Apple Store Data Analysis Mobile App.

Here is where your presentation begins

Apple App Store Analysis: Analyse Apple App Store data to uncover trends and insights for app success.

Key Findings:

- Top categories: Games, Entertainment, Education, Social Networking, Photo & Video.
- User ratings: Mean 3.52, majority above 3.5.
- Market share: Games, Entertainment, Education, Utilities, Business, Productivity, Lifestyle.

Recommendations:

- Focus on popular categories for growth and Longer descriptions for higher ratings.
- Improve lower-rated categories.
- Broad language support for higher ratings and Optimize user experience and marketing.

Conclusion:

- Understanding app trends, user ratings, and market demand are vital for app success.
- App categories like Games, Entertainment, Education, and Utilities offer potential for growth.
- Success relies on factors beyond genre, such as user experience, features, and marketing efforts.

Project link: click on the link to access the work

Introduction: Understanding Trends and Insights in the iOS App Market

Introduction:	• Mobile dominance is increasing, making app visibility crucial. • Mobile app analytics drives growth and user retention.
Objective:	Analyse Apple App Store data for insights and optimization
Data Set:	Contains 7200+ detailed entries of Apple iOS mobile apps.
Audience:	App developers, marketers, and stakeholders
Benefits of Analysis:	• Identify popular genres and market trends. • Understand user preferences and ratings. • Optimize visibility, pricing, and descriptions.
Conclusion:	Data-driven decisions lead to app success.

Engage with the findings, insights, and recommendations presented to unlock app success.

Prepare: Create Combined Description Table

Query - Create Combined Description Table This query creates a new table called "applestore_description_combined" by combining data from four different tables: appleStore_description1, appleStore_description2, appleStore_description3, and appleStore_description4.

```
create TABLE
applestore_description_combined AS select
* from appleStore_description1 UNION
ALL select * from appleStore_description2
UNION ALL select * from
appleStore_description3 UNION ALL
select * from appleStore_description4
```

EXPLORATORY DATA ANALYSIS

```
--- applestore_description_combined
select * from applestore_description_combined

----AppleStore
select * from AppleStore
```

Missing Values in Key Fields

These queries count the number of rows with missing values in key fields such as "track_name," "user_rating," and "prime_genre" in the AppleStore table and the combined description table. It helps identify any missing data that may need to be addressed.

```
-- AppleStore

select count(*) as MissingVALUES
from AppleStore
where track_name is NULL or
      user_rating is NULL or
      prime_genre is NULL

-- Combined Description Table
select count(*) as MissingVALUES
from applestore_description_combined
where app_desc is NULL
```

Unique Apps in Apple Store and Combined Description Tables

These queries count the number of unique app IDs in both the Apple Store table and the combined description table (applestore_description_combined). It helps identify the number of distinct apps in each dataset.

```
-- AppleStore table

SELECT COUNT(DISTINCT id) as
UniqueAppIDs
from AppleStore

-- Combined Description Table

SELECT COUNT(DISTINCT id) as
UniqueAppIDs
from applestore_description_combined
```

Number of Apps by Genre

This query groups the apps in the AppleStore table by genre and calculates the count of apps in each genre. It provides an overview of the distribution of apps across different genres.

```
-- AppleStore

select prime_genre, count(*)
as Num_Apps
from AppleStore
group by prime_genre
order by Num_Apps DESC;
```

prime_genre	Num_Apps
Games	3862
Entertainment	535
Education	453
Photo & Video	349
Utilities	248
Health & Fitness	180
Productivity	178
Social Networking	167
Lifestyle	144
Music	138
Shopping	122
Sports	114
Book	112
Finance	104
Travel	81
News	75
Weather	72
Reference	64
Food & Drink	63
Business	57
Navigation	46
Medical	23
Catalogs	10

Overview of App Ratings

This query calculates the minimum, maximum, and average user ratings of apps in the AppleStore table. It provides an overview of the range and average rating of apps.

```
-- AppleStore

select min(user_rating) as Min_rating,
       max(user_rating) as Max_rating,
       avg(user_rating) as Avg_rating
from AppleStore
```

Min_rating	Max_rating	Avg_rating
0	5	3.526956

Overview of App Prices

This query calculates the minimum, maximum, and average prices of apps in the AppleStore table. It provides an overview of the range and average price of apps.

```
-- AppleStore

select min(price) as Min_Price,
       max(price) as Max_Price,
       avg(price) as Avg_Price
from AppleStore
```

Min_Price	Max_Price	Avg_Price
0	299.99	1.726218

App Price Distribution

This query groups the apps in the AppleStore table into price bins and calculates the count of apps in each bin. It helps visualize the distribution of app prices.

```
-- AppleStore

SELECT
  (price/2)*2 as Price_Bin_Start,
  ((price/2)*2)+2 as Price_Bin_End,
  count(*) as NumApps
FROM
  AppleStore
GROUP BY
  Price_Bin_Start
ORDER BY
  Price_Bin_Start;
```

Price_Bin_Start	Price_Bin_End	NumApps
0	2	4056
0.99	2.99	728
1.99	3.99	621
2.99	4.99	683
3.99	5.99	277
4.99	6.99	394
5.99	7.99	52
6.99	8.99	166
7.99	9.99	33
8.99	10.99	9
9.99	11.99	81
11.99	13.99	6
12.99	14.99	5
13.99	15.99	6
14.99	16.99	21
15.99	17.99	4
16.99	18.99	2
17.99	19.99	3
18.99	20.99	1
19.99	21.99	13
20.99	22.99	2
21.99	23.99	1
22.99	24.99	2
23.99	25.99	2
24.99	26.99	8
27.99	29.99	2
29.99	31.99	6
34.99	36.99	1
39.99	41.99	2
47.99	49.99	1
49.99	51.99	2
59.99	61.99	3
74.99	76.99	1
99.99	101.99	1
249.99	251.99	1
299.99	301.99	1

Paid vs. Free App Ratings

This query groups the apps in the AppleStore table into paid and free categories and calculates the average user rating for each category. It helps determine if paid apps have higher ratings compared to free apps.

```
SELECT
  CASE
    WHEN price > 0 THEN 'Paid'
    ELSE 'Free'
  END AS App_Type,
  AVG(user_rating) AS Avg_Rating
FROM
  AppleStore
GROUP BY
  App_Type;
```

App_Type	Avg_Rating
Free	3.376726
Paid	3.720949

App Language vs. Ratings

This query groups the apps in the AppleStore table into language buckets based on the number of supported languages and calculates the average user rating for each bucket. It helps analyse if apps supporting more languages have better ratings.

```
SELECT
  CASE
    WHEN lang_num < 10 THEN '< 10 language'
    WHEN lang_num BETWEEN 10 AND 30 THEN '10-30
language'
    ELSE '>30 language'
  END AS language_Bucket,
  AVG(user_rating) AS Avg_Rating
FROM
  AppleStore
GROUP BY
  language_Bucket
ORDER BY
  Avg_Rating desc;
```

language_Bucket	Avg_Rating
10-30 language	4.130512
>30 language	3.777778
< 10 language	3.368327

Low-Rated Genres

This query calculates the average user rating for each genre in the AppleStore table and lists the genres with the lowest ratings. It helps identify genres that may require improvement.

```
SELECT
  prime_genre,
  AVG(user_rating) AS Avg_Rating
FROM
  AppleStore
GROUP BY
  prime_genre
ORDER BY
  Avg_Rating
LIMIT 10;
```

prime_genre	Avg_Rating
Catalogs	2.1
Finance	2.432692
Book	2.477679
Navigation	2.684783
Lifestyle	2.805556
News	2.98
Sports	2.982456
Social Networking	2.98503
Food & Drink	3.18254
Entertainment	3.246729

App Description Length vs. Ratings

This query groups the apps in the AppleStore table and the combined description table (applestore_description_combined) based on the length of the app description. It calculates the average user rating for each description length bucket. It helps determine if there is a correlation between app description length and user ratings.

```
SELECT
  CASE
    WHEN LENGTH(b.app_desc) < 500 THEN 'short'
    WHEN LENGTH(b.app_desc) BETWEEN 500 AND 1000 THEN 'Medium'
    ELSE 'long'
  END AS Description_length_Bucket,
  AVG(a.user_rating) AS Avg_Rating
FROM
  AppleStore AS a
JOIN
  applestore_description_combined AS b
ON
  a.id = b.id
GROUP BY
  Description_length_Bucket
ORDER BY
  Avg_Rating DESC;
```

Description_length_Bucket	Avg_Rating
long	3.855947
Medium	3.232809
short	2.533613

Top Rated Apps for Each Genre

This query identifies the top-rated app for each genre in the AppleStore table based on user ratings and rating counts. It helps showcase the highest-rated apps in each genre.

```
SELECT prime_genre, track_name, user_rating
FROM (
  SELECT prime_genre, track_name, user_rating,
    RANK() OVER (PARTITION BY prime_genre ORDER BY user_rating DESC, rating_count_tot DESC) AS rank
  FROM AppleStore
) AS a
WHERE a.rank = 1;
```

prime_genre	track_name	user_rating
Book	Color Therapy Adult Coloring Book for Adults	5
Business	TurboScanâ„¢ Pro - document & receipt scanner: scan multiple pages and photos to PDF	5
Catalogs	CPlus for Craigslist app - mobile classifieds	5
Education	Elevate - Brain Training and Games	5
Entertainment	Bruh-Button	5
Finance	Credit Karma: Free Credit Scores, Reports & Alerts	5
Food & Drink	Domino's Pizza USA	5
Games	Head Soccer	5
Health & Fitness	Yoga Studio	5
Lifestyle	ipsy - Makeup, subscription and beauty tips	5
Medical	Blink Health	5
Music	Tenuto	5
Navigation	parkOmator â€“ for Apple Watch meter expiration timer, notifications & GPS navigator to car location	5
News	The Guardian	5
Photo & Video	Pic Collage - Picture Editor & Photo Collage Maker	5
Productivity	VPN Proxy Master - Unlimited WiFi security VPN	5
Reference	Sky Guide: View Stars Night or Day	5
Shopping	Zappos: shop shoes & clothes, fast free shipping	5
Social Networking	We Heart It - Fashion, wallpapers, quotes, tattoos	5
Sports	J23 - Jordan Release Dates and History	5
Travel	Urlaubspiraten	5
Utilities	Flashlight â„	5
Weather	NOAA Hi-Def Radar Pro - Storm Warnings, Hurricane Tracker & Weather Forecast	5

Recommendations:

1. Focus on app categories with high market share, such as Games, Entertainment, Education, and Social Networking, as they have a large user base and potential for growth.
2. Pay attention to user ratings and aim for ratings above 3.5, which indicates better user satisfaction.
3. Consider developing apps with longer descriptions, as they tend to have higher average ratings.
4. Explore app categories like Navigation, Lifestyle, and Sports, which have lower average ratings but potential for improvement.
5. Pay attention to language support, as apps supporting 10-30 languages have higher average ratings.

Conclusion:

- Popular app genres on both platforms include Games, Entertainment, Education, Utilities, Business, Productivity, and Lifestyle.
- Market share analysis helps identify potential growth areas for mobile app development.
- Success depends on factors beyond genre, such as app features, user interface, marketing strategy, and overall user experience.

Please note that these recommendations and conclusions are based on the provided data. Adjustments or further analysis may be required based on specific project requirements and additional data insights.

However, it's important to note that the success of a mobile app depends on many factors beyond the app genre, such as the app's features, user interface, marketing strategy, and overall user experience.

Thanks