

BOOSTING PRODUCT GROWTH

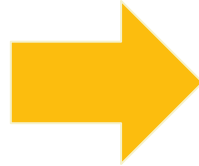
Dianne Batya

<https://github.com/diannebatya/isba4715-project.git>

BUSINESS OWNERS

can make more informed decisions

1. What's trending?
2. What type of content?
3. What are the engagement metrics?
4. Who to feature?
5. What Products?




1. Search Keyword/Product and gather information
2. Get customer ratings and analyze monthly trends





Product analysis for decision making!

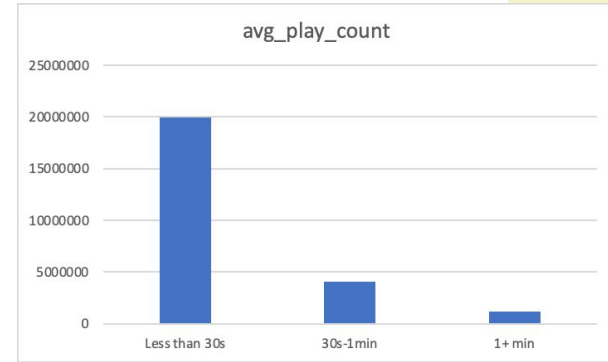
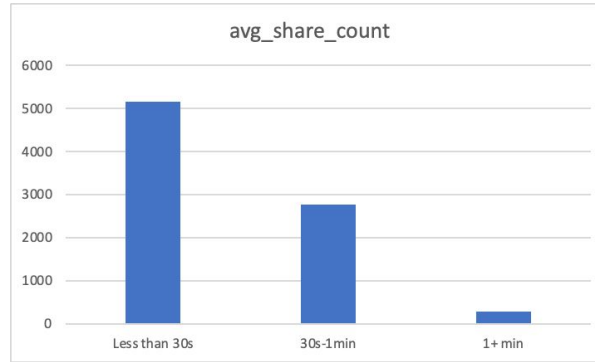
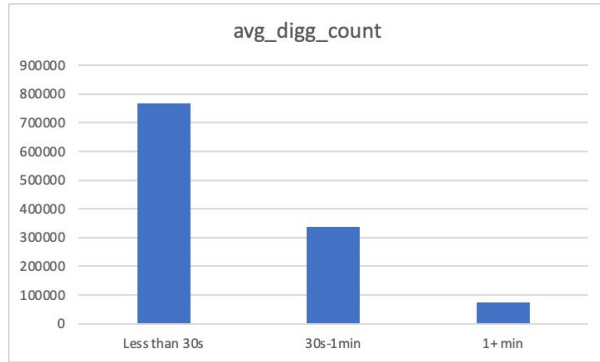
The Data Science team of the Tech and Product department at TikTok USDS is responsible for building high-quality and timely data solutions for the business as the single source of truth and for building easy-to-use and scalable data products to support business growth. You will have the exciting opportunity to:

- Conduct product analytics to provide product recommendations that drive product growth and nurture a healthy ecosystem
 - Deep dive into data sources, understand their limitations, and communicate complex data insights through exploratory analysis and research to suggest improvement
 - Design and monitor core metrics; understand root causes of metric movements
 - Design and build advanced analytical solutions and models to deliver superior business outcomes
- 

Unofficial TikTok API **TikAPI**

1. Enter word/product as one of the params
2. Get trending videos
3. Take useful information
4. Create insights

SHORTER VIDEOS → higher engagement

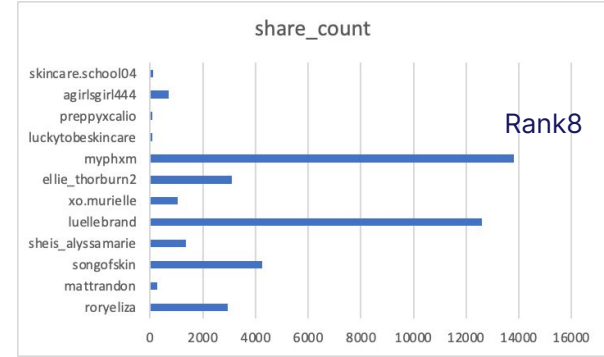
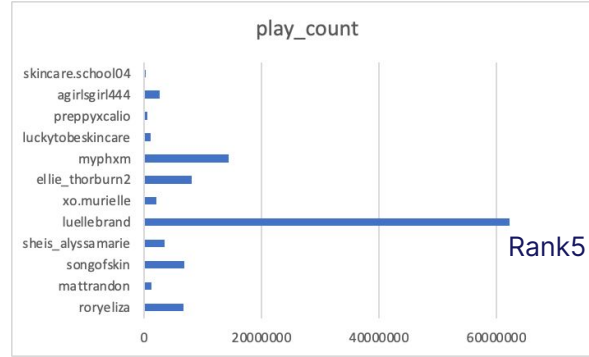
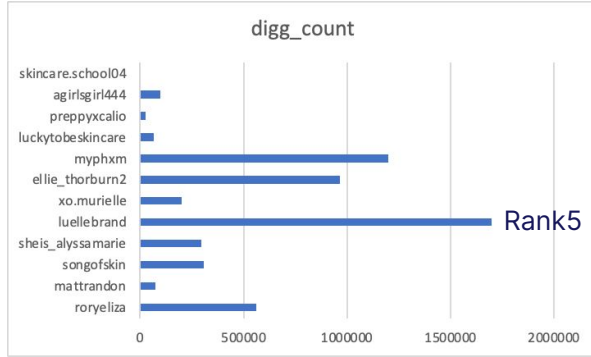


Question: What are the average engagement metrics per video duration category?

Recommendation: Make shorter videos to sell products or feature products

Prediction: Higher engagement which can lead to higher visibility and conversions

Engagement rate > Follower Count



Question: Does a higher number of followers correlate with higher engagement metrics on videos produced by authors?

Recommendation: Feature your products with users that have high engagement rate over follower count, such as 'luellebrand'

Prediction: More product engagement and increased conversions

BLUME



A Shopify Page of a Skincare Brand

1. Went to the product Catalog to scrape product information
2. Use Order Data (made my own dataset to support and demo) to find trends

Sets, Bundles & Kit: High Rating Count

Product Name	Rating	Rating Count	Rating Count Rank
Blume Babies: Travel Size Best Sellers	4.4524519	5037	1
Clear Skin Kit: Acne Essentials	4.4449357	4976	2
Treat & Hydrate Kit	4.442032	4882	3
Acne Treat & Fade Bundle	4.4365063	4843	4
Meltdown Acne Oil	4.4365063	4843	4
In the Clear	4.4365063	4843	4
The Glass Skin Set	4.4365063	4843	4
Daydreamer Face Wash	4.6133109	1187	8

Question: Which products tend to have higher rating count?

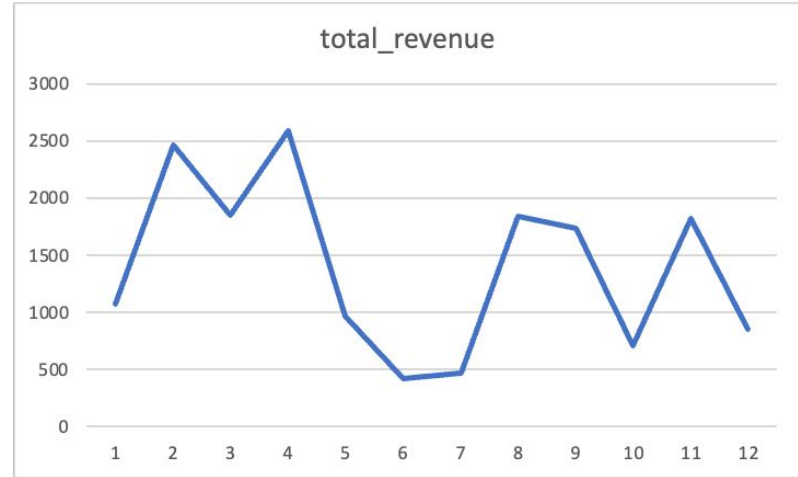
Recommendation: Make travel size kits to attract customers

Prediction: More revenue and higher customer satisfaction



April has the highest products sold & revenue

month	num_products_sold	total_sales	total_revenue
1	6	34	1070
2	5	66	2468
3	4	50	1846
4	6	52	2588
5	3	22	964
6	2	10	418
7	3	18	468
8	4	46	1838
9	4	52	1734
10	2	24	712
11	4	50	1822
12	3	30	852



Question: What are the monthly trends for 2023?

Recommendation: Investigate marketing strategies during April and implement it

Prediction: Increase in sales and higher revenue

1. Engagement boosts product growth
2. Shorter videos are more effective
3. Bundles, Kit or Sets are more appealing
4. Understanding Trends is important to know market wants

