

Islanders Team Presentation



Sports Lab



Presented By Dayo Aderibole, Jack Behrens, Kevin Ma, Henry Martin

PROJECT TEAM



Dayo Aderibole
PhD, 2023
adedayo@mit.edu



Jack Behrens
MBA, 2020
jackbehr@mit.edu



Kevin Ma
MBA, 2021
kevinsma@mit.edu



Henry Martin
BS, 2021
hemartin@mit.edu



Agenda

1. Project Scope
2. Follower Segmentation - Who are Islanders' Fans?
3. Twitter Activity - How do Followers Engage with the Islanders?
4. Next Steps

Project Scope



Our project had two phases: understanding fan engagement, and recommending an engagement strategy

Analyze

WHO?

What factors determine fan avidity?

What clusters of fans emerge?

HOW?

How do fans engage on Twitter?

Recommend

Strategies to better engage fans

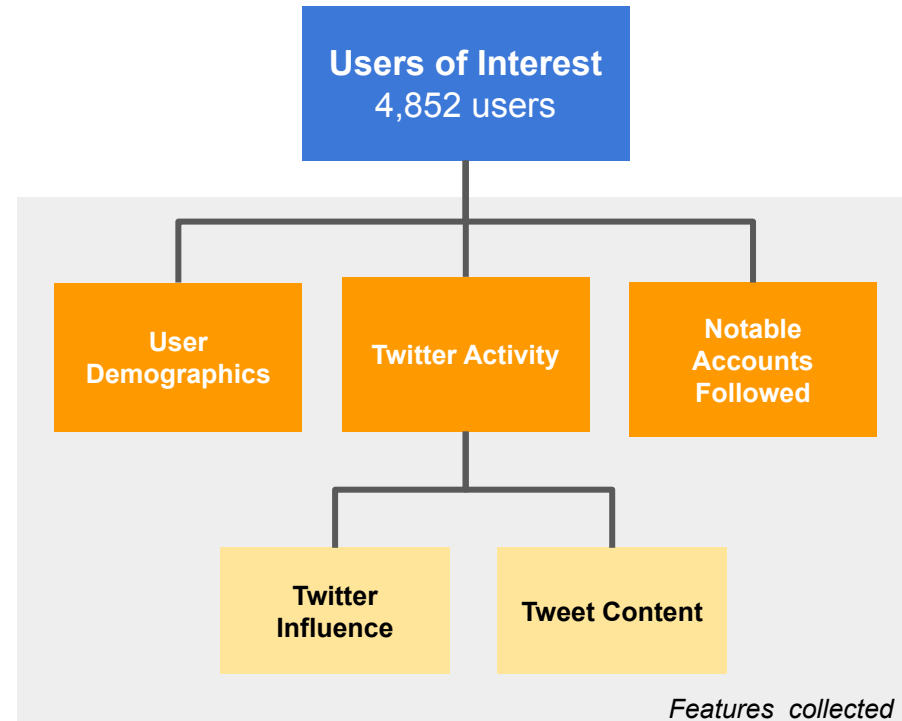
Opportunities to explore next

Follower Segmentation - Who are Islanders' Fans?



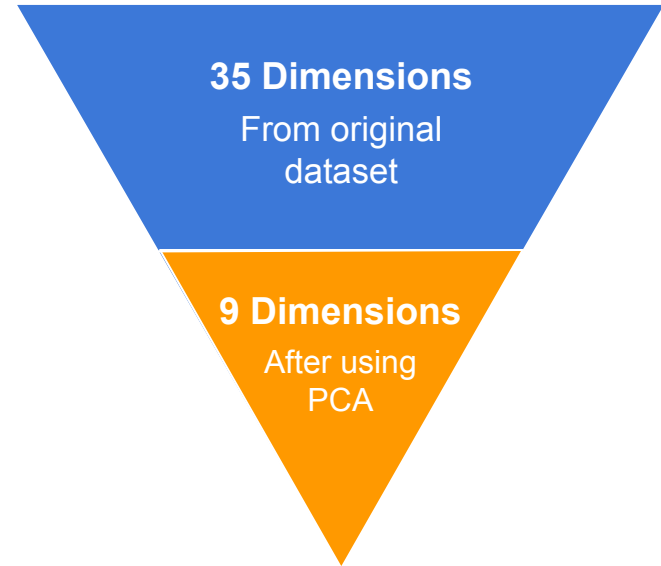
Clustering Methodology

1. **Collection of Twitter data on ~5,000 users**
2. Feature reduction via Principal Component Analysis (PCA)
3. Running optimal clustering algorithm leads to >10% improvement in silhouette score
4. Data visualization to confirm that clusters are distinguishable



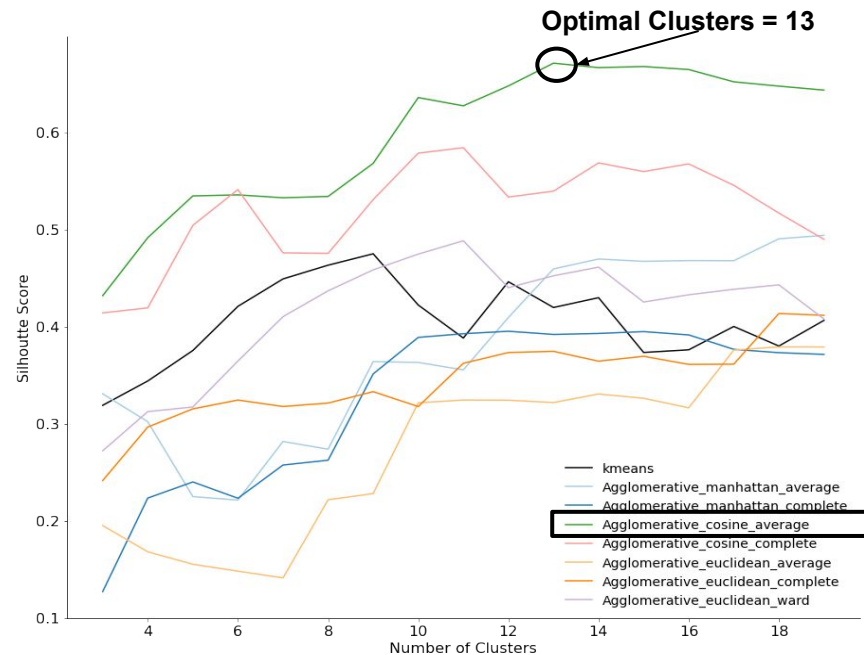
Clustering Methodology

1. Collection of Twitter data on ~5,000 users
2. **Feature reduction via Principal Component Analysis (PCA)**
3. Running optimal clustering algorithm leads to >10% improvement in silhouette score
4. Data visualization to confirm that clusters are distinguishable



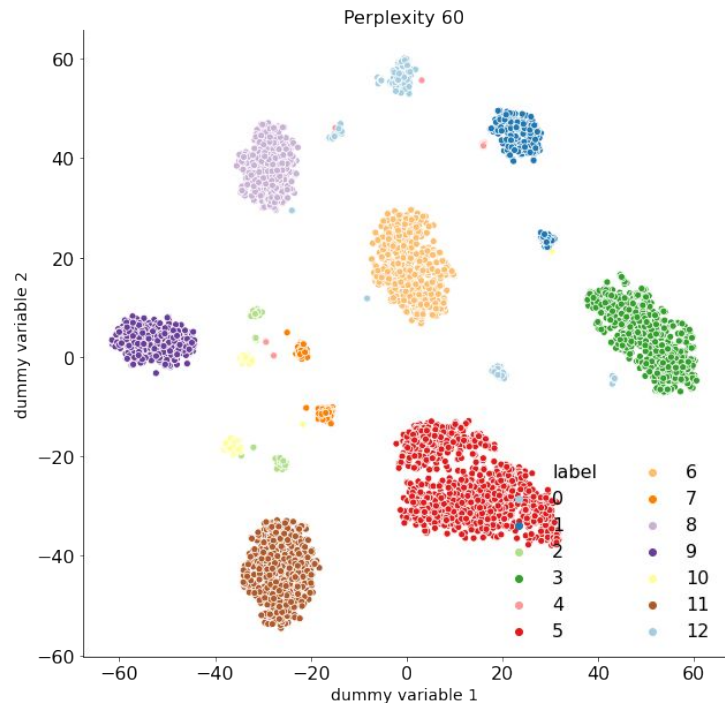
Clustering Methodology

1. Collection of Twitter data on ~5,000 users
2. Feature reduction via Principal Component Analysis (PCA)
3. **Running optimal clustering algorithm leads to >10% improvement in silhouette score**
4. Data visualization to confirm that clusters are distinguishable



Clustering Methodology

1. Collection of Twitter data on ~5,000 users
2. Feature reduction via Principal Component Analysis (PCA)
3. Running optimal clustering algorithm leads to >10% improvement in silhouette score
4. **Data visualization to confirm that clusters are distinguishable**



Clustering Results

We identified four main characteristics to describe Islanders fans

Twitter Influence

- Number of followers
- Tweet reach and depth

Twitter Engagement

- Total historical tweets
- Total tweets in dataset

Islanders Myopia

- Does bio/handle mention the Islanders?
- Official account follower?
- # of notable accounts followed
- % tweets that mention Islanders

Locality

- Is profile location set to NY?




Clustering Results - Overview

- Archetype**
- The General Influencer
- The Sports News Reporter
- The Superfan
- The Silent Follower
- The Fair-Weather Fan



Grant Paulsen ✓
@granthpaulsen
Grant&Danny show @1067T @NBCSWashington. Host @ PlayByPlay @XFL2020 @Of
[instagram.com/granthpaulsen](https://www.instagram.com/granthpaulsen)
253 Following 100.5K Followers



Andrew Cuomo ✓
@NYGovCuomo
Father, fisherman, motorcycle enthusiast
New York, NY [ny.gov](https://www.ny.gov)
616 Following 2M Followers



Twitter Moments ✓
@TwitterMoments
The best of what's happening on Twitter in an instant.
New York, USA about.twitter.com/company/moment...
Born October 6 Joined June 2015
10 Following 786.8K Followers



Clustering Results - Overview

- Archetype
- The General Influencer
- The Sports News Reporter
- The Superfan
- The Silent Follower
- The Fair-Weather Fan



David Satriano ✓
@davidsatriano
Writer/editor/fantasy goalie
New York, NY [nhl.c](#)
1,746 Following 27.6K F



Linda Cohn ✓
@lindacohn
Mom, ESPN SportsCen
Radio, Speaker Modera
Los Angeles, CA [📍](#)
1,934 Following 232



Tina Cervasio ✓
@TinaCervasio
Lead Sports Anchor/Reporter @fox5ny, Host of "Sports Xtra" Sundays, 10:30PM on #fox5ny, @ArmyWP_Football Reporter on @CBSSportsnet ~Loves God 🇺🇸 family 🍌 Terps 🍌 ~
Jeremiah 29:11-14 <http://www.TinaCervasio.com> [📅](#) Joined April 2009
2,307 Following 40.4K Followers



Clustering Results - Overview

- Archetype
- The General Influencer
- The Sports News Reporter
- The Superfan
- The Silent Follower
- The Fair-Weather Fan

Justin
@NyifanBarzal13

New York Islanders fan to amazing, brave little boy.

📍 Long Island 📅 Join

1,335 Following 545 F

Isles Territory
@IslesTerritory

Welcome to #Isles 🇺🇸 T
@isles_territory

🔗 youtube.com/chann

1,372 Following 3,9E

P J
@YesYesIsles

♦ #Isles 🇺🇸 ❤️ ♦ #LGM #Mets ♦ #Resist ♦ 🏠 chers! 🍷 🍻 ♦
@m(i)l(e) ♦ take your hate elsewhere ♦

📍 Born March 20 📅 Joined March 2010

366 Following 1,005 Followers

⋮

✉

Follow



Clustering Results - Overview

- Archetype
- The General Influencer
- The Sports News Reporter
- The Superfan
- The Silent Follower**
- The Fair-Weather Fan



Anthony
@anthony_c1

Long Island 🇺🇸 Las Vegas
video games, I drink Jarr
Las Vegas, Nevada

144 Following 81 Followers



Phil
@Philzfacts

Islanders fan in enemy
Toronto, Ontario

242 Following 233 Followers



domenico Jj
@DomLongo22

Juventus F. C. and the New York Islanders have made my life miserable but I can't get enough of them 🤖🤖🤖🤖

Queens, NY Joined May 2009

208 Following 192 Followers



Clustering Results - Overview

Archetype

The General Influencer

The Sports News Reporter

The Superfan

The Silent Follower

The Fair-Weather Fan



The General Influencer

1,022 users

Overview

These users are your **high-clout** social media influencers. They tweet a lot about everything and have **great reach and depth** with their own followers, but they **don't actually care much about the Islanders**.



 **Grant Paulsen** ✓
 @granthpaulsen

Grant&Danny show @1067TheFan. Host Redskins, Caps pre/post @NBCSWashington. Host @MLBNetworkRadio. DC columnist @TheAthletic. PlayByPlay @XFL2020 @OfficialAFL.

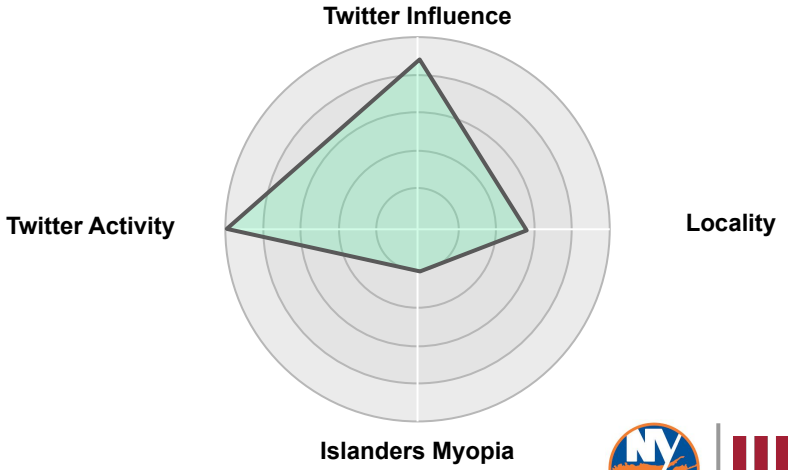
[instagram.com/granthpaulsen/](https://www.instagram.com/granthpaulsen/)  Joined March 2009

253 Following 100.5K Followers

Example Accounts

 PWP Nation @PWPNation	 Andrew Cuomo ✓ @NYGovCuomo
 GamingToday @GamingTodayNews	 Twitter Moments ✓ @TwitterMoments
 CBS New York ✓ @CBSNewYork	 WGR 550 ✓ @WGR550

Twitter Behavior



Each circle represents an additional 25th percentile

The Sports News Reporter

685 users

Overview

This group of users doesn't solely focus on the Islanders but rather **covers the overall hockey and sports community**. These users are **influential in their communities** and are in the list of notable accounts that superfans probably follow.



David Satriano ✓
@davidsatriano

Writer/editor/fantasy goalie master for [NHL.com](https://www.nhl.com). @Moes_HQ lover

📍 New York, NY 🌐 [nhl.com](https://www.nhl.com) 📅 Joined April 2010

1,746 Following 27.6K Followers

⋮ ✉ Follow

Example Accounts



Linda Cohn ✓
@lindacohn



Tina Cervasio ✓
@TinaCervasio



WFAN Sports Radio ✓
@WFAN660



Mike Morreale ✓
@mikemorrealeNHL

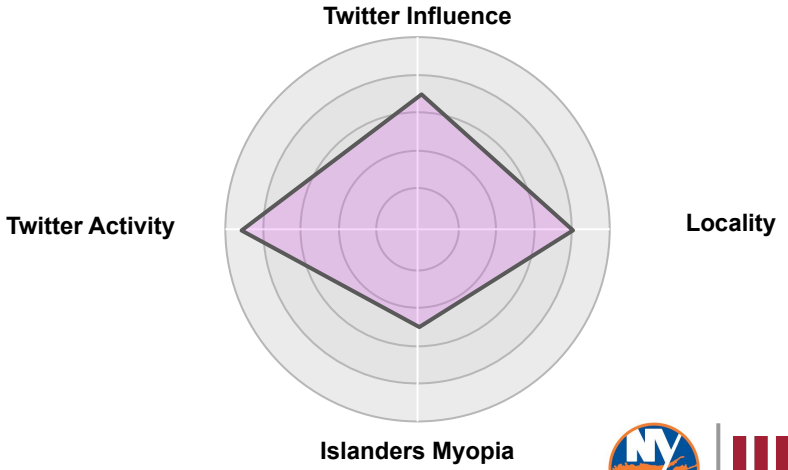


Dejan Kovacevic ✓
@Dejan_Kovacevic



Dave Stubbs ✓
@Dave_Stubbs

Twitter Behavior



Each circle represents an additional 25th percentile

The Superfan

1,199 users

Overview

This group of users is your **most loyal fanbase**. They are **highly active** on Twitter, follow the largest number of notable accounts, and are **solely focused on Islanders** updates. This cluster includes highly **avid fans** as well as **Isles fan pages**.

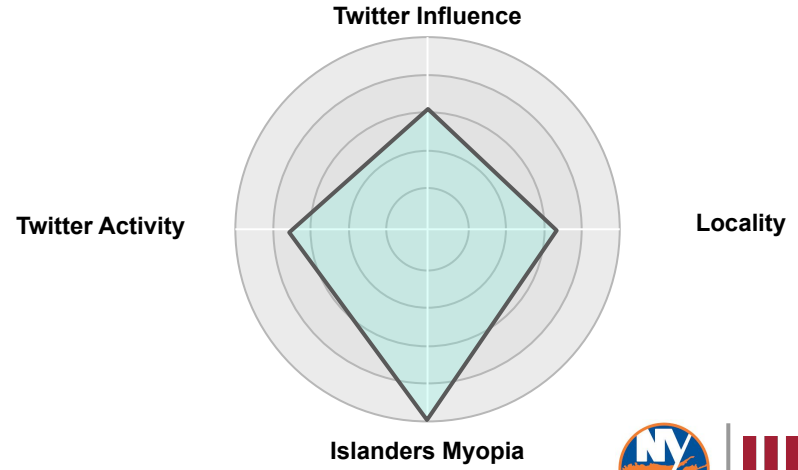


Justin
@NyifanBarzal13
New York Islanders fan to the core. I bleed Orange & Blue. Proud Father of an amazing, brave little boy. Tottenham Hotspurs addict! New York Jets too!
📍 Long Island 📅 Joined February 2010
1,335 Following 545 Followers

Example Accounts

-  **Isles on MSG Plus** ✓
@IslesMSGN
-  **PJ**
@YesYesYesIsles
-  **Isles Territory**
@IslesTerritory
-  **YESUV** 🚗
@IslesWhiteSUV
-  **Justin**
@NyifanBarzal13
-  **Billy Wagner hall of fame**
@IslesHockey13

Twitter Behavior



Each circle represents an additional 25th percentile

The Silent Follower

551 users

Overview

These users love the Islanders, but they prefer to follow in silence. They follow a significant number of notable accounts and are even unafraid to display their loyalty to the Islanders, but they don't actively engage with the community.



Anthony
@anthony_c1

Long Island 🇺🇸 Las Vegas. I listen to metal, hockey is my game, I lift weights, I play video games, I drink Jameson and beer. Rep the #Isles 🇺🇸 and #Raidernation

📍 Las Vegas, Nevada 📅 Joined May 2009

144 Following 81 Followers

Example Accounts



Phil
@Philzfacts
Islanders fan in enemy territory.
📍 Toronto, Ontario 📅 Joined June 2019
242 Following 231 Followers

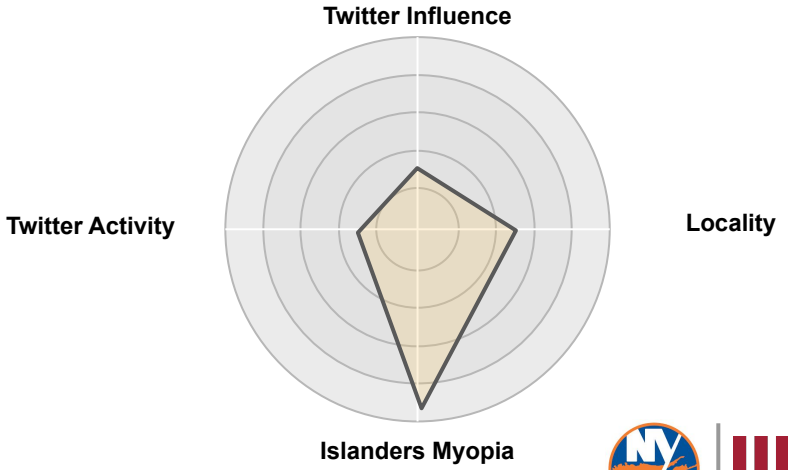


IslesEnforcers
@IslesEnforcers
Owner of Islesenforcers.com and proud member of Hockeyfights.com
🌐 Islesenforcers.com 📅 Joined August 2010
189 Following 652 Followers



Isles22Isles
@Isles22Isles
GO ISLES!!!
📍 Bethpage 🌐 Islandersfans.ning.com
342 Following 259 Followers

Twitter Behavior



Each circle represents an additional 25th percentile

The Fair-Weather Fan

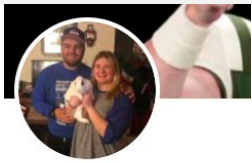
1,138 users

Overview

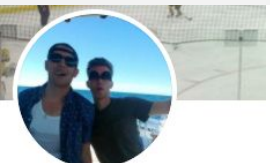
This group of users' avidity is mercurial at best and displays a wide range of interests beyond the Islanders. These fans infrequently tweet about the Islanders, and some don't even follow the Islanders official account.



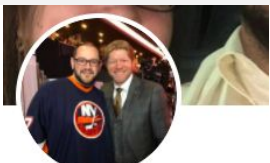
Example Accounts



CainMack72
@CainMack72
Coach 🏒 🐾
📍 Long Island, New York 📅 Joi
435 Following 57 Followers

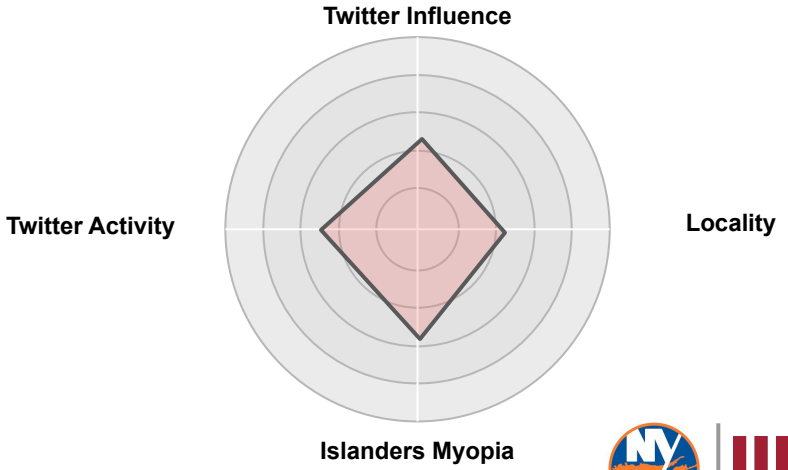


Brendan Sommer
@2_pucks1
📅 Joined September 2018
173 Following 55 Followers



A Very Stable Genius
@Shawnoreis
📅 Joined November 2009
168 Following 44 Followers

Twitter Behavior



Each circle represents an additional 25th percentile

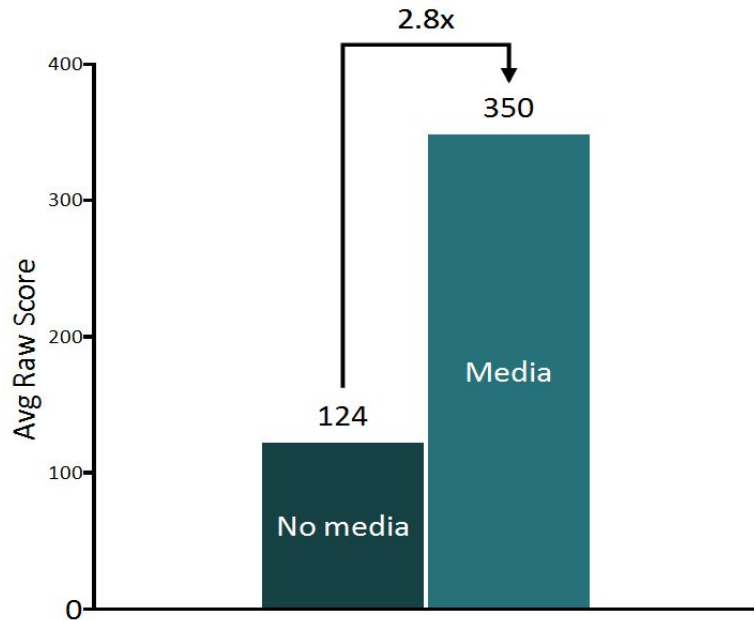
Engagement Strategy Recommendations



Relevant formulas and definitions

- “Raw Score” = Retweets + Replies + Favorites
- Late night: Midnight – 2am
- Overnight: 2am – 7am
- Morning: 7am – 11am
- Lunchtime: 11am – 1pm
- Afternoon: 1pm – 5pm
- Evening: 5pm – 8pm
- Nighttime: 8pm – Midnight

Tweets with media get 2.8x as much engagement



Consider creating standard graphics for penalty kills, goals, etc. that can be quickly added to in-game tweets

Add photos and videos to tweets more often



Observation

Tweets with embedded media had **2.8x** higher engagement than plain text tweets.

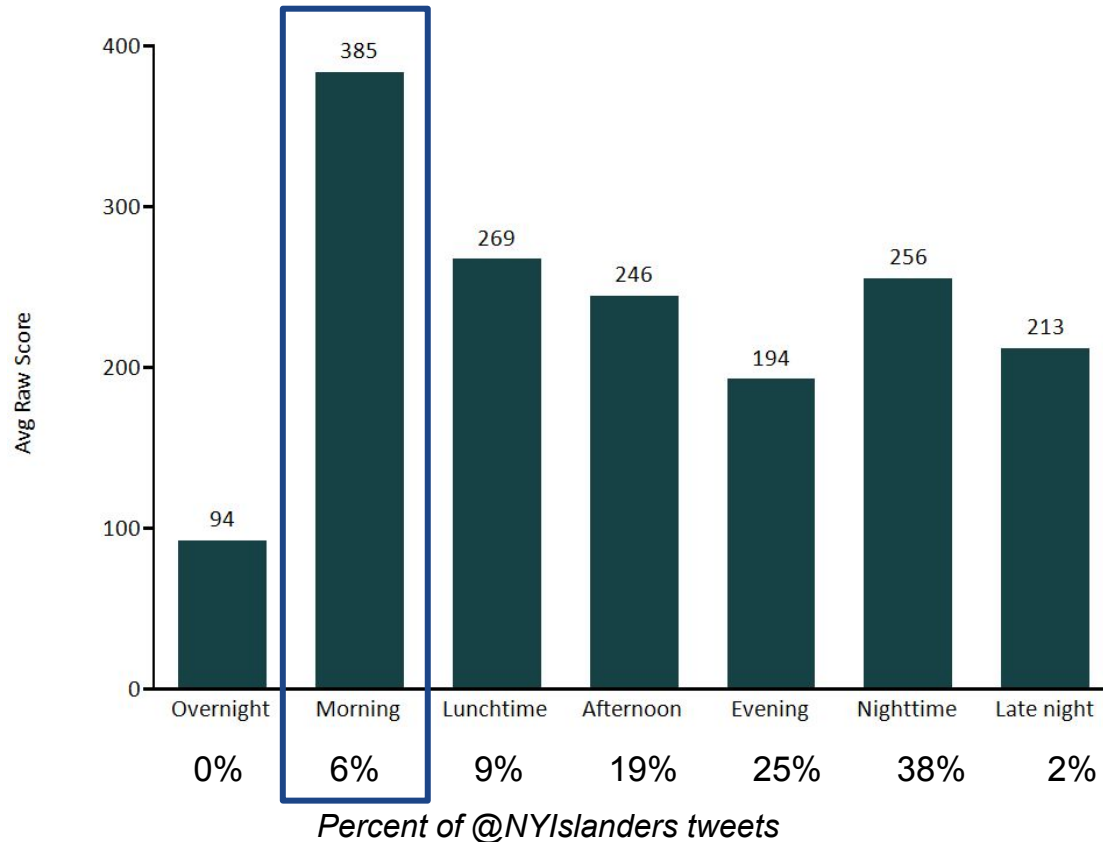


Recommendation

Find ways to supplement plain tweets (e.g. “Goal! #Isles up 3-2”) with media (photos, videos, GIFs).



Morning tweets get 62% more engagement



Schedule more morning tweets

Observation

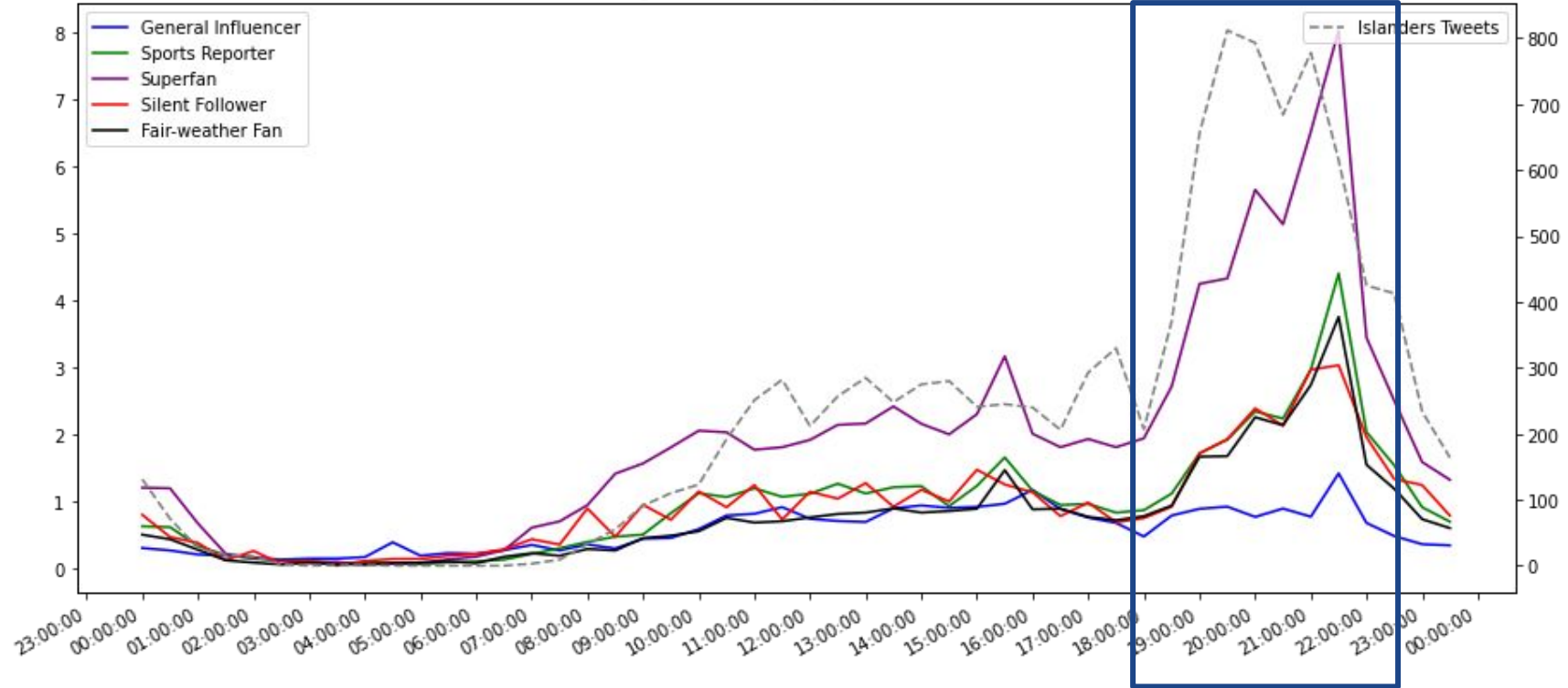
Morning tweets have **62%** higher engagement, yet only comprise **6%** of @NYIslanders tweets.

Recommendation

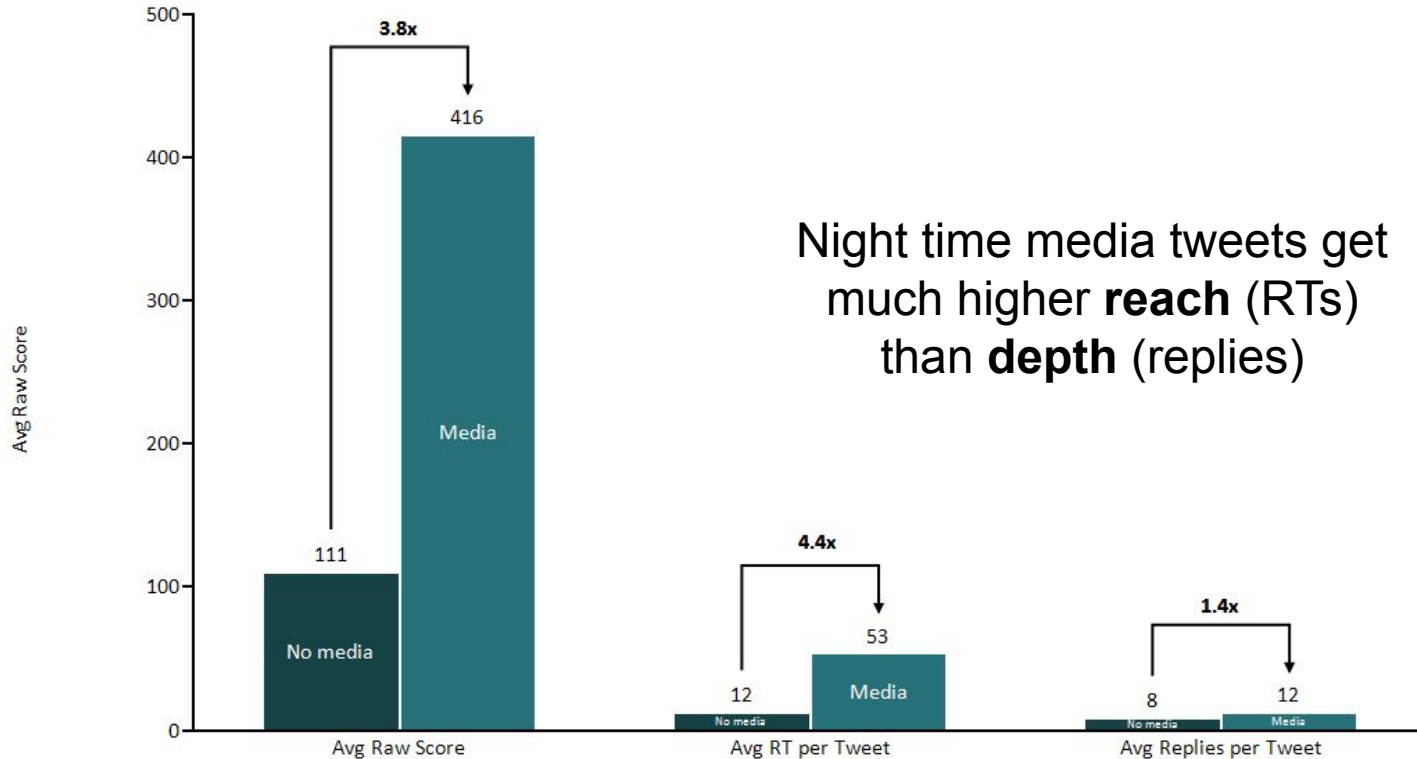
Adjust content schedule to tweet more during mornings (8:00 - 11:00 AM).

Isles influencers and fans tweet most often at night

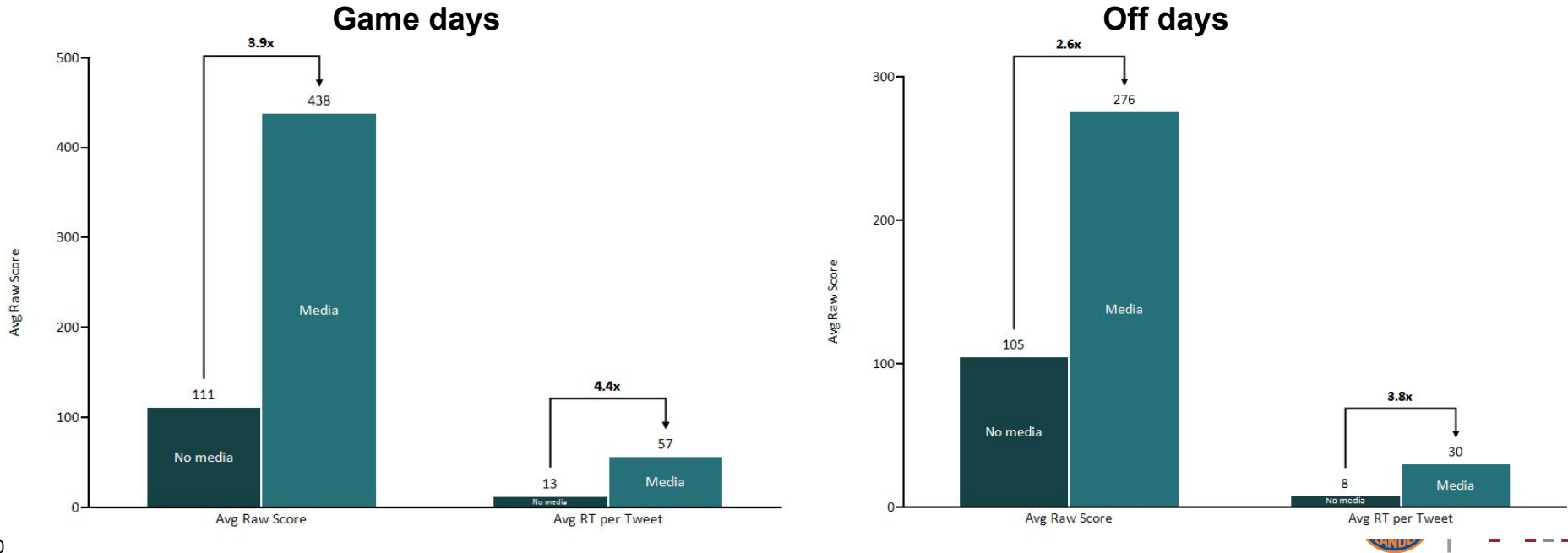
Average Twitter Activity per User - Overall



Night tweets with media get 3.8x higher engagement



The night media effect is strongest on game days, but still relevant for off day tweets



Incorporate more photos and videos into night tweets



Observation

Isles influencers and superfans tweet most during the night. @NYIslanders have low engagement at night, but night tweets with media get **3.8x** higher engagement.

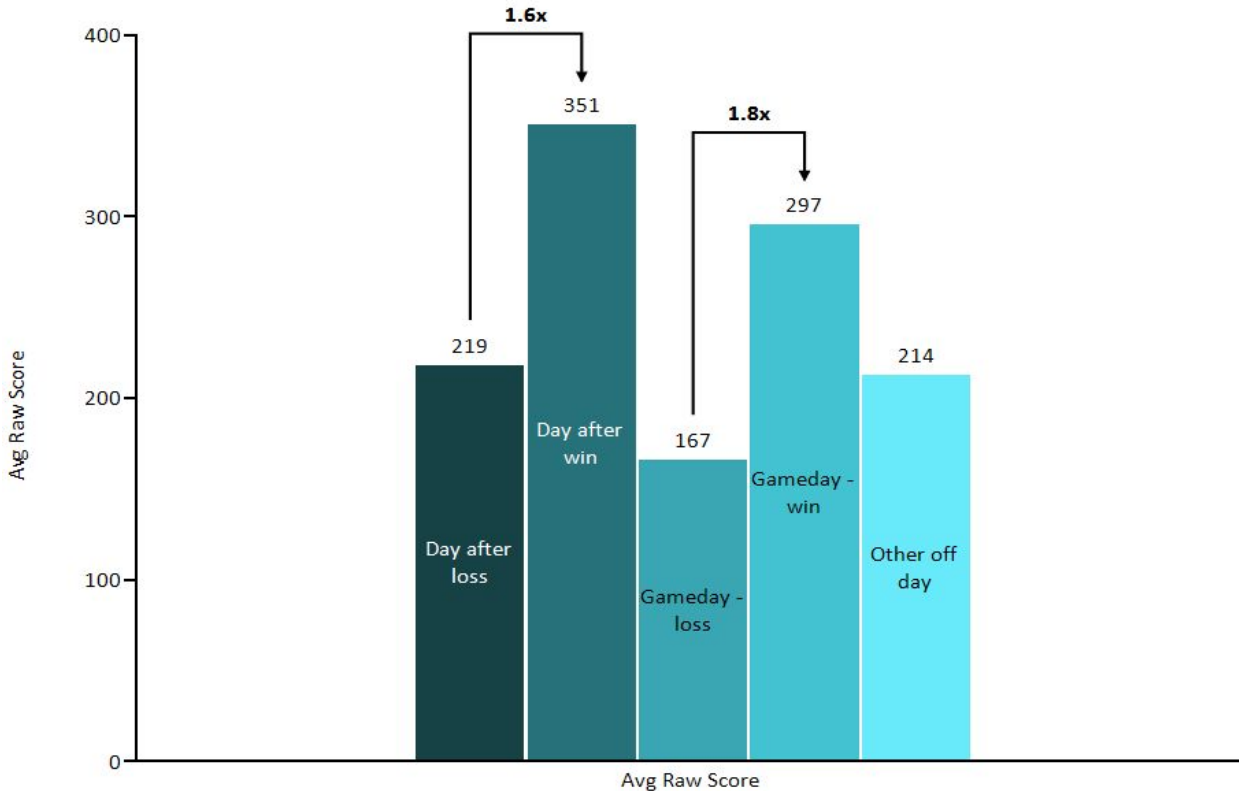


Recommendation

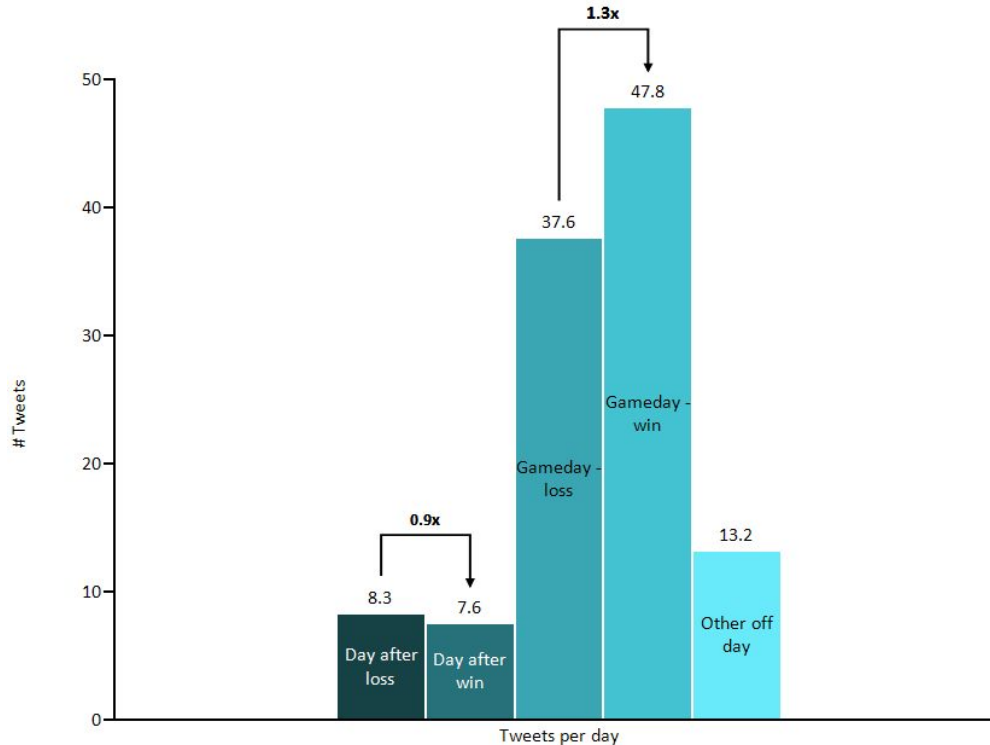
Supplement nighttime tweets with media to cut through the “noise” of other Islanders-related tweets.



Engagement peaks following a win



@NYIslanders currently tweets more during the day of a win, but doesn't take advantage of the day after



Tweet more important content on the day after a win



Observation

Engagement on all types of tweets is highest after a win -- both on the game day and the day after.



Recommendation

Leverage the ‘post-win effect’ by (a) tweeting more often, and (b) tweeting your most important content at these times.



Next Steps



Future work



Short Term

Use a broader basis of users to uncover small new clusters

Include retweets in the database (only with official Twitter API)

Overlay official Islanders Twitter content buckets to help team gain more insight



Long Term

Identify common language topics for each archetype

Extend to Instagram with a similar goal in mind

Integrate information into CRM system to help link twitter accounts



Thank You!



Sports Lab

