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CASE STUDY: BrightTV (Viewership Analytics)

Methodology

Two data files were provided for BrightTV Case Study. These files are User profile and Viewership. These files contain subscriber profiles as well as viewership information.

Data was collected for the period 01/01/2016 to 31/03/2016. It is worth noting that five duplicates were found from the Viewership data file. Data cleaning was done. The duplicate ID were removed because it is assumed that one user is watching. It was found that 5376 were unique users.

User profile and Viewership files were uploaded on snowflakes. The two tables were joined together (user profiles table with the viewer table on UserID)

The following syntax was used:

```
SELECT
    up.UserID,
    up.Name,
    up.Surname,
    up.Email,
    up.Gender,
    up.Race,
    up.Age,
    up.Province,
    up.[Social_Media_Handle],
    v.Channel2,
    v.RecordDate2,
    v.[Duration_2]
FROM
    user_profile up
JOIN
    viewer v
ON
    up.UserID = v.UserID;
```

Provide insights on user and usage trends of BrightTV.

1. Gender

We noted that on gender the are people who did not provide details when signing up either male or female. Others could be Him/her

The syntax below was used to count the number of users (viewers) there are in each gender category. The results shows that the higher number of users are male than female

```
1.1 ---viewership by gender

SELECT Gender, COUNT(DISTINCT u.UserID) AS UserCount
FROM viewer v
JOIN user_profiles u ON v.UserID = u.UserID
GROUP BY Gender;
```

Results | Chart

	GENDER	USERCOUNT
1	male	3723
2	None	175
3	female	488

2. Province

The syntax below was used to count the number users (viewers) per province. The findings shows that Gauteng has the highest number viewers which is 1607

```
1.2 ---viewership per Province

SELECT Province, COUNT(DISTINCT u.UserID) AS UserCount
FROM viewer v
JOIN USER_PROFILES u ON v.UserID = u.UserID
GROUP BY Province;
```

Results | Chart

	PROVINCE	USERCOUNT
1	Western Cape	770
2	None	176
3	Gauteng	1607
4	Eastern Cape	271
5	Kwazulu Natal	448
6	Mpumalanga	391
7	Limpopo	342
8	North West	152
9	Northern Cape	82
10	Free State	147

3. Race

To find out how many users (viewers) belong to which racial group, the syntax below was used. The results shows that higher number of users are black people, followed by Indian_asian people. We noted that under race there are people who did not provide details

```sql
1.3 ---viewership by the race

SELECT Race, COUNT(DISTINCT u.UserID) AS UserCount
FROM viewer v
JOIN USER_PROFILES u ON v.UserID = u.UserID
GROUP BY Race;
```

Results | Chart

	RACE	USERCOUNT
1	coloured	653
2	None	540
3	indian_asian	755
4	white	726
5	black	1662
6	other	42
7	null	8

4. **Age**

We have grouped age according to the following:

Age interval from south Africa

- Children (0-14)
- Young Adults (15-24)
- Working-age Adults (25-54)
- Mature Working-age Adults (55-64)
- Elderly (65+)

To count how many viewers belong to different age groups, using commonly recognized age categories like the above mentioned, the following syntax was used:

```sql
1.2---viewership by age

SELECT
  CASE
    WHEN Age BETWEEN 0 AND 14 THEN 'Children (0-14)'
    WHEN Age BETWEEN 15 AND 24 THEN 'Young Adults (15-24)'
    WHEN Age BETWEEN 25 AND 54 THEN 'Working-age Adults (25-54)'
    WHEN Age BETWEEN 55 AND 64 THEN 'Mature Working-age Adults (55-64)'
    WHEN Age >= 65 THEN 'Elderly (65+)'
    ELSE 'Unknown'
  END AS AgeGroup,
  COUNT(DISTINCT u.UserID) AS UserCount
FROM viewer v
JOIN USER_PROFILES u ON v.UserID = u.UserID
GROUP BY AgeGroup;
```

Results | Chart

	AGEGROUP	USERCOUNT
1	Working-age Adults (25-54)	3396
2	Children (0-14)	231
3	Young Adults (15-24)	632
4	Mature Working-age Adults (55-64)	96
5	Elderly (65+)	31

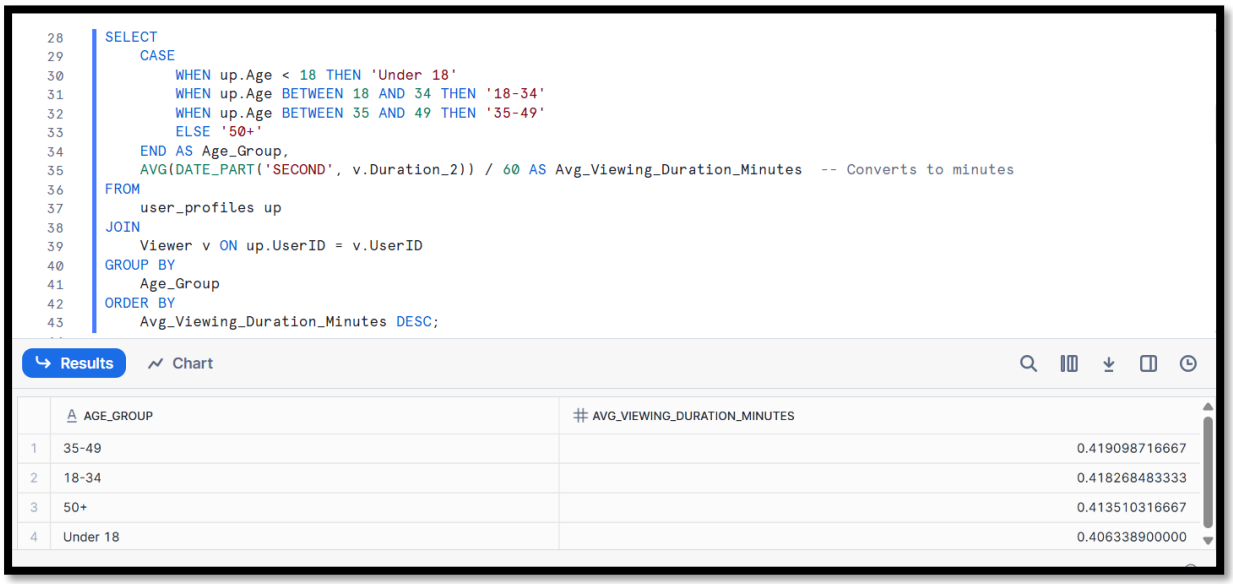
3.1. To provide insights into factors influencing BrightTv consumption using SQL, we have to analyze how different demographic and behavioral variables correlate with BrightTv viewing habits such as duration of viewership, channel preference, and viewing frequency.

Most watched Channels

To find out which channels are watched more than others

Age group

To find out which age groups watch content the longest on average - by calculating their average viewing time in minutes. The syntax below was used



```sql
SELECT
    CASE
        WHEN up.Age < 18 THEN 'Under 18'
        WHEN up.Age BETWEEN 18 AND 34 THEN '18-34'
        WHEN up.Age BETWEEN 35 AND 49 THEN '35-49'
        ELSE '50+'
    END AS Age_Group,
    AVG(DATE_PART('SECOND', v.Duration_2)) / 60 AS Avg_Viewing_Duration_Minutes  -- Converts to minutes
FROM
    user_profiles up
JOIN
    Viewer v ON up.UserID = v.UserID
GROUP BY
    Age_Group
ORDER BY
    Avg_Viewing_Duration_Minutes DESC;
```

Results | Chart

	AGE_GROUP	AVG_VIEWING_DURATION_MINUTES
1	35-49	0.419098716667
2	18-34	0.418268483333
3	50+	0.413510316667
4	Under 18	0.406338900000

What type of factors influence consumption?

1. Affordability and Cost:

When subscription costs increases, it becomes less affordable for some consumers, particularly those in lower-income households.

2. Content and Programming

Content offering sports, movies, news and local content, attracts viewers.

3. Location

In rural areas, news programming is more popular than movies, while in urban areas, movies are more frequently watched.

4. Loadshedding

Periods of loadshedding can have a negative impact on Bright TV viewership

5. Social interactions and recommendations can also influence viewing choices.

6. Age

Younger generations are more likely to use streaming services compared to older demographics who may prefer traditional TV.

What type of initiatives would you recommend to further grow BrightTV 's User base.

Recommendations

- Prioritise channels that people watch e.g. content offering sports, movies, news and local content, attracts viewers.
- Do outreach programmes in rural areas about BrightTv and go with different actors
- Evolve with time
- Quality content over quantity
- Create a new model (pay as you watch) that can track what people like
- Create a package which allows people to watch what they like, the package must be aligned to the trend, must be tailored for specific audience from the of channels available they will be looking at the trends of content consumption
- Relook the way to come up with the packages
- Reduce premium to packages
- BrightTv must offer Rewards such as, but not limited to, vouchers, exclusive access to VIP events, early-bird access to tickets, package upgrades and discount offers