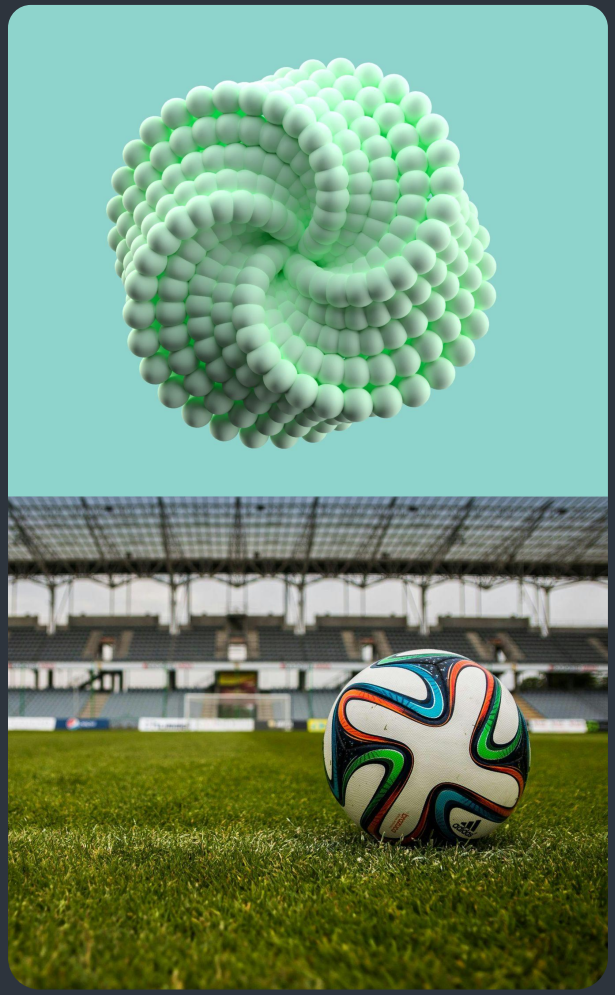


Two Circles

Partnership Analyst Case Study

Assignee
Christian Granados

Agenda

P1 Problem Statement & Business Value

P2 Cleaning, Standardization & EDA

P3 Summative Takeaways

P4 Insights

Problem Statement

Create a comprehensive database for ingesting, standardizing, and modeling disparate datasets.

Business Value

Partnership Value

Supports analysis that can communicates partnership value

Inform Decisions

Guide future partnership campaigns and marketing decisions

Reference Point

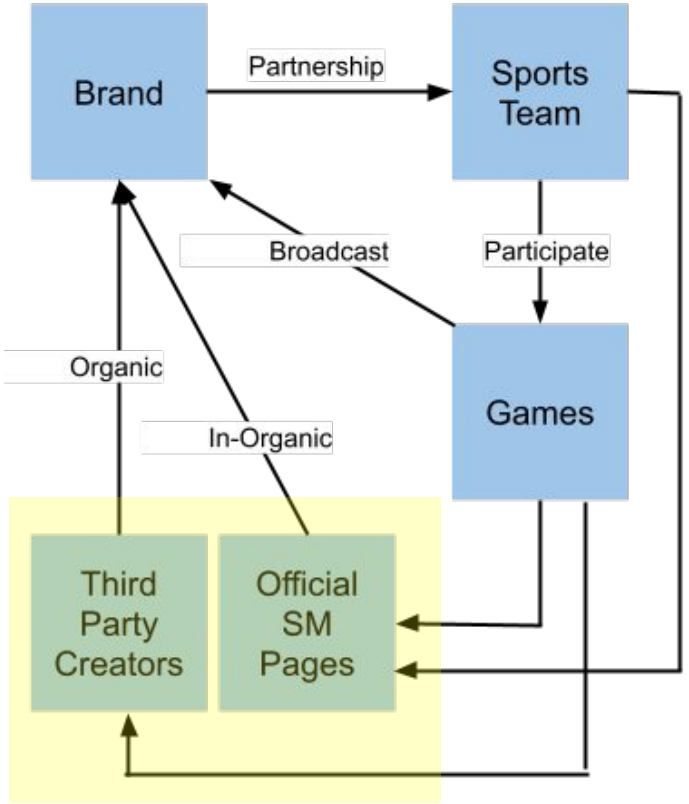
Measuring growth overtime is only possible with historical data

Effective Partnerships Yield Long-Term, Steady Income

Questions?

Social Media Dataset

- Sources of data are either first (54%) or third party (46%)
- Stretches across Facebook, Twitter, and Youtube
- Majority of posts are Photos and Videos on Twitter (96%)



Social Media Dataset

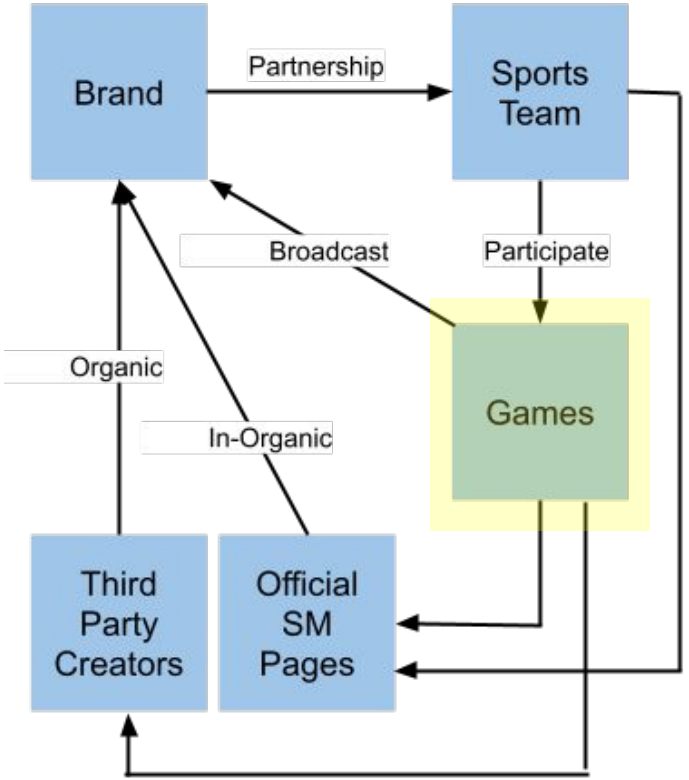
feed_name is either ‘owned’ or ‘earned’ → Indicator for first vs. third party content. Third-party content has less granularity of data.

exposure_id is not unique for each post → Details a unique brand on a post, not a unique instance of branding.

The data are time series → For each post and brand exposure, analytics are captured at multiple points in time.

Broadcast Dataset

- Details branding exposure from broadcast games on streaming services.
- QIMV is externally calculated and used to discount raw impressions
- When joined to Social Media Dataset, skews result heavily right



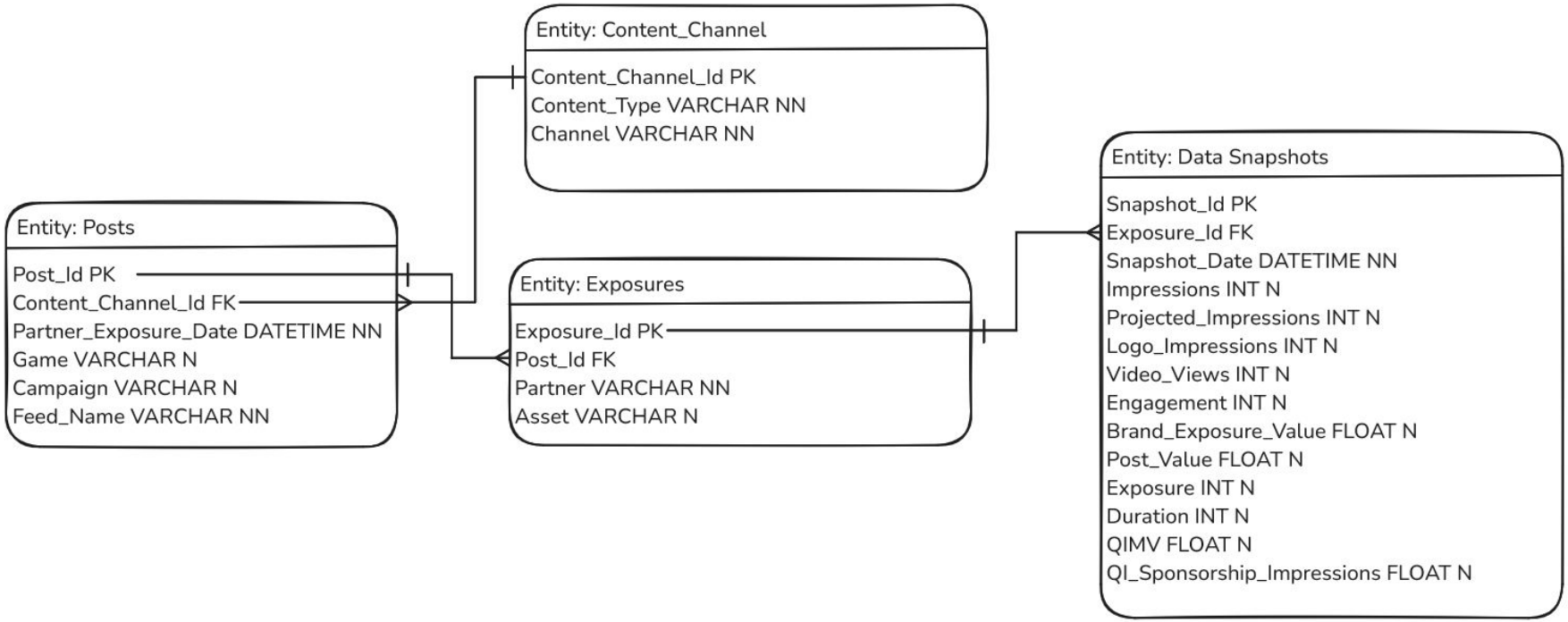
Questions?

Joining Datasets

Broadcast dataset was manipulated to join onto the Social Media Dataset

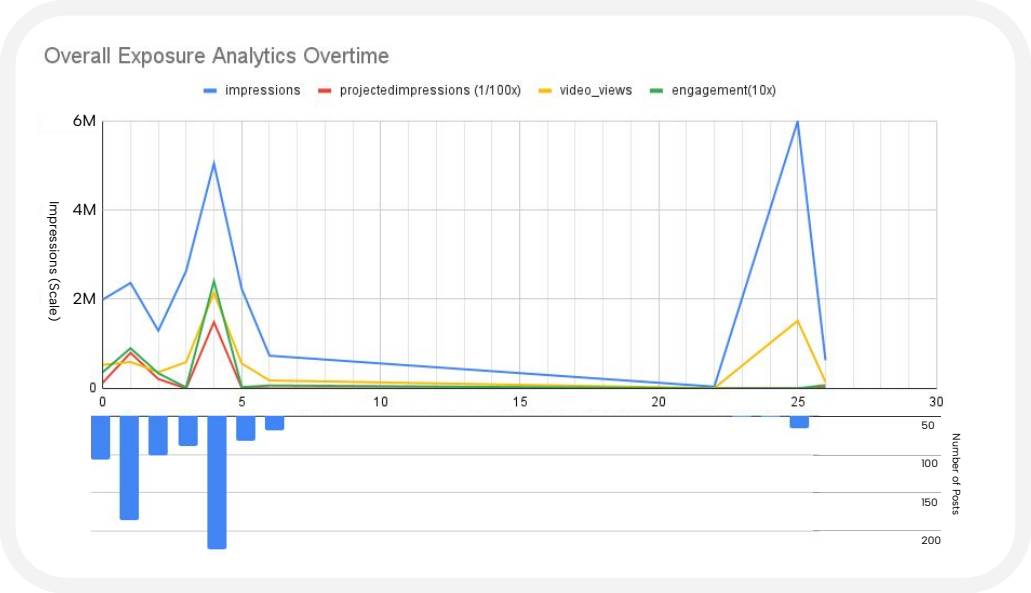
Partner_Exposure_Date, Snapshot_Date created from Date
Seasons column dropped
Assets, Games, & Partner columns standardized and snake_cased between the tables
Exposure_Impressions renamed to Impressions
Sponsorship_Impressions renamed to Video_Views
Static columns channel, content_type, and feed_name added
Exposure_Id unique to each row & Post_Id unique for each game

Data Model


Entity: Content_Channel
Content_Channel_Id PK
Content_Type VARCHAR NN
Channel VARCHAR NN
Entity: Posts
Post_Id PK
Content_Channel_Id FK
Partner_Exposure_Date DATETIME NN
Game VARCHAR N
Campaign VARCHAR N
Feed_Name VARCHAR NN
Entity: Exposures
Exposure_Id PK
Post_Id FK
Partner VARCHAR NN
Asset VARCHAR N
Entity: Data Snapshots
Snapshot_Id PK
Exposure_Id FK
Snapshot_Date DATETIME NN
Impressions INT N
Projected_Impressions INT N
Logo_Impressions INT N
Video_Views INT N
Engagement INT N
Brand_Exposure_Value FLOAT N
Post_Value FLOAT N
Exposure INT N
Duration INT N
QIMV FLOAT N
QI_Sponsorship_Impressions FLOAT N

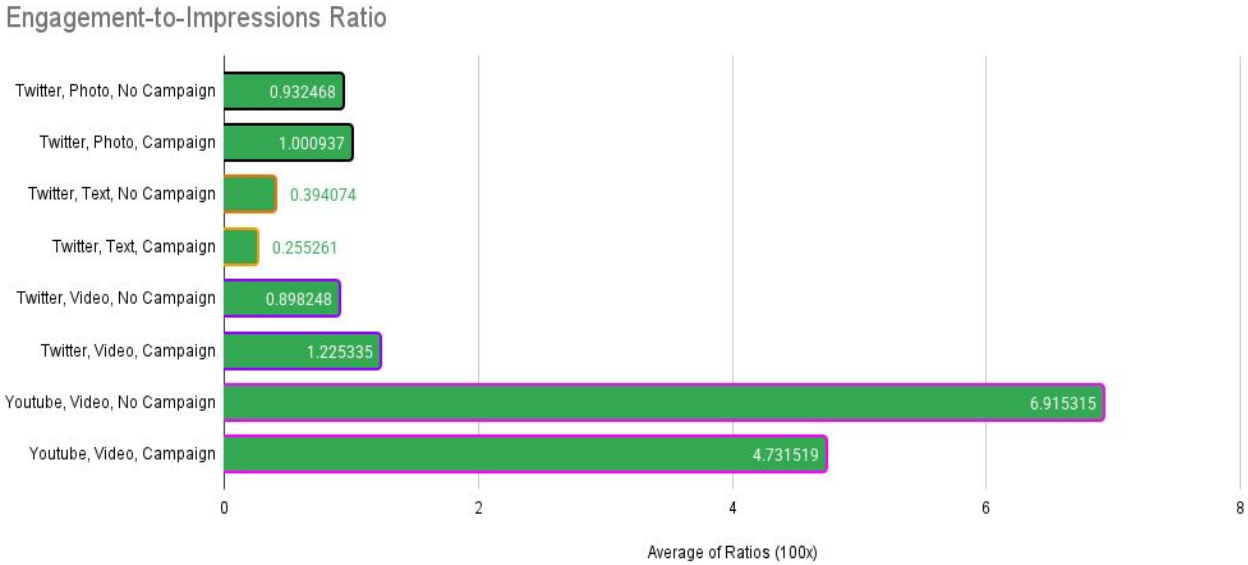
Questions?

When do most sponsorships take place?



- Season start has low engagement compared to start of year
- Main influx of attention is start of January and February
- Efficiency in start of year is lower than end of year

Campaign Effectiveness



- Campaigns have a significant effect on Twitter
- Youtube engagement is multitudes higher than Twitter
- Longer-form content more engaging?

Does asset type affect final Post Value?

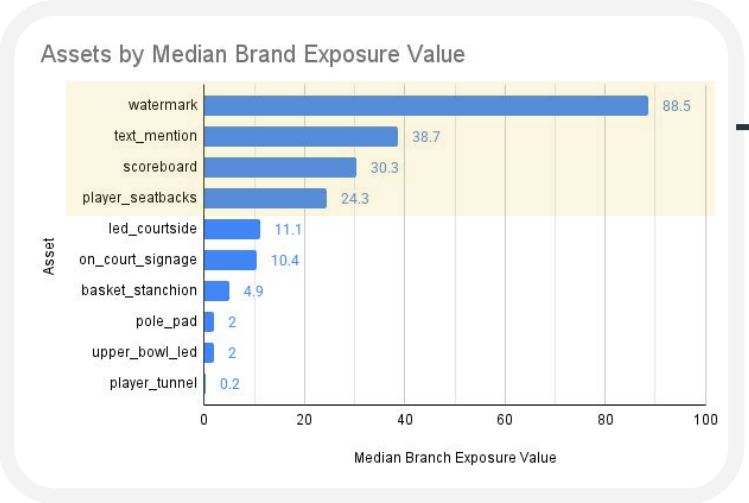
Use Linear Regression with One-Hot encoded asset types and highest frequency column as the reference category.

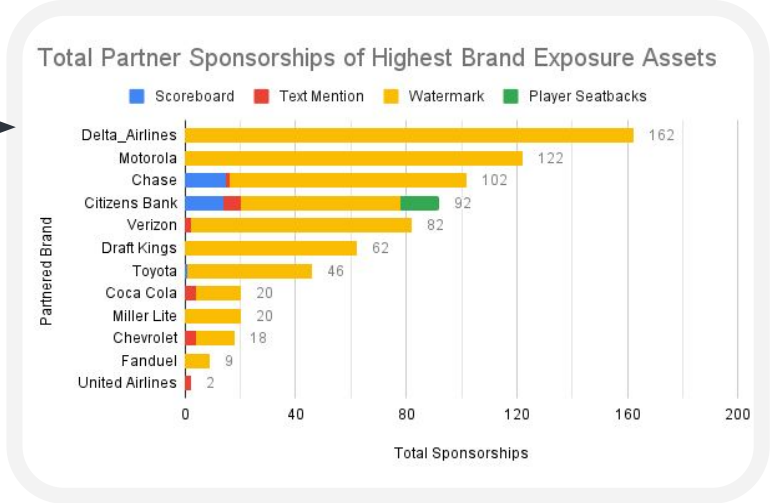
→ Cannot guarantee parametric assumptions.

	coef	std err	t	P>|t|	[0.025	0.975]
const	686.0147	160.065	4.286	0.000	372.073	999.957
impressions	0.0114	0.002	6.122	0.000	0.008	0.015
engagement	0.0909	0.095	0.953	0.341	-0.096	0.278
logoimpressions	0.0555	0.001	39.002	0.000	0.053	0.058
asset_LED Courtside	15.7401	240.491	0.065	0.948	-455.945	487.425
asset_On Court Signage	311.8347	241.970	1.289	0.198	-162.751	786.421
asset_Pole Pad	-32.1712	233.800	-0.138	0.891	-490.733	426.391
asset_Scoreboard	2296.4024	743.086	3.090	0.002	838.959	3753.846
asset_Seatbacks	-285.9638	913.861	-0.313	0.754	-2078.356	1506.428
asset_Upper Bowl LED	-566.2115	550.668	-1.028	0.304	-1646.258	513.835
asset_Watermark	-2250.2639	181.343	-12.409	0.000	-2605.939	-1894.589

- Coefficients and t-values are calculated relatively to the reference category
- Statistical non-significance ≠ no effect
- Upper Bowl LED and Watermark has a significant penalty compared to the rest

What brand purchase the highest exposure assets?





- Highest exposure but not necessarily highest value or efficiency
- Less price sensitive?

Appendix

Social Media – Feature Relationships