

WHAT DRIVES HIGH-PERFORMING PRODUCTS?

Product + Consumer Review Analytics Case Study



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Data Set: 2023 Sephora Products + 1M+ Customer Reviews (Kaggle)

THE CHALLENGE

Sephora offers thousands of products across skincare, makeup, and fragrance.

Key Question:

What drives product success, and what do customers consistently praise or criticize?

Leadership teams need to understand:

- What differentiates “winning products”
- Where categories produce the most success
- How review feedback can guide product and merchandising strategy

DATA & METHODOLOGY

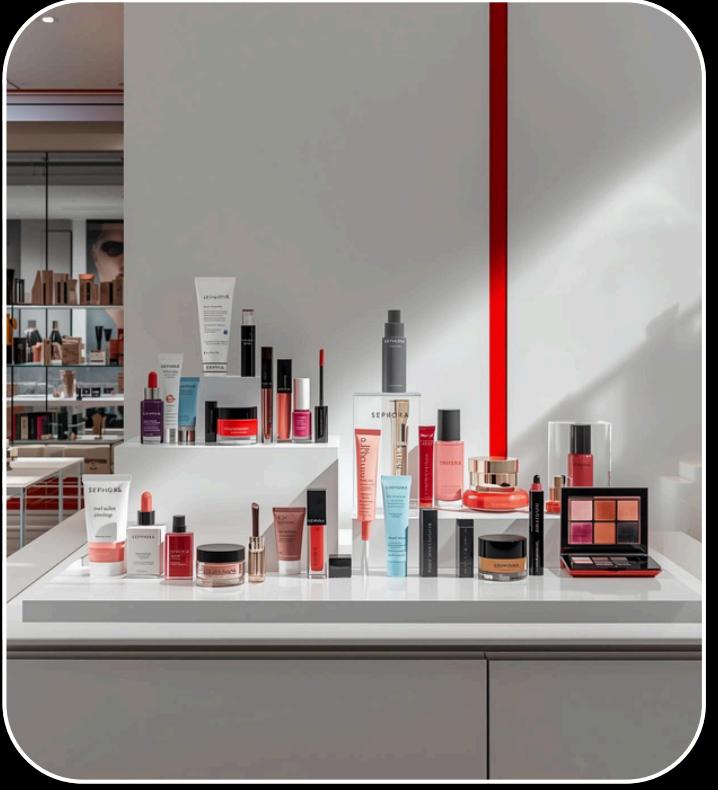
This project combines product metadata [price, category, brand, ratings] and customer voice through 1.09M written reviews.

Analytical steps:

1. Defined a High Performer product segment [about 15% of catalog]
2. Compared winners vs non-winners across pricing + satisfaction
3. Benchmarked brand success using tier-based segmentation
4. Applied NLP phrase mining to extract key review drivers

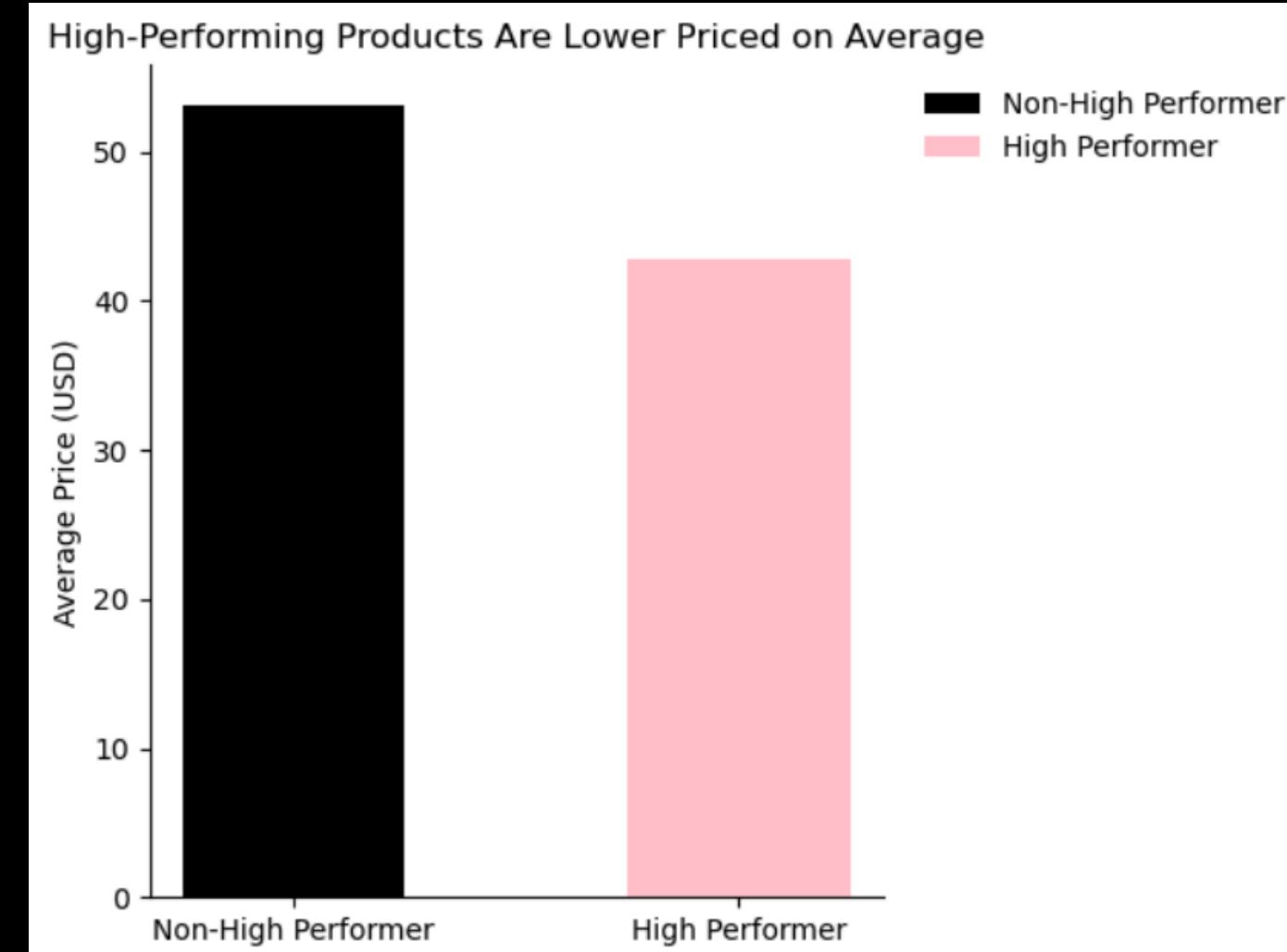


HIGH PERFORMERS ARE NOT PREMIUM PRICED



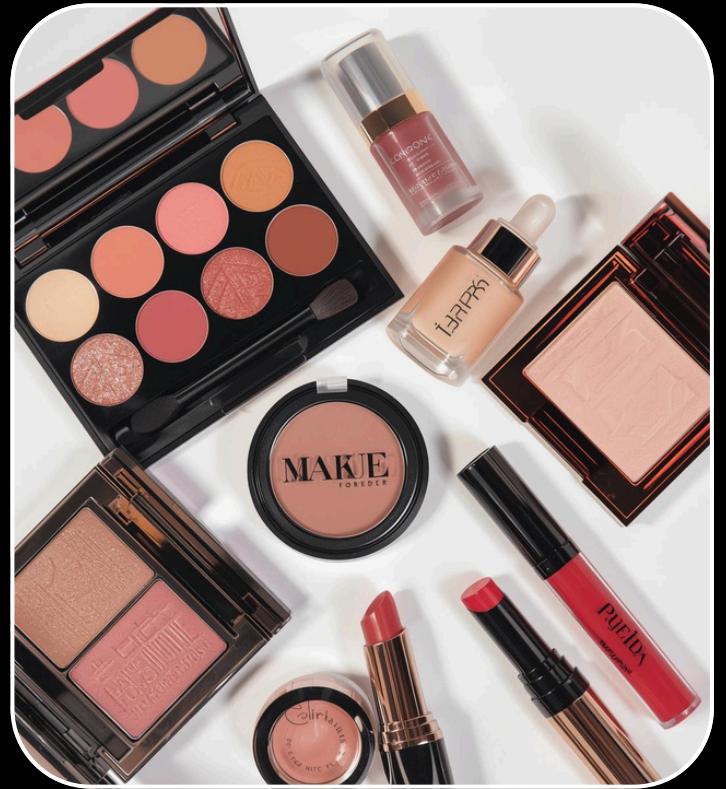
Finding:

Top-performing products were often lower priced on average [\$42 avg], suggesting success is driven more by perceived value and results than luxury positioning.



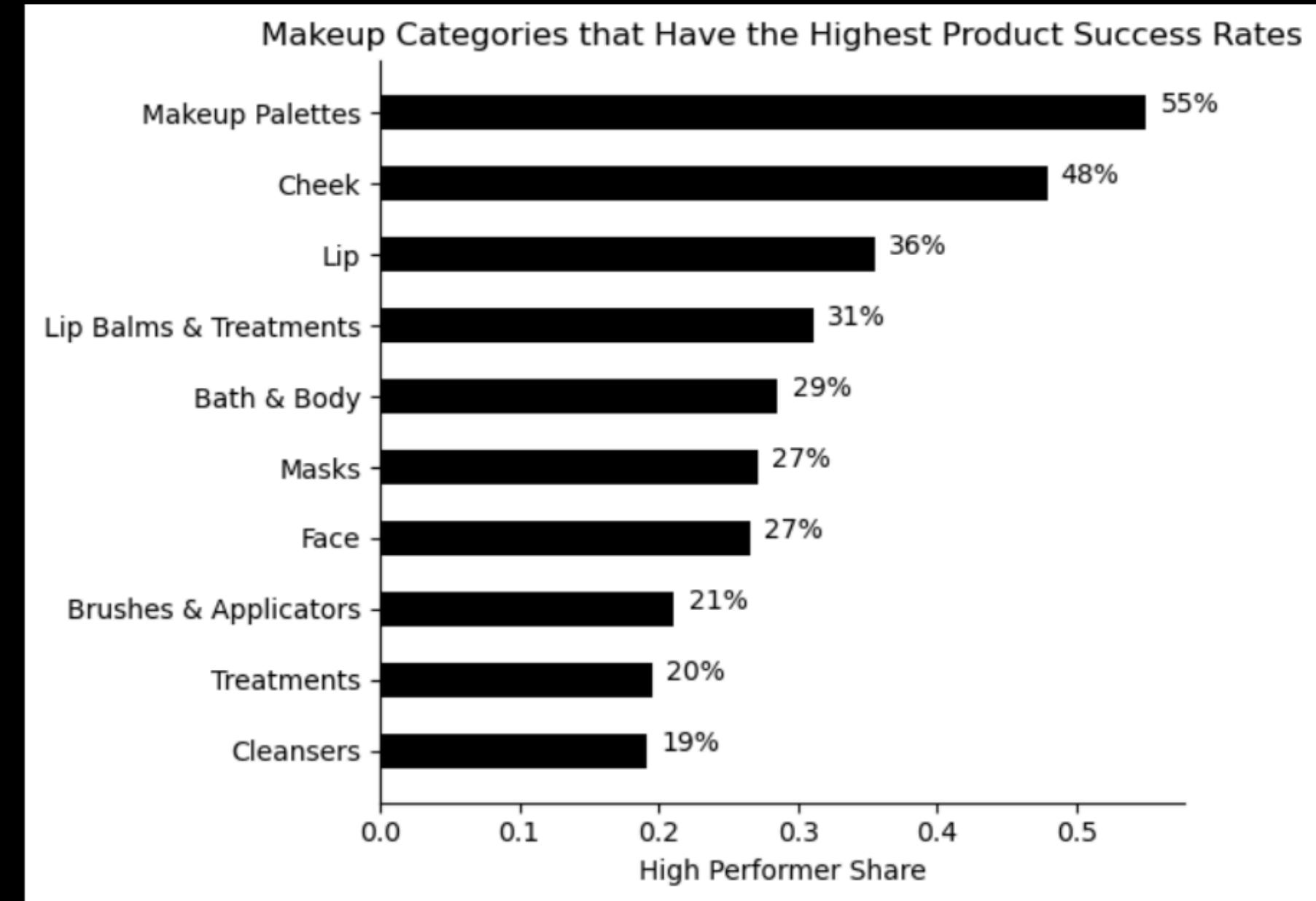
Sephora growth is powered by products that deliver strong outcomes at accessible price points.

Winners Cluster in Core Categories



Finding:

- Face and Lip products contain the most winners by volume
- Palettes and Cheek products show the highest “success rates” [>45%]



Sephora should prioritize categories with high success probability, not just high volume

BRAND SUCCESS DEPENDS ON CATALOG SIZE

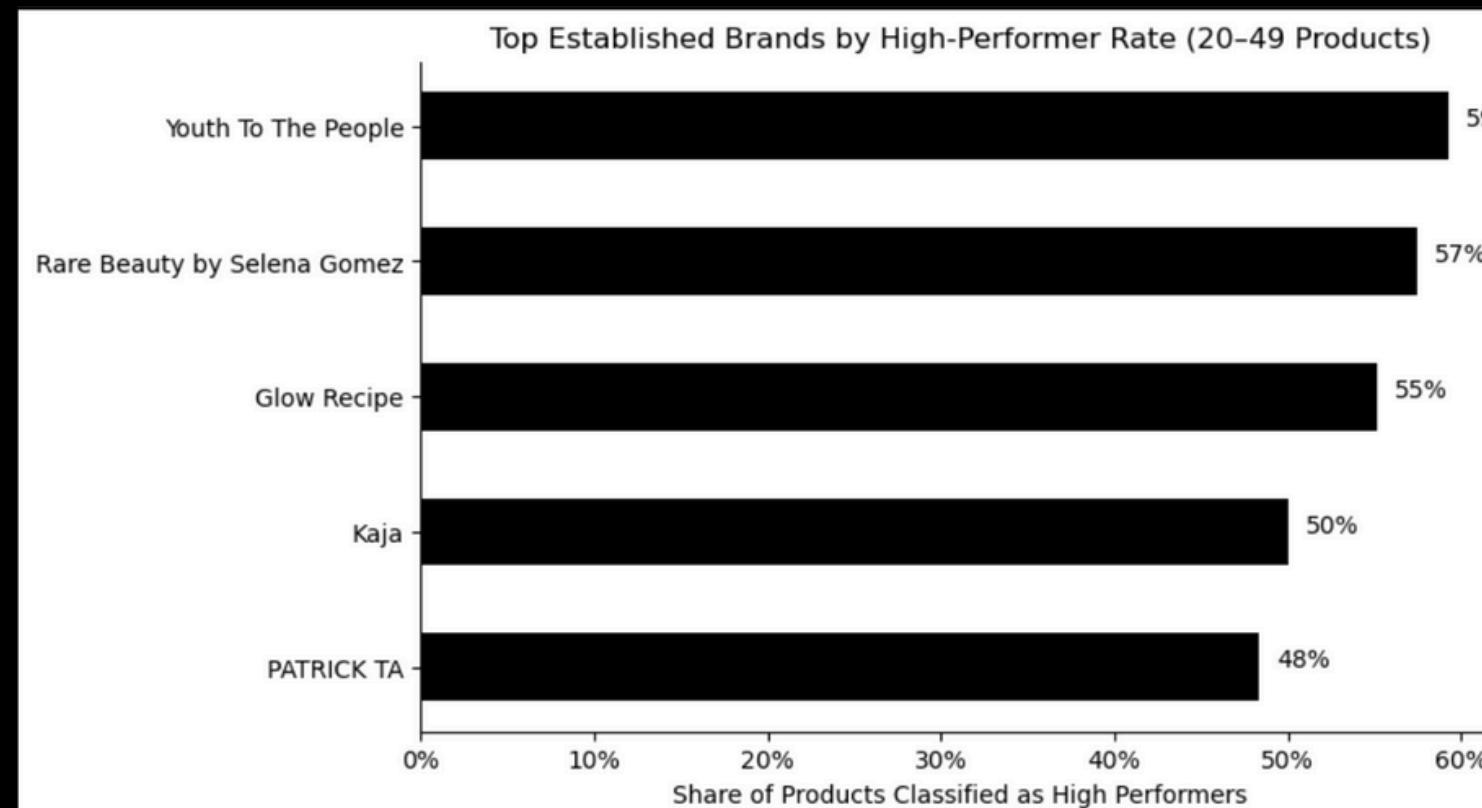
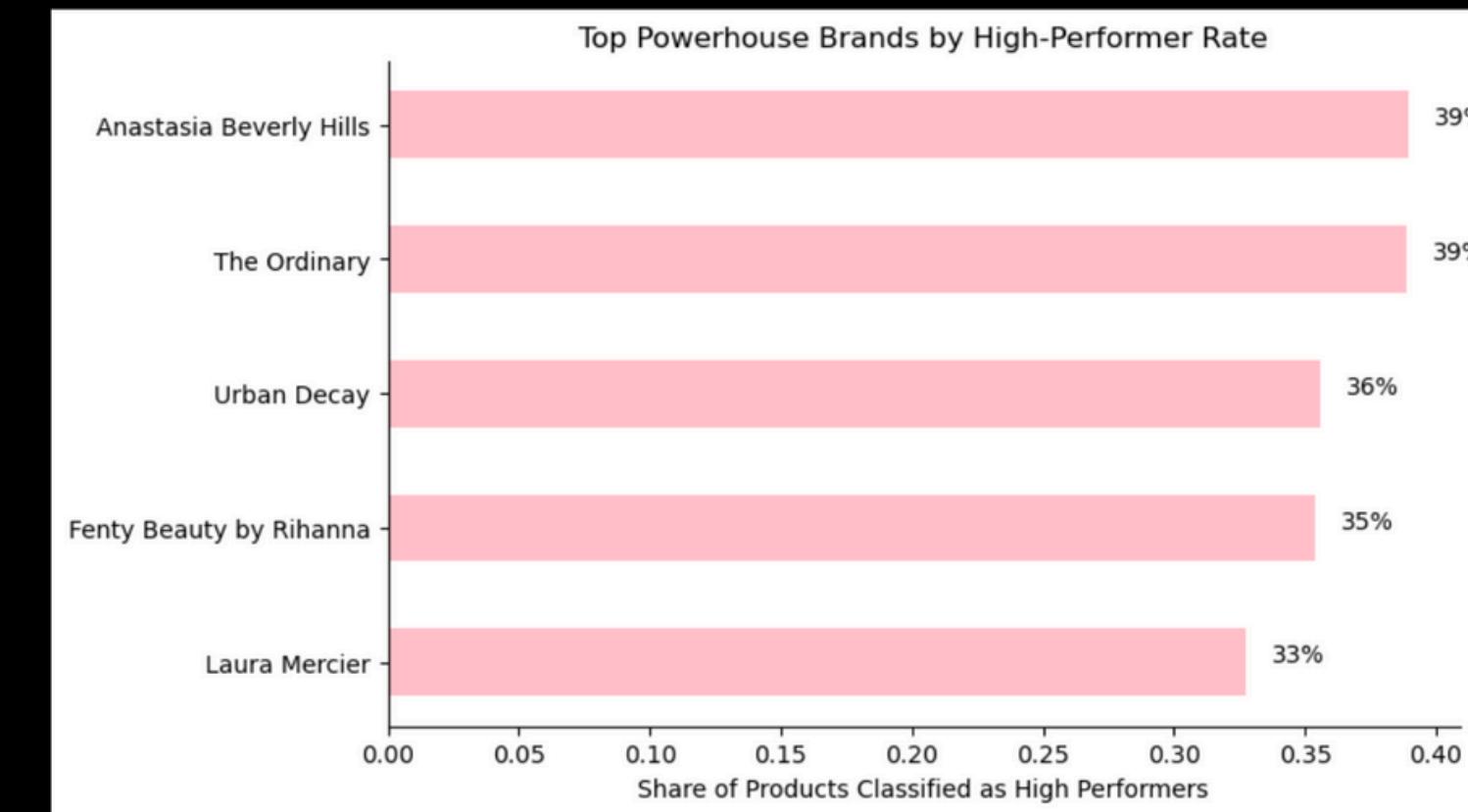
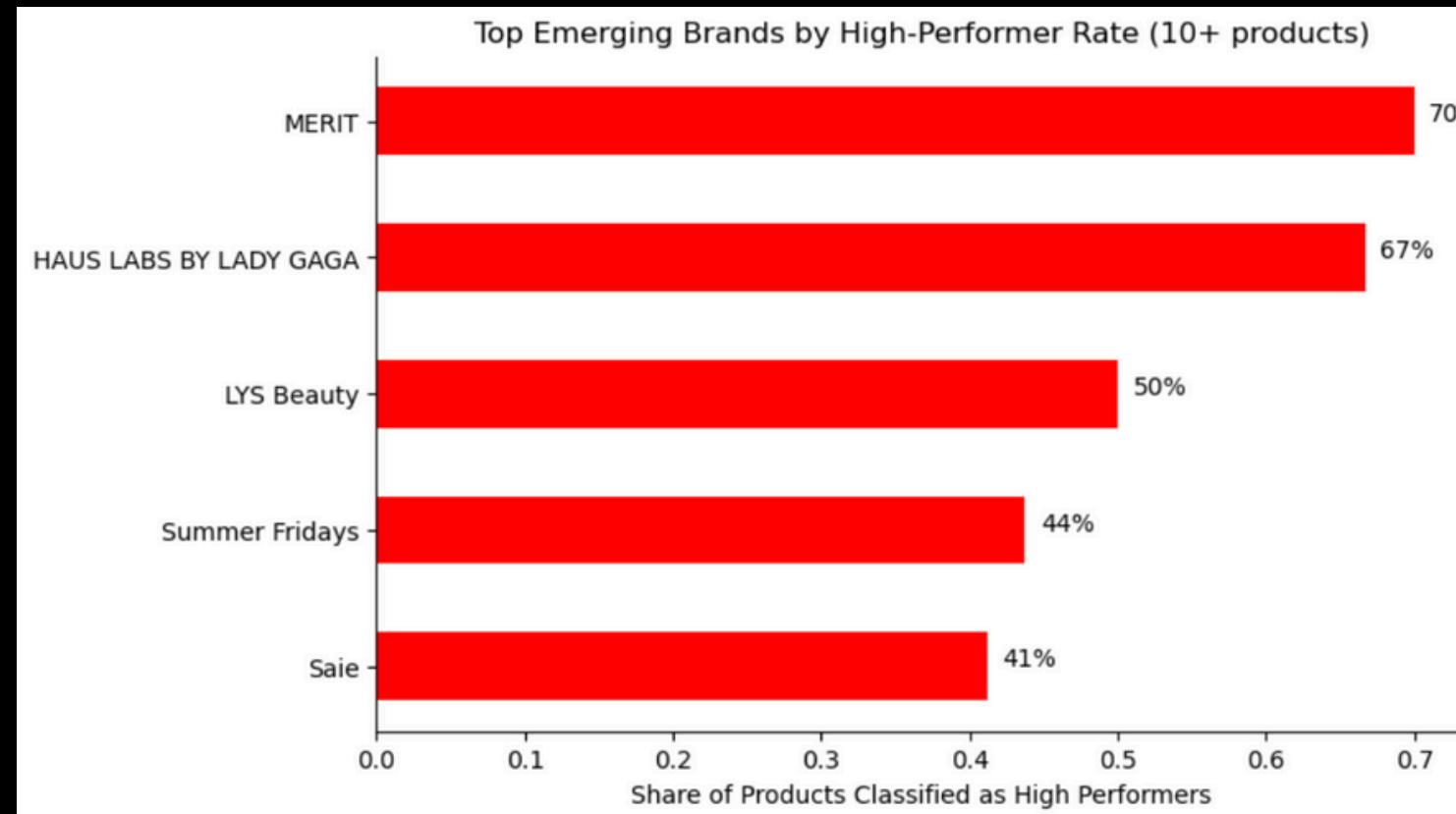
To ensure fair comparison, brands were segmented into tiers:

1. Emerging [10-19 products]
2. Established [20-49 products]
3. Powerhouse [50+ products]



Finding:

Different brands lead at different stages of scale.



Breakout success is concentrated among emerging brands, while established brands offer the strongest foundation for long-term partnership growth.

RECOMMENDATIONS FOR SEPHORA PRODUCT STRATEGY



Prioritize sensitive-skin-safe innovation

[largest recurring consumer segment]



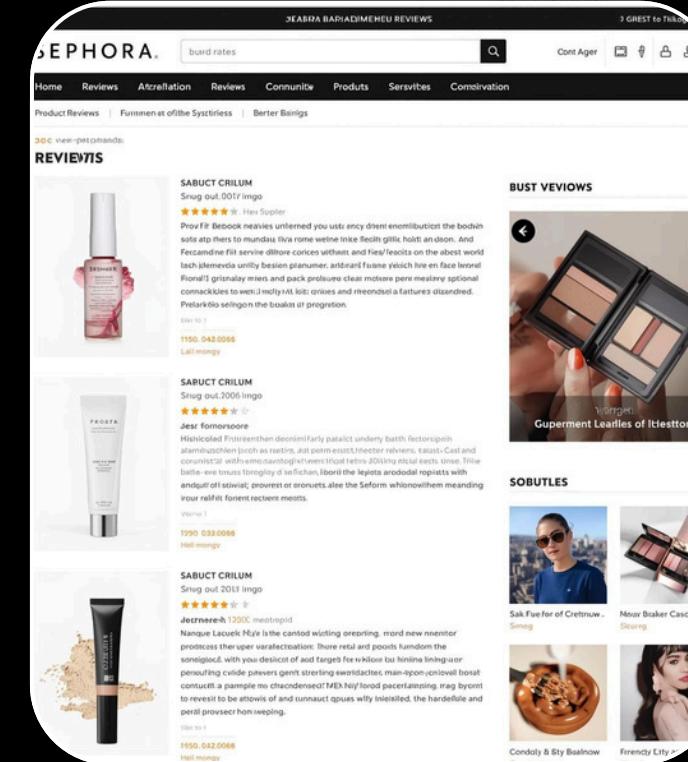
Use tier-based brand investment strategy

emerging = nurture, Established = scale, Powerhouse = anchor



Reduce sensory friction

Address smell concerns and PF white case issues



Integrate review-theme monitoring into merchandising

Use recurring complaint drivers as early warning signals

Combining product metrics with customer voice provides a scalable framework for driving satisfaction, retention, and category growth.



SEPHORA