Islanders Team Presentation

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

PROJECT TEAM

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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

Recommend

WHO?

What factors determine fan avidity?

What clusters of fans emerge?

HOW?

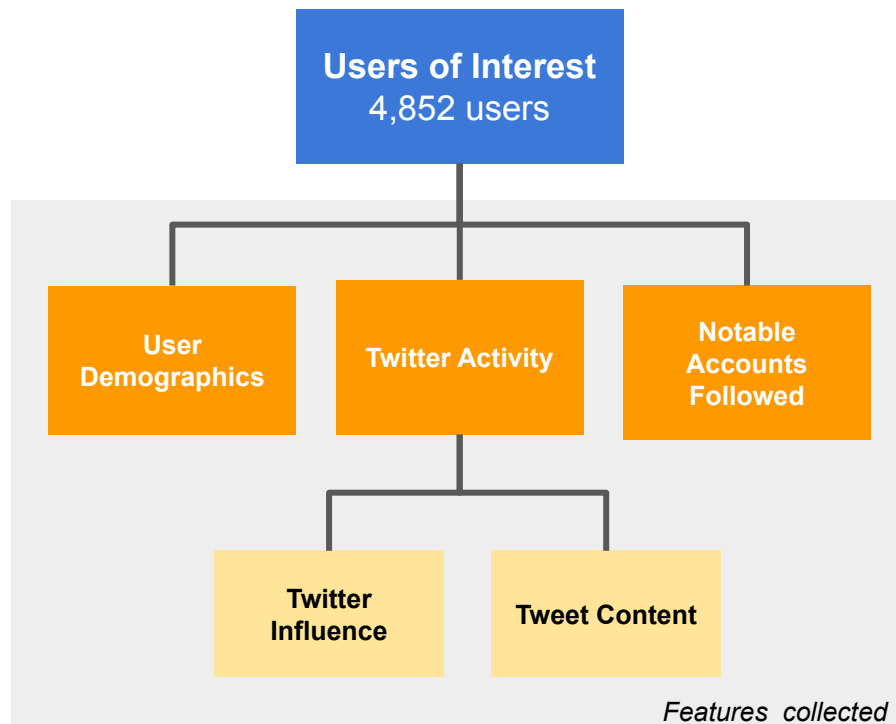How do fans engage on Twitter?

Strategies to better engage fans

Opportunities to explore next

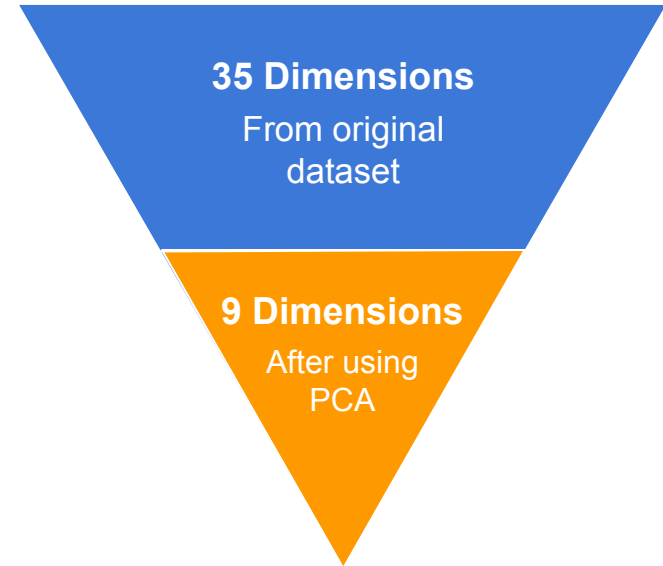# Follower Segmentation - Who are Islanders' Fans?

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

Users of Interest
4,852 users

User Demographics

Twitter Activity

Notable Accounts Followed

Twitter Influence

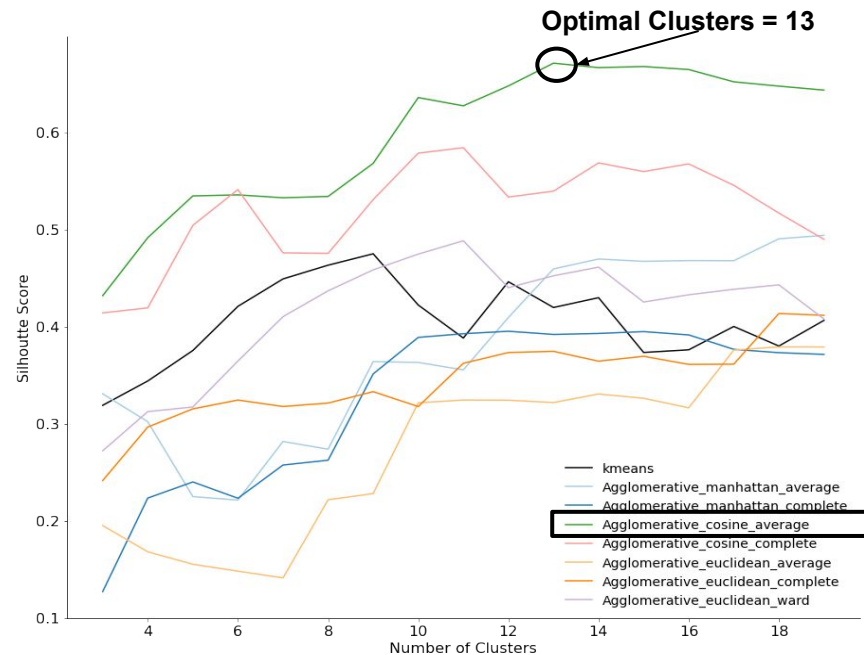**Tweet Content**

Features collected

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

35 Dimensions
From original dataset
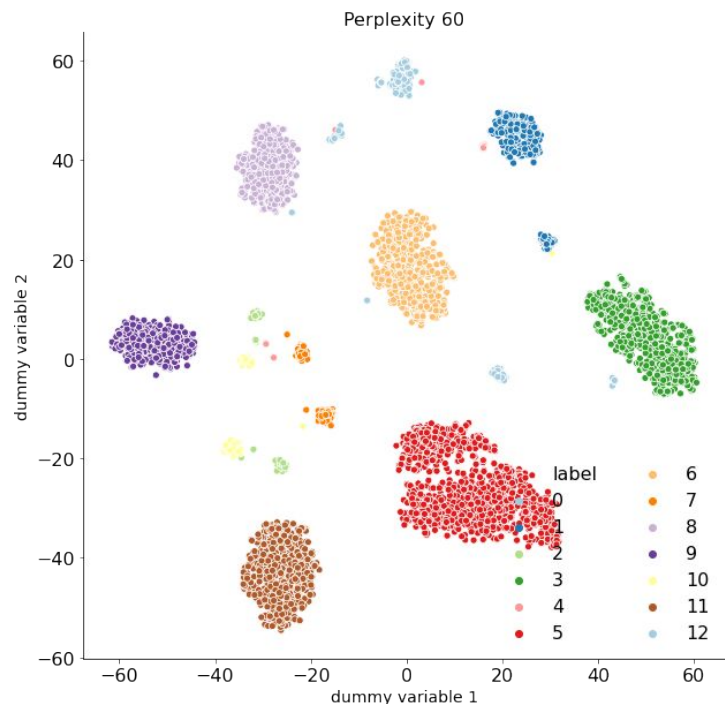
9 Dimensions
After using PCA

Clustering Methodology

1. Collection of Twitter data on ~5,000 users

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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

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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	**Twitter Engagement**	**Islanders Myopia**	**Locality**
- Number of followers - Tweet reach and depth	- Total historical tweets - Total tweets in dataset	- Does bio/handle mention the Islanders? - Official account follower? - # of notable accounts followed - % tweets that mention Islanders	- 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/granthpa

253 Following   100.5K Fo

Andrew Cuomo ✔
@NYGovCuomo

Father, fisherman, moto

⊙ New York 🔗 ny.go

616 Following   2M Fo

⚡

○○○   Follow

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

Follow

Clustering Results - Overview

Archetype
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The Superfan
The Silent Follower
The Fair-Weather Fan

Justin
@NyifanBarzal13

New York Islanders fan to
amazing, brave little boy.

⊙ Long Island   🗓 Joine

1,335 Following   **545** F

Isles Territory
@IslesTerritory

Welcome to #Isles 🏒 T
@isles_territory

🔗 youtube.com/chann

1,372 Following   **3,98**

P J
@YesYesYesIsles

◆ #Isles 🏒 💙💙 ◆ #LGM #Mets #Resist ◆ 🎧 ¡srǝǝɥɔ! 🍺🍷🥃 ◆
ⓢⓜ🅘ⓛⓔ ◆ *take your hate elsewhere* ◆

⊙ Born March 20   🗓 Joined March 2010

366 Following   **1,005** Followers

14

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 Vega
video games, I drink Jam

📍 Las Vegas, Nevada

144 Following **81** Foll

Phil
@Philzfacts

Islanders fan in enemy

📍 Toronto, Ontario

242 Following **233**

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

Follow

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.
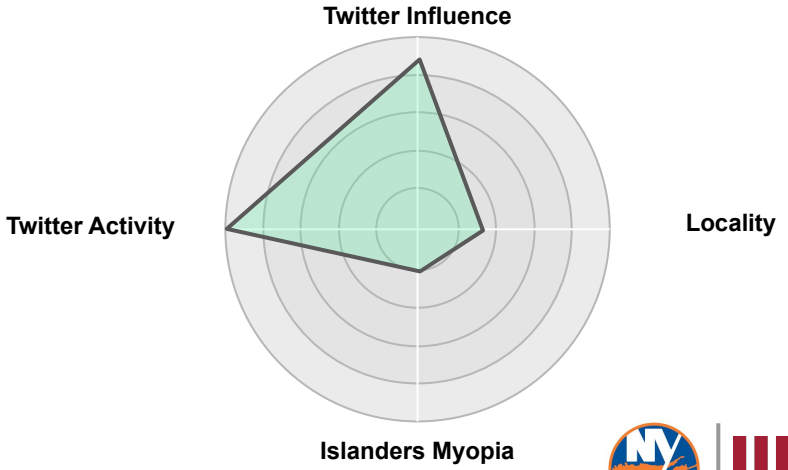
🔗 instagram.com/granthpaulsen/ 📅 Joined March 2009

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. @Moes_HQ lover

◎ New York, NY 🔗 nhl.com 🗓 Joined April 2010

1,746 Following   27.6K Followers

Example Accounts

Linda Cohn ✓
@lindacohn

Tina Cervasio ✓
@TinaCervasio

WFAN Sports Radio ✓
@WFAN660

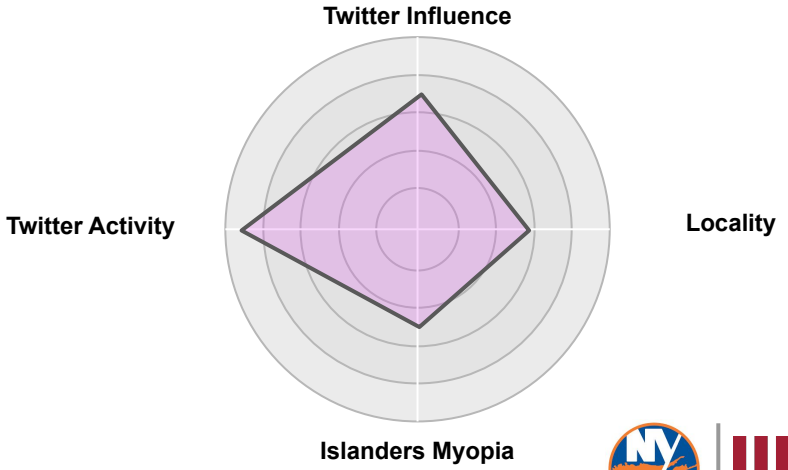**Mike Morreale** ✓
@mikemorrealeNHL

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!
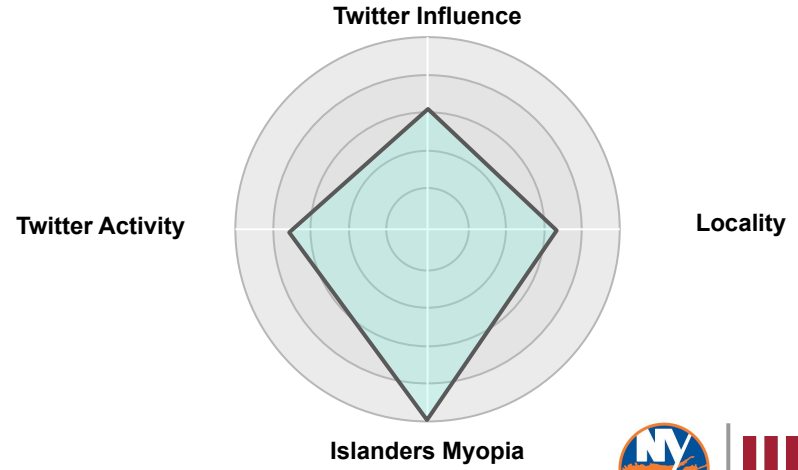
⊙ Long Island ▦ Joined February 2010

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
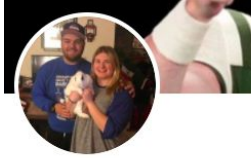
20
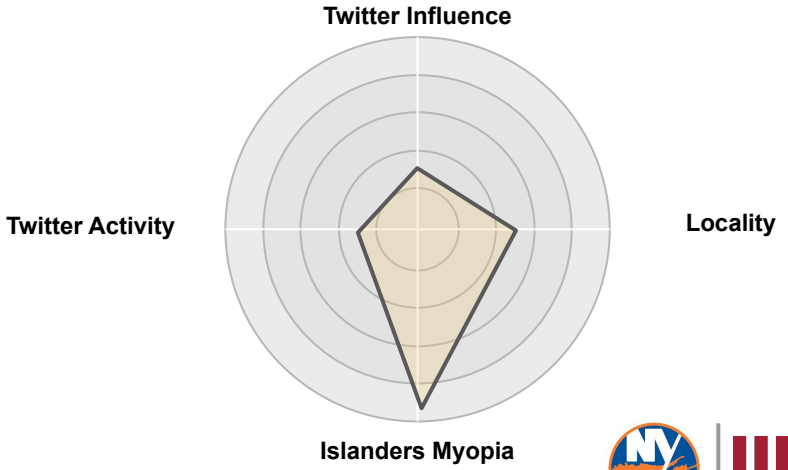
The Fair-Weather Fan

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
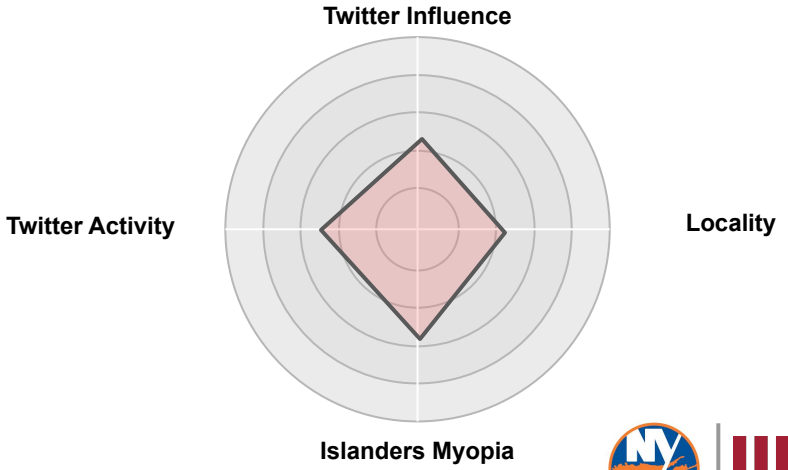435 Following   57 Followers

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

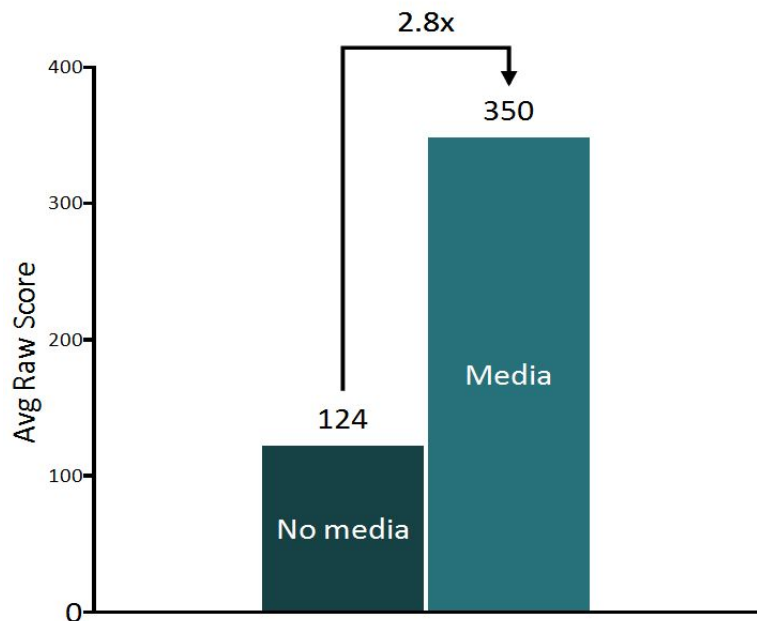*Each circle represents an additional 25th percentile*

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

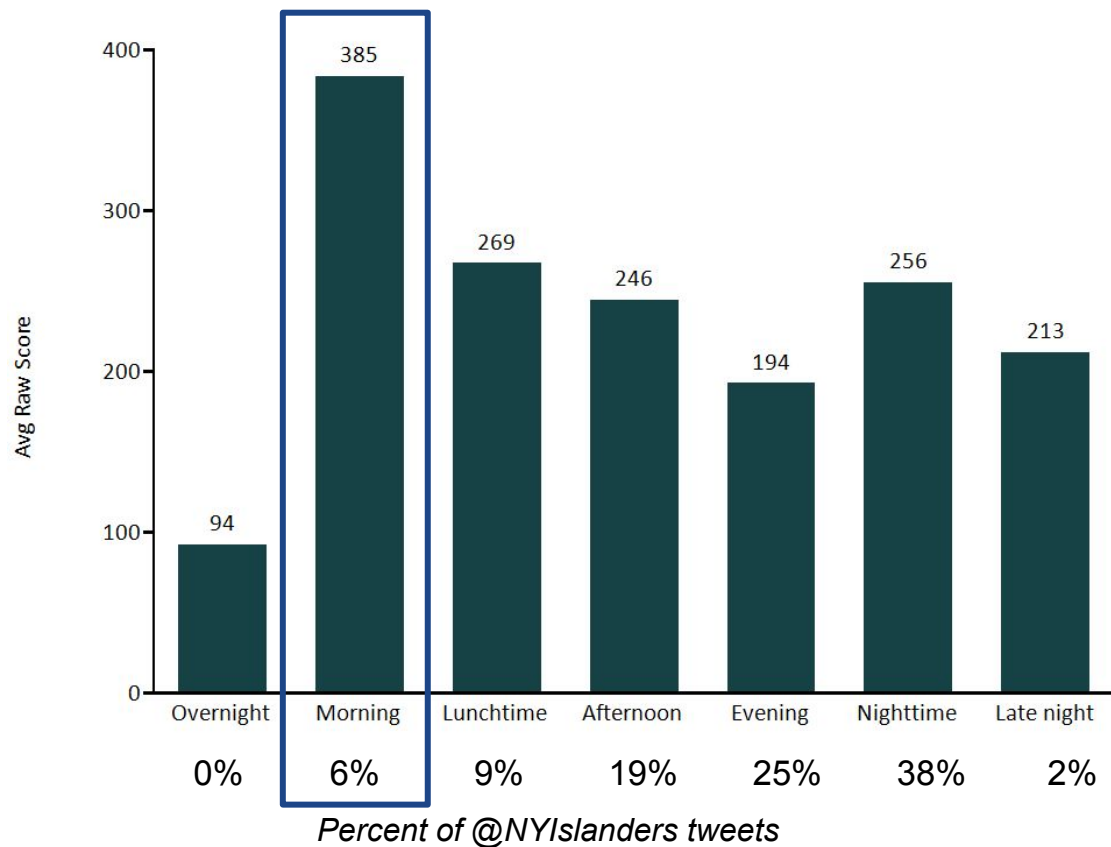Tweets with embedded media had **2.8x** higher engagement than plain text tweets.

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

Avg Raw Score

Overnight	Morning	Lunchtime	Afternoon	Evening	Nighttime	Late night
94	385	269	246	194	256	213
0%	6%	9%	19%	25%	38%	2%

Percent of @NYIslanders tweets

Schedule more morning tweets

Observation

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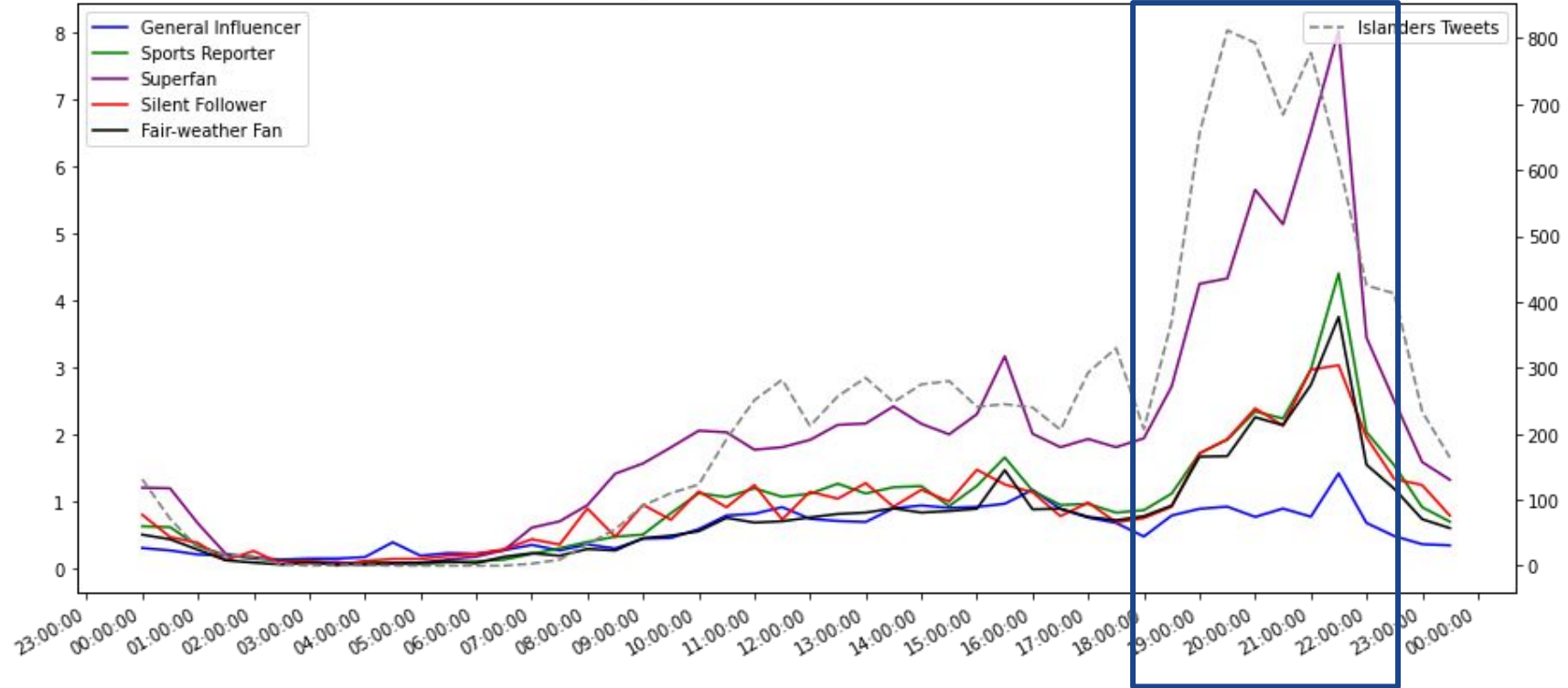
Recommendation

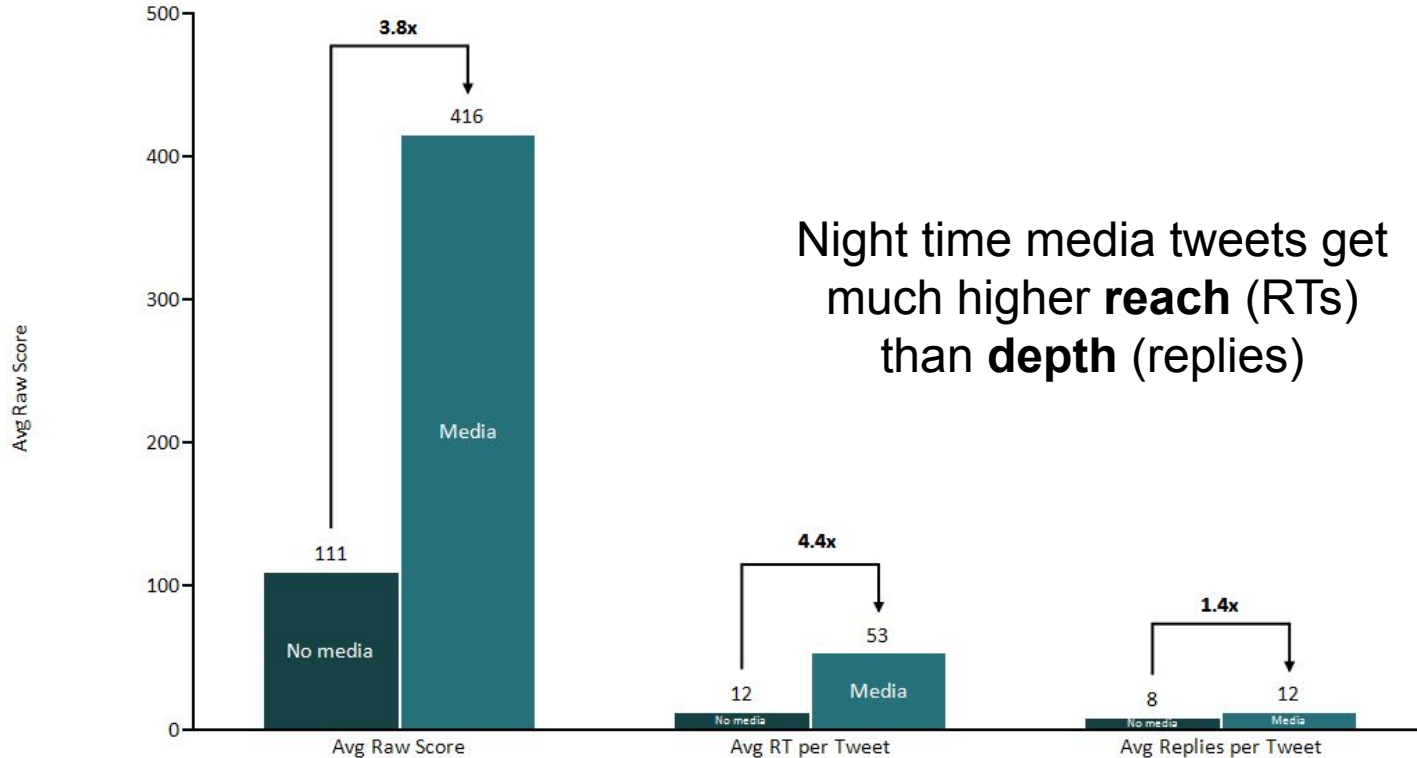**Adjust content schedule to tweet more during mornings (8:00 - 11:00 AM).**
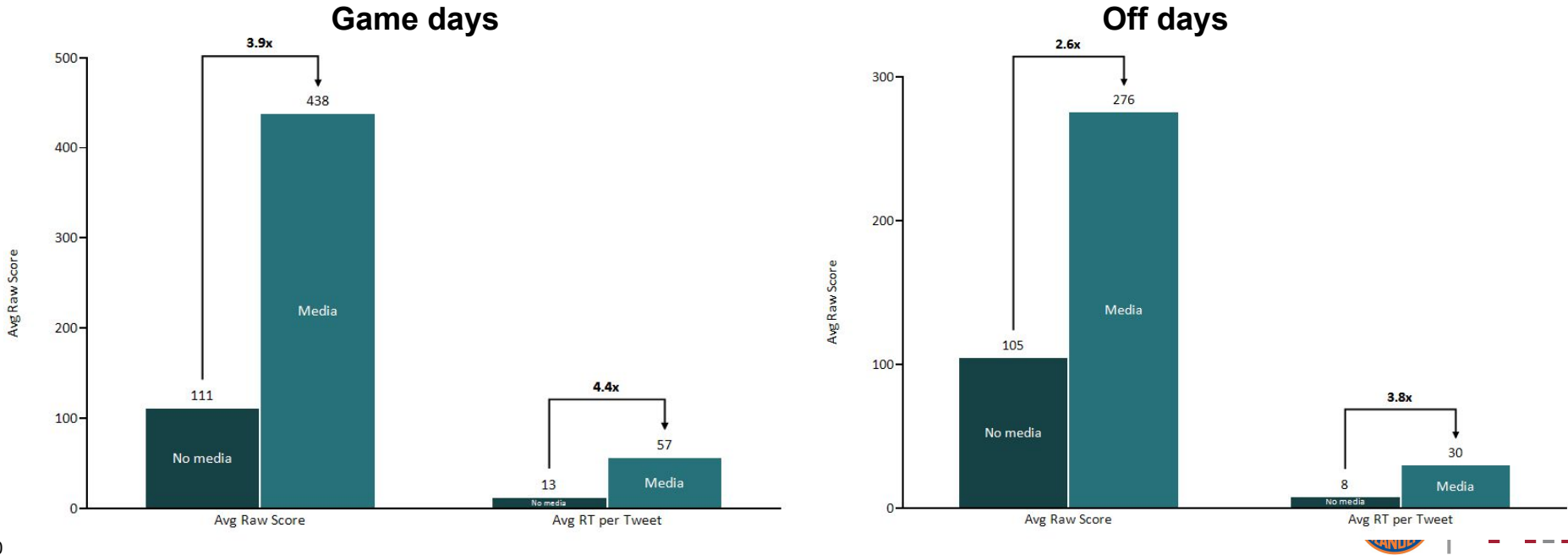
Isles influencers and fans tweet most often at night

Average Twitter Activity per User - Overall

Legend:
- General Influencer
- Sports Reporter
- Superfan
- Silent Follower
- Fair-weather Fan
- Islanders Tweets

Night tweets with media get 3.8x higher engagement

Night time media tweets get much higher **reach** (RTs) than **depth** (replies)

29

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

Game days

Avg Raw Score

3.9x

438

Media

111

No media

4.4x

57

Media

13

No media

Avg Raw Score · Avg RT per Tweet

Off days

Avg Raw Score

2.6x

276

Media

105

No media

3.8x

30

Media

8

No media

Avg Raw Score · Avg RT per Tweet

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.
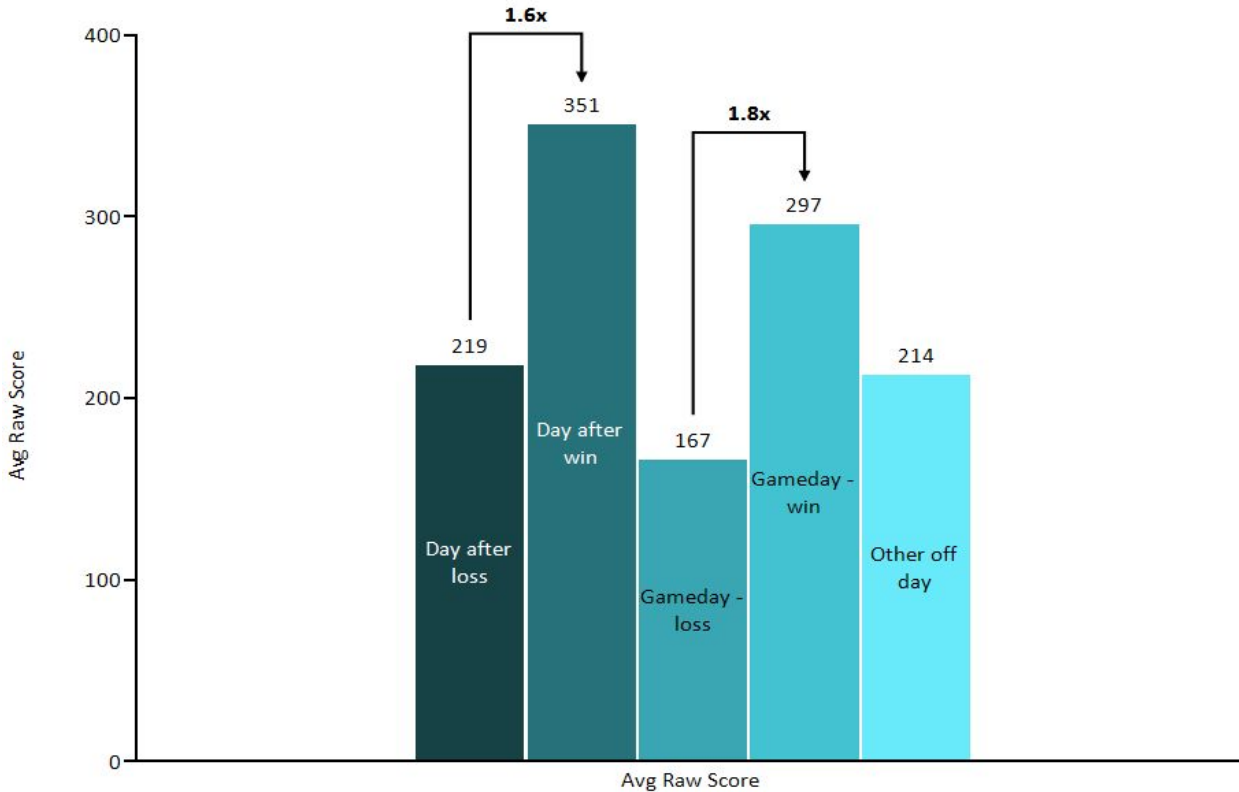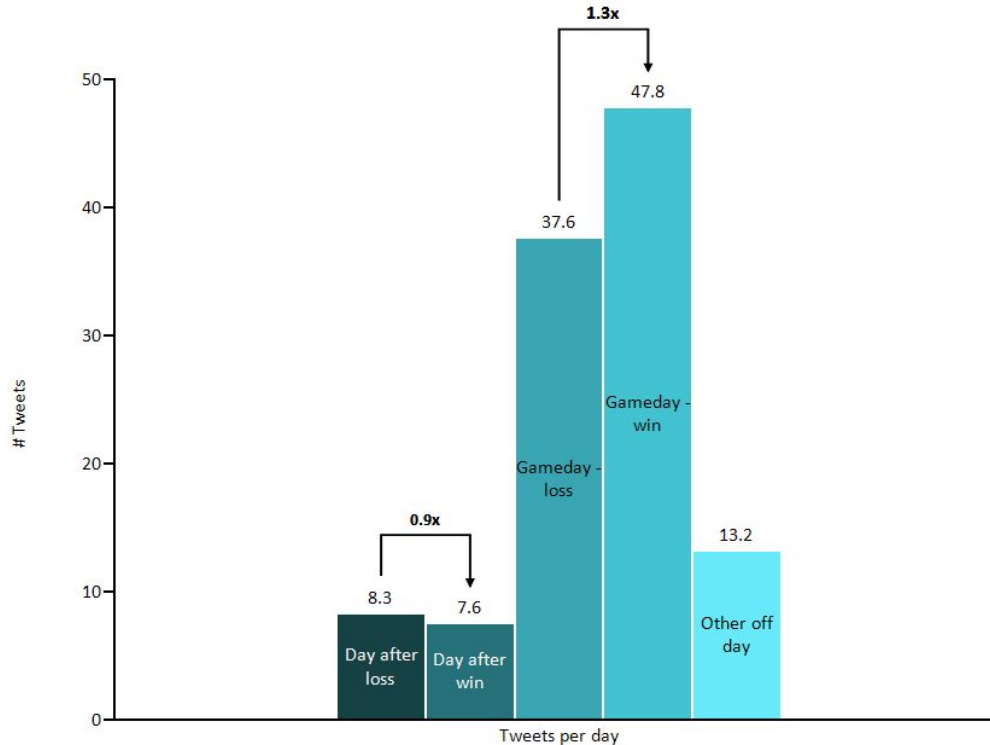
Recommendation

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!