Understanding and Interpreting Consumer Preferences for Wireless Speakers

Bertha Shipper — August-September 2024

Introduction and Context

This project focuses on analyzing **customer feedback** on wireless speakers to uncover **usage patterns**, preferences, and areas for **product improvement**. Key analytical methods include **clustering** for customer segmentation, **sentiment analysis** to decode feedback, and comprehensive visualizations to highlight trends.

1040

Over 1000 respondents surveyed

18-65

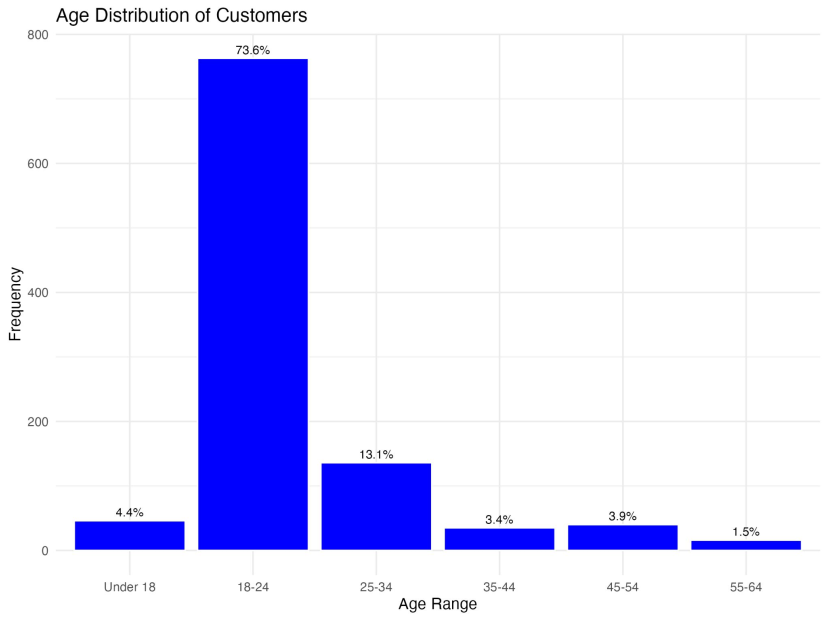
Respondents' age range

20

20 Survey questions, a mix of multiple choice and short answer

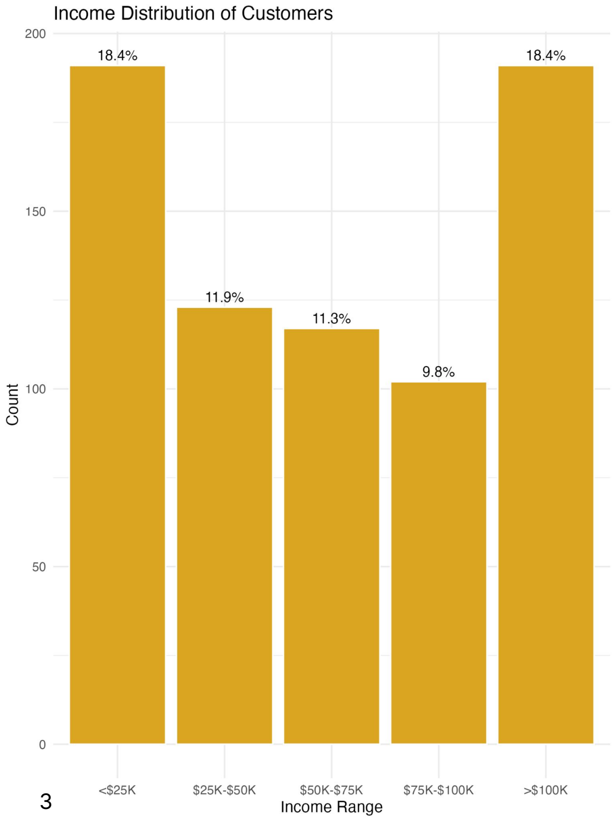
57%

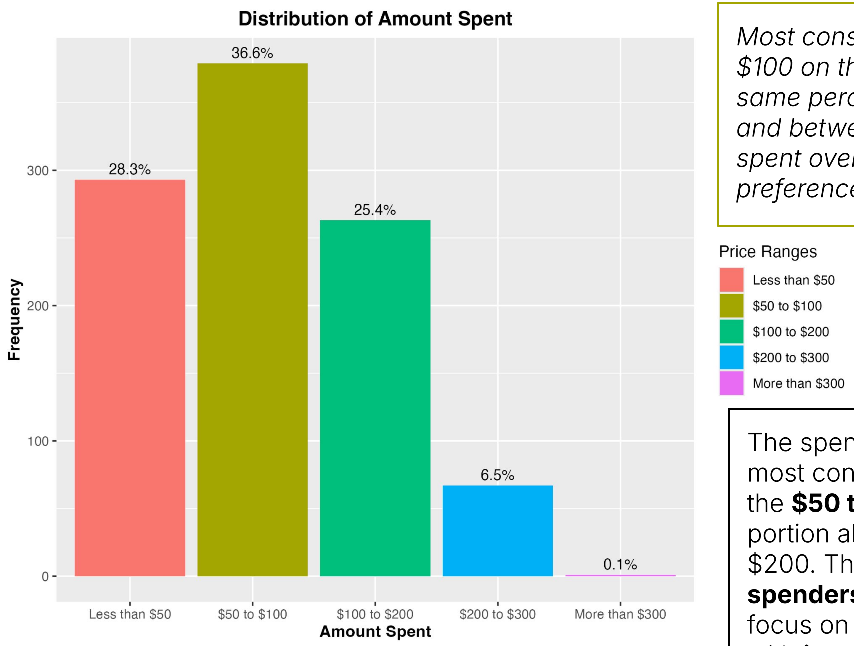
57% of respondents are women



The survey respondents are distributed across various age ranges, with the vast majority being in the 18-25 group, the relevant Gen-Z demographic.

Understanding the *Economy* Behind Purchases





Most consumers spent between $50 and $100 on their speaker, with about the same percent spending less than $50 and between $100 and $200. Very few spent over $200, highlighting a preference for mid-range pricing.

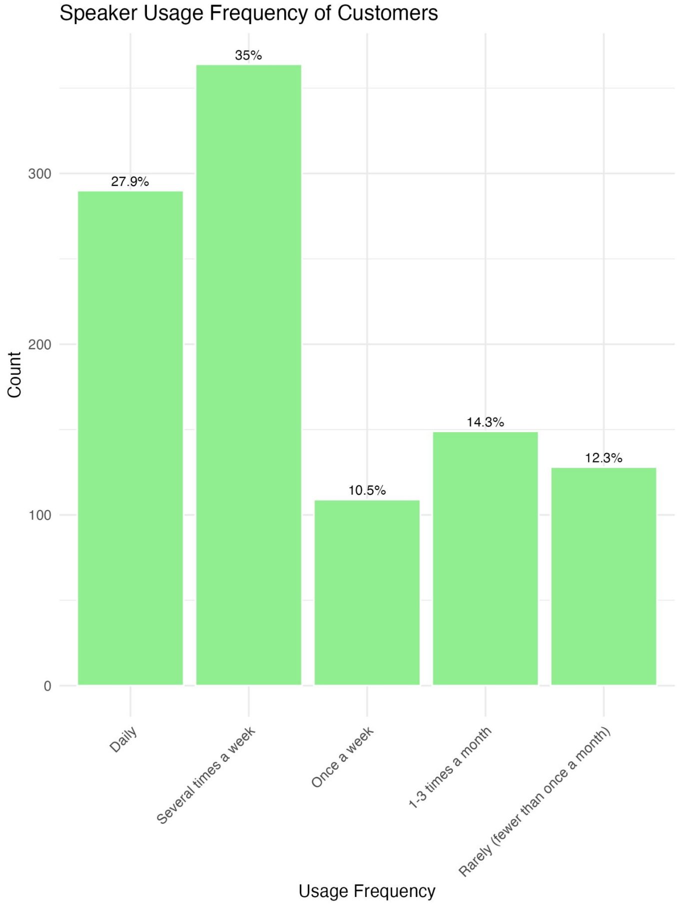
Respondents' incomes vary widely from below $25K to over $100K, with a significant concentration in the lowest and highest income brackets, indicating a skew towards lower income levels.

The spending distribution shows that most consumers purchase speakers in the **$50 to $100 range**, with a significant portion also spending between $100 and $200. The **low percentage of high-end spenders** suggests a strong market focus on **mid-range pricing**. Coupled with **income** distribution skewed towards the lower range, this indicates a **cost-sensitive market** where affordability is key, and mid-range pricing strategies are crucial for capturing the largest customer base.

Daily Use of Wireless Speakers Indicates High Engagement

- ★ Customers use their speakers very frequently; 35% use speakers several times a week.
- ★ **Frequent use** patterns highlight that wireless speakers are an **integral** part of consumers' **daily routines**.

Consistent use indicates a **strong market** for **high-quality**, **durable** products. Brands can capitalize on this engagement by introducing **complementary features** or upgrades that make frequent use more **appealing**, such as enhanced sound quality, longer battery life, or seamless connectivity with other devices.



Majority (35%) of respondents use speakers several times a week, closely followed by 27.9% who use them daily, underscoring high consumer engagement.

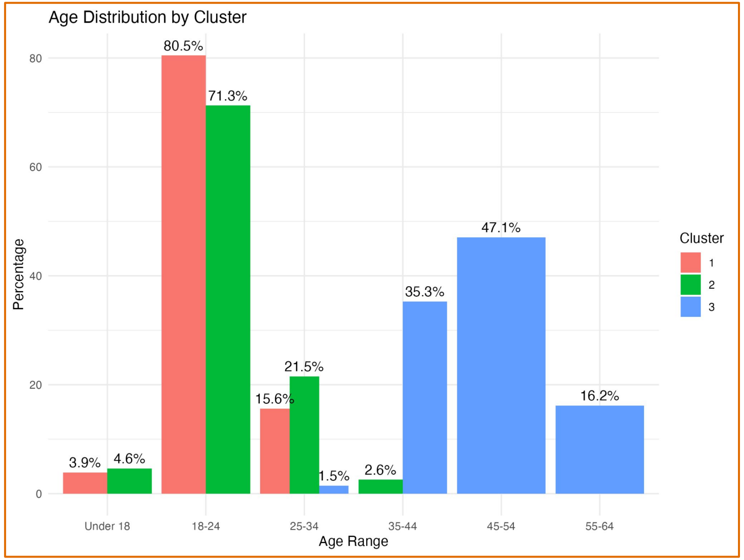
Understanding Customer Clusters: *Demographics*

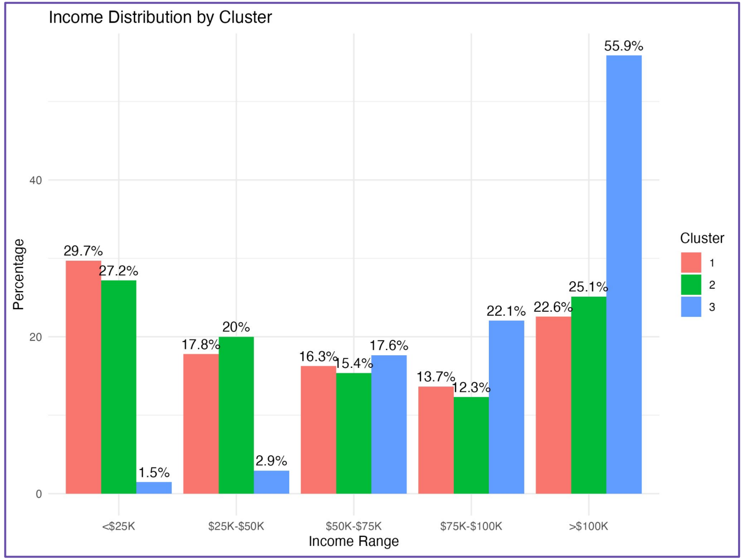
AGE:

Cluster 1:
- 80.5% is Gen-Z, 18-24
- 15.6% is a bit older, 25-34

Cluster 2:
- Similar to Cluster 1 but skewed a bit older, representative of millenials

Cluster 3:
- Mostly Gen X, range from 44-64





INCOME:

Cluster 1:
- Skewed towards lower income bracket, 29.7% in <$25k range

Cluster 2:
- An evenly distributed cluster, with pretty equal percents in all brackets

Cluster 3:
- The wealthiest percent, 55.9% make >$100K, with a combined 95.6% make over $50K

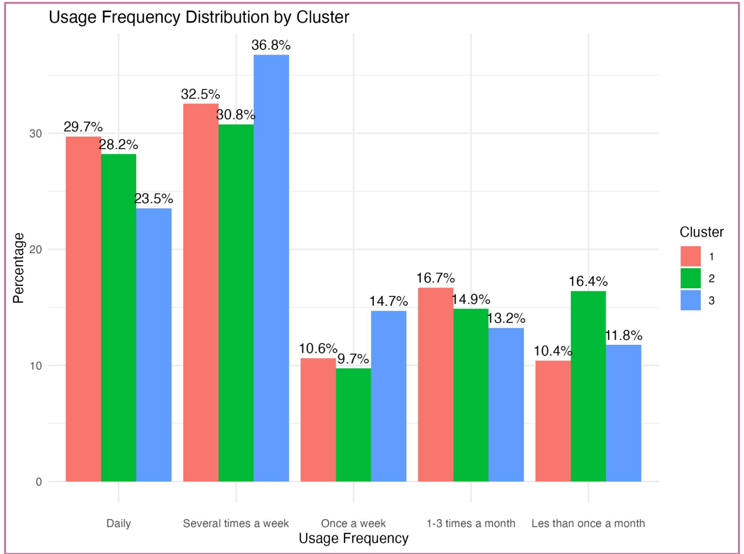
Understanding Customer Clusters: *Speaker Use*

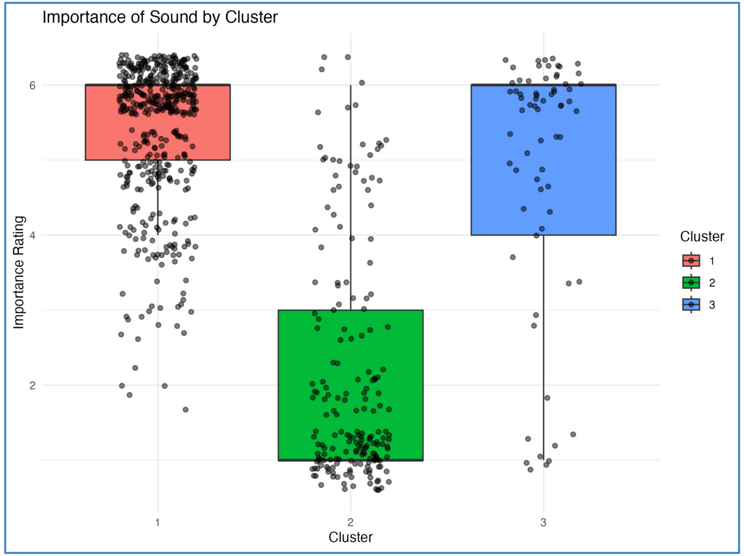
USAGE FREQ:

Cluster 1:
- 62.2% use their speakers either daily or several times weekly

Cluster 2:
- Skewed less frequently, most use more than once weekly

Cluster 3:
- Biggest percent of once a week users





SOUND IMPORTANCE:

Cluster 1:
- Values sound quality overwhelmingly and more than any other cluster

Cluster 2:
- Consistently rates sound quality as less important than other features

Cluster 3:
- Pretty distributed over the rankings of the importance of sound quality

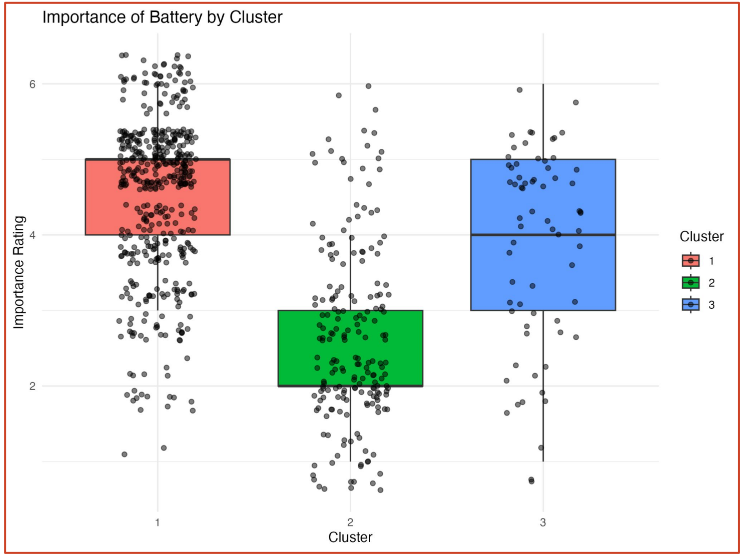
Understanding Customer Clusters: *Values*

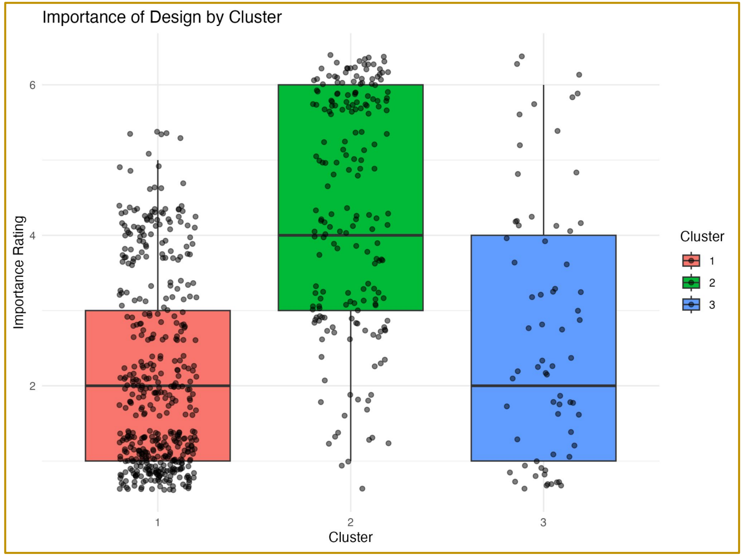
BATTERY IMPORT.:

Cluster 1:
- Concentrated in the high importance ranking of battery

Cluster 2:
- Distributed lower (2-3), values battery less

Cluster 3:
- Evenly distributed across importance ranking





DESIGN IMPORTANCE:

Cluster 1:
- Values design much less than other clusters, most rank as lowest importance

Cluster 2:
- Considers design an important to highly important feature

Cluster 3:
- Most concentrated in lower importance rating of design

Customer Segmentation: *Interpretation*

*This cluster represents **young**, **price-sensitive**, and **performance-focused** users who use their speakers **frequently** and care deeply about **sound quality** and **battery life**. They are likely attracted to products that offer excellent audio performance at an **affordable price**, and they might not prioritize premium aesthetics.*

Cluster 1: "Sound Enthusiasts" (Gen Z, Low-Income, Frequent Users)

- 80.5% Gen Z (18-24 years old). This is a very **young** cluster, primarily composed of **digital natives**.
- 29.7% earn less than $25K, which shows a skew towards the lower-income bracket. This might include **students** or **early-career** professionals with **limited purchasing power**.
- Over half use their speakers daily or several times weekly. They are **heavy users** of the product, indicating high engagement.
- This cluster overwhelmingly values sound quality above all other features. Given their frequent use of the product, it makes sense that they are focused on the **listening experience**. They also rate battery life as highly important, which could be linked to their frequent use — **reliable battery performance** is critical to them.
- Design matters the least to this group, possibly because they prioritize performance (sound and battery) over aesthetics.

Customer Segmentation: *Interpretation*

*This cluster represents **balanced buyers**, likely **Millennials** who care about both **style** and **functionality**. They may not use their speakers as frequently as Cluster 1 but are attracted to **well-designed** products. They value a good balance between **performance and aesthetics**, and they are distributed across various income levels, making them a flexible target for a wide range of products.*

Cluster 2: "Balanced Buyers" (Millennials, Even Income, Moderate Usage)

- This group is slightly older, skewing towards **Millennials**. Their age distribution is broader, encompassing more **young professionals**.
- Evenly distributed across all income brackets, meaning they could range from entry-level professionals to mid-career individuals. This suggests a **diverse socioeconomic background**.
- They use their speakers more than once weekly, but not as frequently as Cluster 1. This implies **moderate engagement** with the product.
- They rate sound quality as less important compared to other features. While sound quality is still relevant, this group may be more focused on other aspects of the product.
- They place less value on battery life, indicating they might **not rely on the product** for **long, uninterrupted sessions** or in situations where battery performance is critical.
- **Design** is a key factor for them, suggesting that they are **drawn to aesthetically appealing products** and are willing to trade off performance for looks.

Customer Segmentation: *Interpretation*

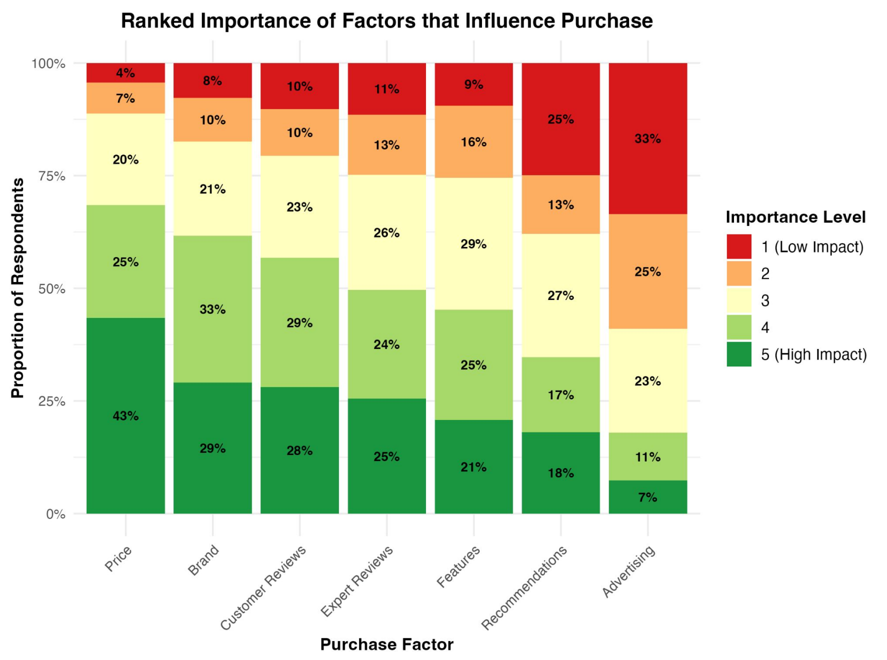
*Cluster 3 consists of **older**, **wealthier** users who use their speakers **less frequently** and are more concerned with **performance** than aesthetics. They likely value **premium products** with good overall quality, but their opinions on specific features like sound, battery, and design are more distributed. They may expect **high performance** from **all aspects** of the product and focus more on **practicality** than style.*

Cluster 3: "Design-Conscious Wealthy Users" (Gen X, High-Income, Weekly Users)

- Mostly **Gen X** (44-64 years old), indicating an **older demographic**. They likely have **established lifestyles** and preferences.
- 55.9% make **over $100K**, with nearly all (95.6%) earning more than $50K. This group is clearly the wealthiest, with **significant purchasing power**.
- They primarily use their speakers once a week, indicating **lower engagement** compared to the other clusters. They may use their speakers in more **specific situations** (e.g., social events, occasional use).
- Their sound quality ratings are spread out across the spectrum, showing a diversity of opinions on how critical sound is to them.
- Their importance ratings for battery are evenly distributed, meaning that opinions vary. Battery life might be **situationally important** but is not a primary concern for everyone.
- Design ranks lower in importance for most of this group, possibly indicating that **functionality and quality** are more important than appearance, or they may expect all products to meet a baseline level of aesthetic appeal.

Price and Brand Reputation Drive Purchase Decisions

- ★ **Price** dominates decision-making. 43% of respondents rate price as a highly impactful factor in their purchasing decisions. This signals that **competitive pricing strategies** are essential; offering **promotions**, **bundles**, or affordable product ranges can capture **cost-sensitive** customers.
- ★ 29% of respondents rate brand as an important factor, highlighting the value of strong **brand identity** and **customer loyalty**.
- ★ A significant 33% of respondents say advertising has the lowest impact on their purchasing decisions. Shifting focus from traditional advertising to more **authentic marketing approaches**, such as influencer partnerships and **user-generated content**, may be more effective in **engaging consumers**.



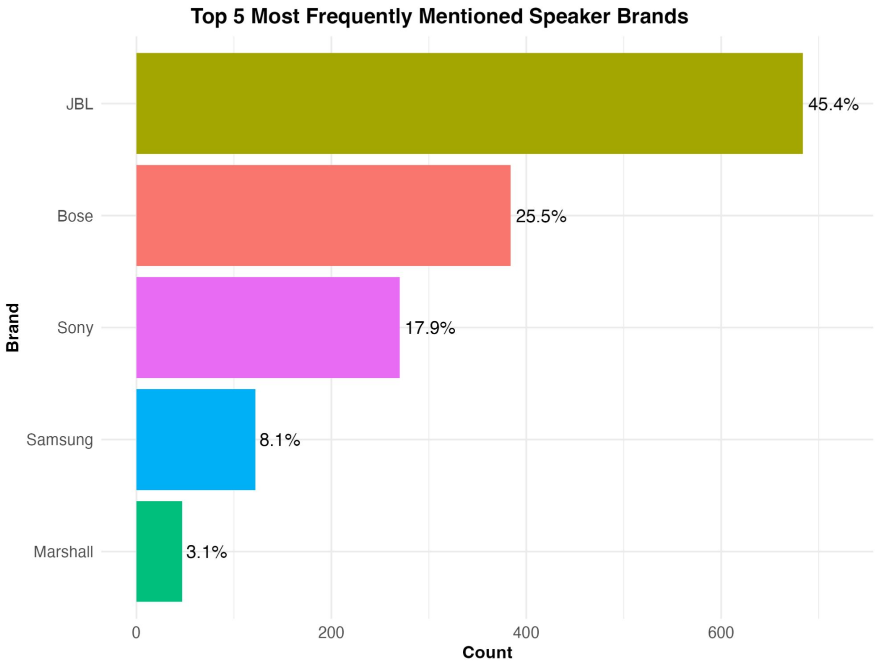
43% of respondents rate price as a factor that highly impacts their purchasing decision, with a following 29% that rate the brand as an impactful factor. A high 33% say that advertising has the lowest impact on their purchasing decision.

JBL and Bose Pose Largest Market Competition

★ **JBL** dominates, indicating a strong **market presence** and high consumer preference. Other brands represent smaller, yet notable competitors.

★ Indicates robust **brand loyalty** and effective market strategies. Beats needs to address these dominant brands to enhance its **market position** and **appeal**.

Beats needs to **differentiate** itself more clearly to **compete** with these top brands. Bose should focus on unique selling points to **stand out** from JBL and Bose through increasing marketing efforts to target specific **consumer segments** where JBL and Bose are currently dominant.



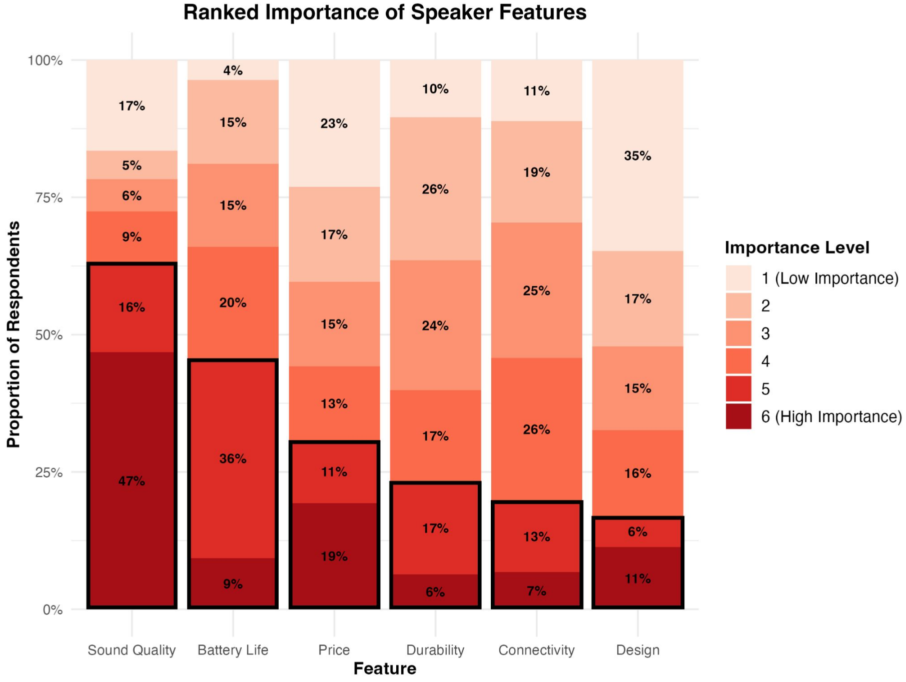
JBL leads with 45% of the mentions, followed by Bose at 25.5%. These brands represent the largest competitors to Beats in the wireless speaker market. The percentages indicate the relative market presence of each brand, highlighting JBL and Bose as dominant players in the consumer preference landscape.

Sound Quality and Battery Life Surface as Top Priorities

★ Features like sound quality and battery life consistently had high proportions of ratings at the highest importance levels (5 and 6), indicating that these aspects are **critically valued** by users.

★ While aesthetic aspects are still relevant, they are secondary to the **core functionalities** that impact the user's **direct experience** with the speakers.

Users prioritize **practical performance** and **longevity** over aesthetic and **peripheral features**. Brands should focus on enhancing sound quality and battery life in product development, as well as **highlighting** the specialty of these features in **marketing** campaigns to align with **consumer priorities**.

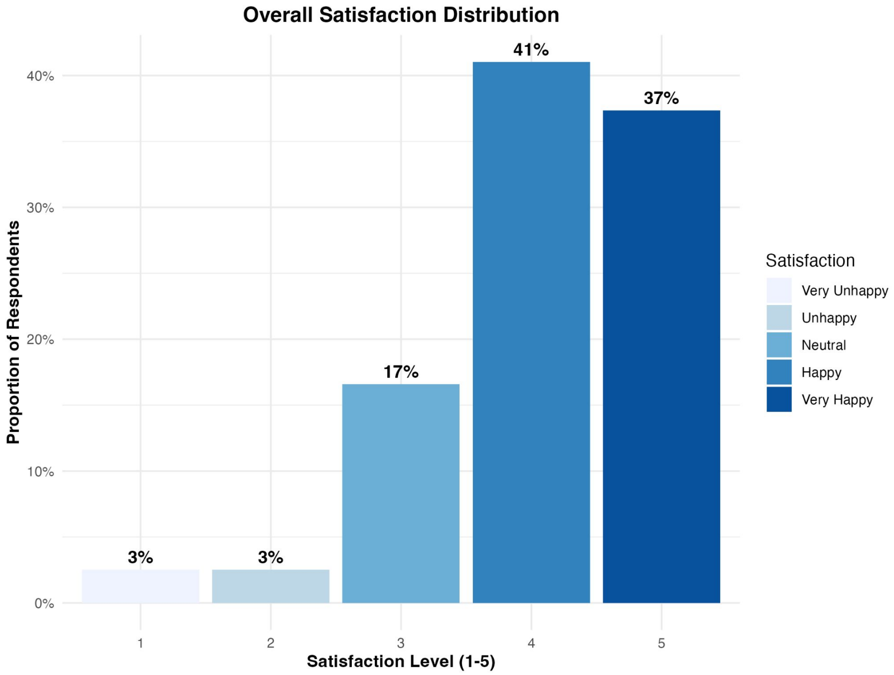


Sound Quality is the most critical feature, with 63% (over half) of respondents rating it as 5 or 6, indicating its overwhelming importance. Battery Life follows, with 45% of respondents also rating it as 5 or 6. Other features such as Design, Durability, Price, and Connectivity have lower proportions of high importance ratings, reflecting varying degrees of emphasis from users.

High Satisfaction Levels Among Wireless Speaker Users

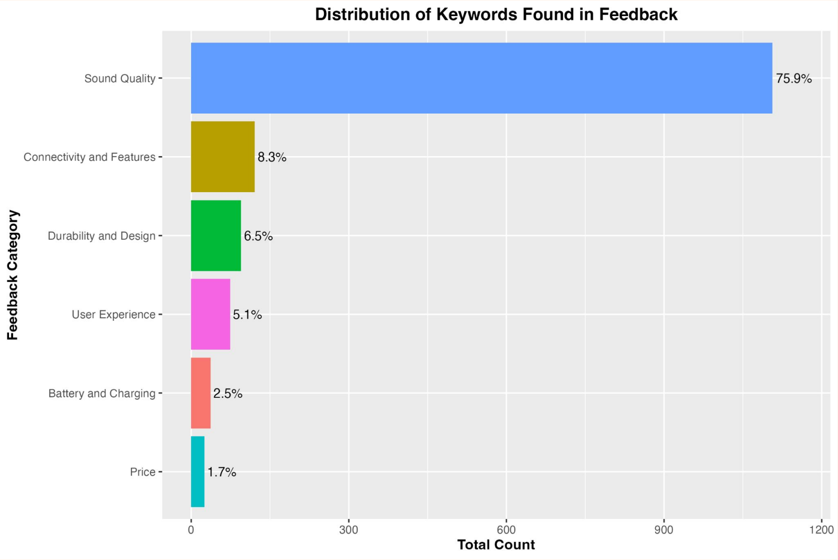
- ★ The 78% combined satisfaction rate highlights the product's **strong reception**. Use this **positive sentiment** in marketing to attract new customers and build **brand loyalty**.
- ★ Engaging with happy customers through **exclusive deals** or updates to satisfied customers will foster loyalty and encourage **repeat business**.

Beats should maintain the **high product quality** and address any minor issues promptly. Improving **customer support** and product features can help reduce dissatisfaction and **boost overall satisfaction**.



The majority of respondents (41%) are happy with their speakers, followed closely by 37% who are very happy. A smaller group, 17%, feel neutral, while only 3% of respondents are either unhappy or very unhappy with their speakers.

Consumers Seek Enhanced Sound Quality and Features



*Sentiment analysis of feedback reveals that a significant majority, 75.9%, focuses on **sound quality**. **Connectivity** and **features** account for 8.3%, while **durability** and **design** contribute 6.5% each. This highlights the predominant customer concern with sound quality over other aspects.*

*"Even when played at higher volumes, the sound remains **undistorted**, which is suitable for outdoor or in a gathering setting."*

*"I just love the **convenience** of the being able to easily access my headphones right from my pocket & **clear out noise**."*

*"My favorite one is my **waterproof** one... it also has good volume **settings** and sound **quality**."*

*"Very loud, **dies quickly**."*

*"It gets the job done but it's definitely **not loud enough** and slightly **distorts** the sound."*

*"It is a bit too much bass and it **drowns out** the high and mid ends."*

*"The quality over the years gotten **worse**."*

Customers commend the speaker's exceptional **sound quality**, **clarity** across frequencies, **performance** at high volumes, **convenience**, and features like waterproofing, highlighting its strong audio performance and **user-centric design**.

Customers are dissatisfied with the speaker's performance, citing issues such as **insufficient volume**, quick **battery depletion**, sound **distortion**, overpowering bass, and a **decline in quality** over time. These concerns highlight areas for improvement in audio clarity, battery life, and overall durability.