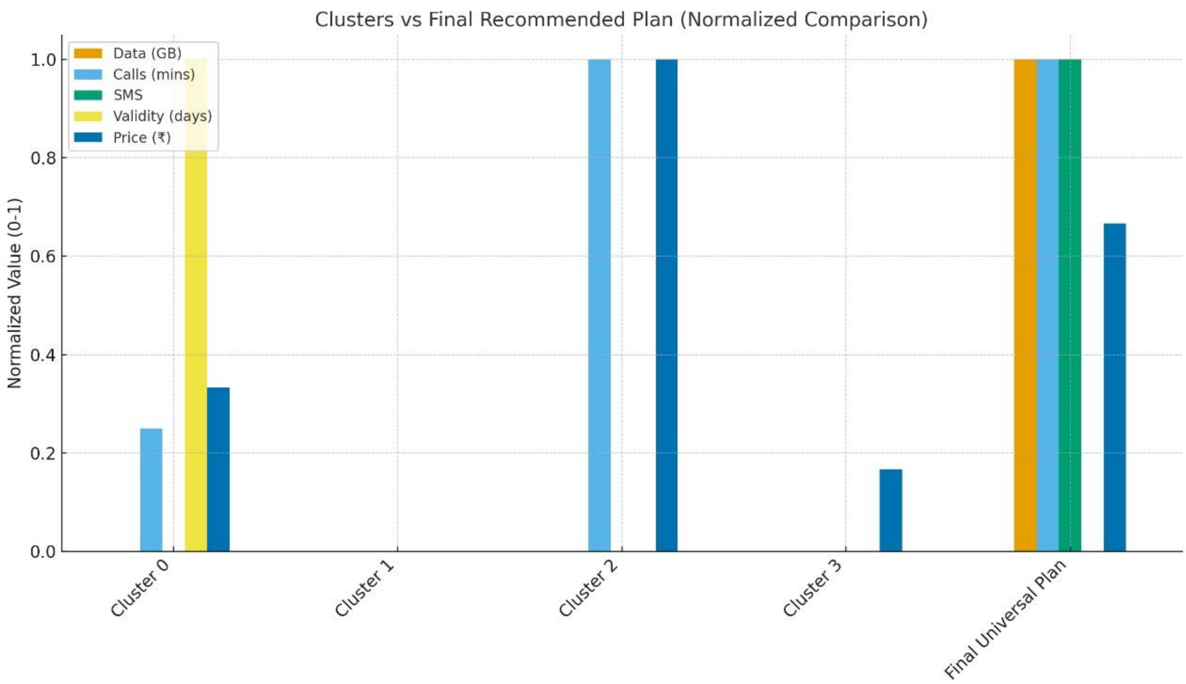
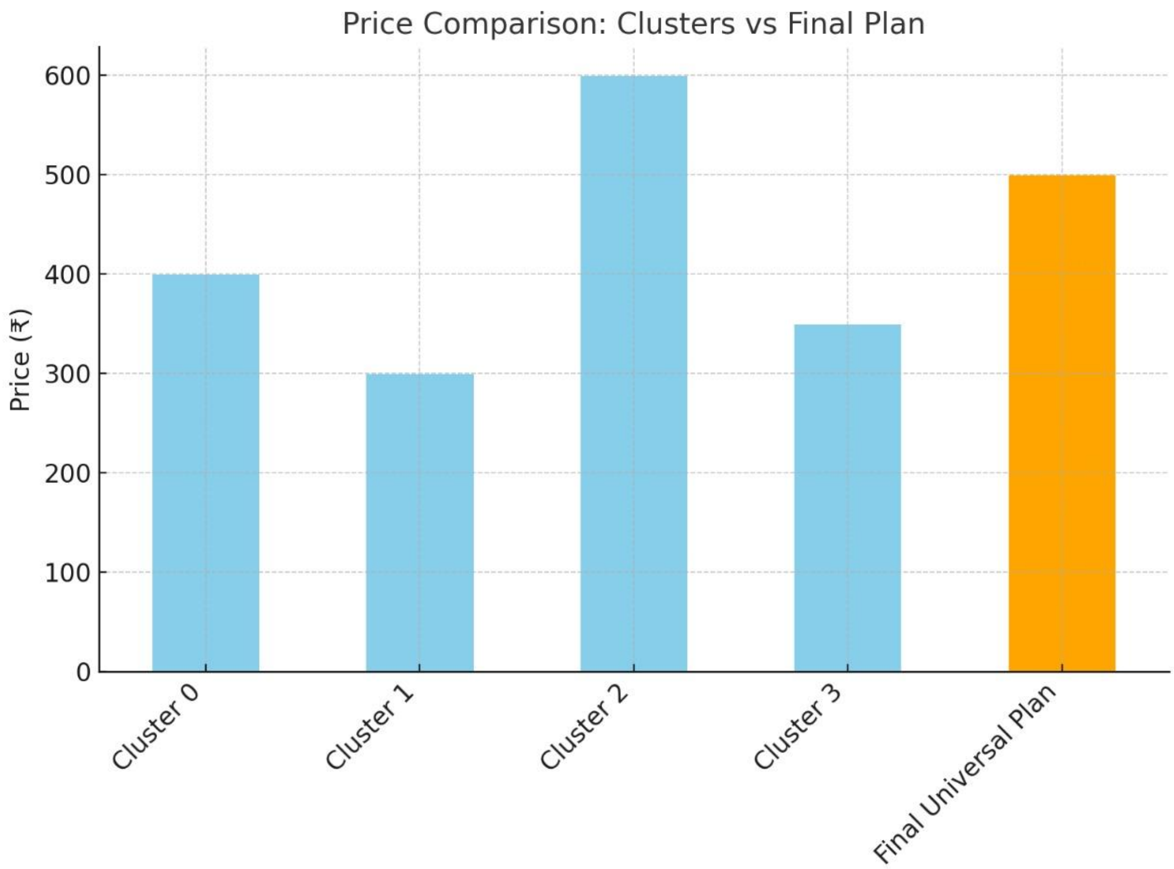


This **bar chart** shows the normalized values (scaled between 0 and 1) of **customer preferences** across different clusters compared with the **Final Universal Plan**.

- **Cluster 0:**
  - Moderate **Data** and **SMS** needs.
  - Low **Calls** and **Validity** requirements.
  - Low **Price** range.
- **Cluster 1:**
  - Minimal contribution across all features (very low requirements).

- **Cluster 2:**
    - High demand for **Calls** and **Validity**.
    - High **Price** tolerance.
    - Very low **Data** and **SMS** needs.
- **Cluster 3:**
    - Negligible requirements across all categories.
- **Final Universal Plan:**
    - Designed as a **balanced combination**:
        - High **Calls** and **Validity** (to cover Cluster 2).
        - Reasonable **Data** and **SMS** (to align with Cluster 0).
        - Moderate **Price**, balancing affordability with features.



Cluster 0: Average price around **₹400**.

Cluster 1: Lower price sensitivity, around **₹300**.

Cluster 2: Willing to spend the most, around **₹600**.

Cluster 3: Moderate price preference, around **₹350**.

Final Universal Plan: Set at **₹500**, highlighted in **orange**.