



KAGR
KRAFT ANALYTICS GROUP

THE FUTURE OF LIVE EVENTS & SPORTS

THE REEMERGENCE OF FANS POST COVID-19

MAY 2020



INTRODUCTION - FANS & DATA

Sports fandom has changed forever due to the COVID-19 pandemic. As industry leaders in customer behavioral assessments using data and technology, we have undertaken a data-driven approach to better define and understand the future of live events and sports during the recovery from COVID-19.

Currently, available “insights” are largely survey-based and could be misrepresentative (either too small a sample size or not the right fan demographics for that market) and lead to inaccurate conclusions on a market-by-market basis.

At KAGR, we triangulate past behavioral data with qualitative and consumer insights to forecast future action. In these unprecedented times, we’ve used our technical and analytic capabilities via machine learning and web scraping to track the following:

- How US markets are rebounding (using 30 markets in our study)
- How businesses in those markets are recovering
- How fan engagement has changed

Our goal is to **predict fan interest in attending games and live events when they resume**. Our framework and analysis will suggest where attendance could be highest based on **market factors, venue initiatives, and fan avidity**. We have sifted through all the noisy data to bring you insights on how live events and sports will be **different as a result of the COVID-19 pandemic** and we will be adding new data sources to track this rapidly changing situation.

In a series focused on the data, we will explore three key questions related to fan demand on a market-by-market basis:

- Will fans come to games and live events?
- Will interest be higher than before?
- Has the willingness to pay changed?

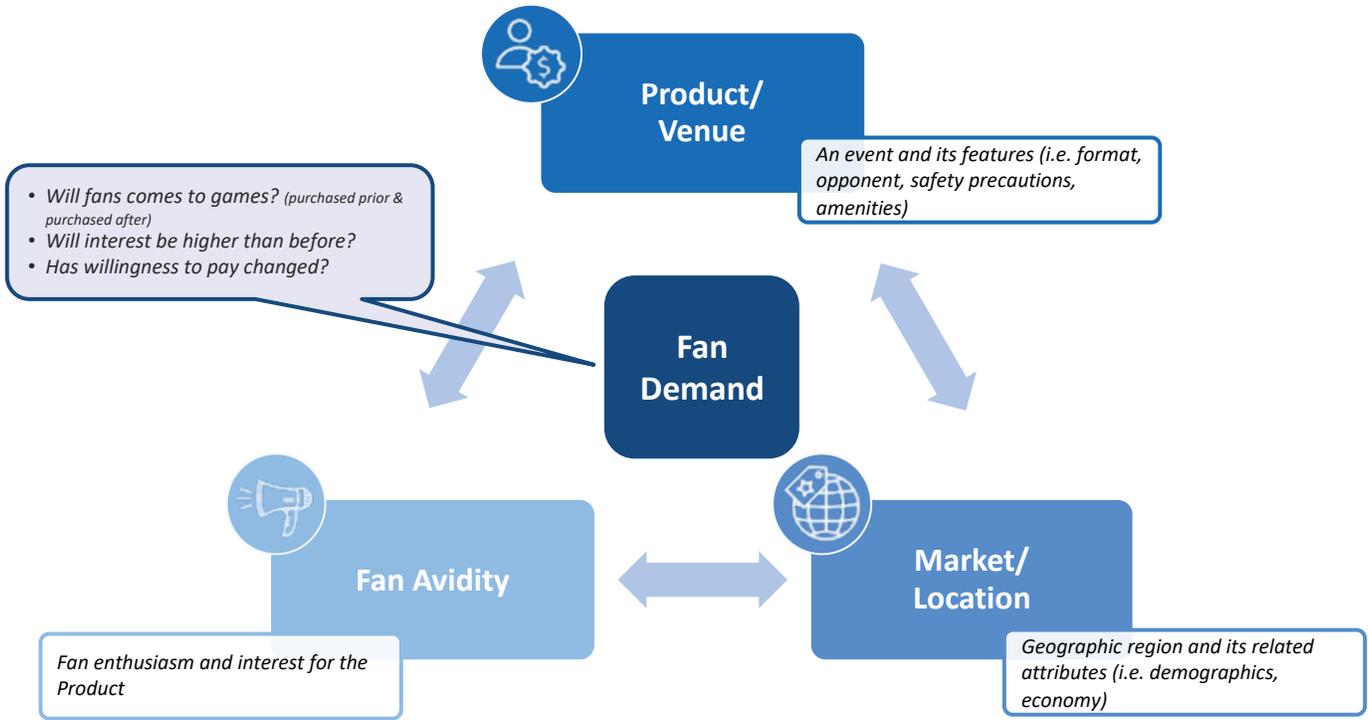
This report serves as an overview of our analytical approach and a preview of hypotheses and insights we will explore.

We will evaluate which demographics are most likely to be impacted by post COVID-19 fears in 30 markets. We will describe how those fans are represented in each market and project which markets will welcome sports back first through the creation of a Fan Demand Index.

We welcome your feedback, insights, and perspective as we endeavor to provide our view on the future of live events and sports. Our focus is providing information to help businesses make informed decisions.

-Jessica Gelman
CEO, KAGR (Kraft Analytics Group)

FIGURE 1. KAGR FAN DEMAND FRAMEWORK



KAGR FAN DEMAND FRAMEWORK

Based on our analysis, we are confident fans will want to attend games and live events post COVID-19. When fans return will be determined by market influences, team behavior and price. Local mandates for re-opening will vary by state. Other factors that will influence consumer confidence when considering to return to games will be demographics and how impacted their market was by COVID-19.

Updating regularly, our projections are based off a diverse data set from a wide range of data sources. This includes public health and government data, consumer and service industry information, and numerous publications. In addition, we measure fan sentiment, interest via viewership, social media, and other fan-related sources.

INSIGHTS DRIVEN FROM DATA, INCLUDING:



Market indicators for all 30 markets:

- Demographics, percentage of sports fan, increase in viewership for specific events
- Economic impact (e.g. unemployment and business closures)
- COVID-19 related data (e.g. percentage of the population tested positive by total population), local government response, and polling data



Fan Avidity to understand fan enthusiasm and interest based on:

- Historical ticketing and fan behavior patterns as a result of significant events
- Fan engagement during the pandemic
- Goodwill of leagues, teams, players, and fan sentiment



Product/Venue to assess the live event experience, including format and venue modifications:

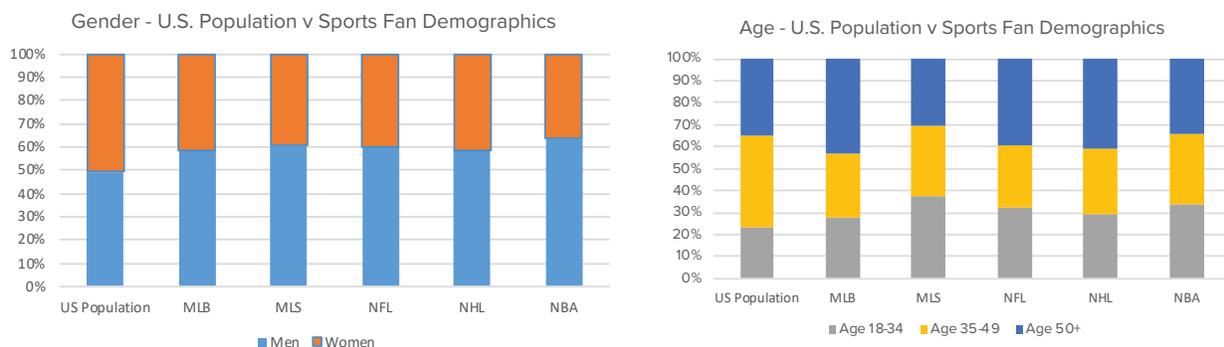
- Historical attendance across fan segments
- Venue experience surveys
- Impact of physical restrictions within essential services on consumer behavior

UNDERSTANDING THE FANS

What can we learn from sports fan demographics? How might demographics for certain leagues adjust as a result of COVID-19? What leagues might be at most risk of decreased demand?

At a macro view, there are discrete differences between the demographics of the five major sports leagues in the context of the U.S. population. The MLB, NHL, and NFL all have a greater percentage of its fan base over the age of 50, at 43%, 41%, and 39% respectively. While much of the COVID-19 research indicates age as a key risk factor, particularly in this demographic, polling of this group's willingness to attend has been mixed. Gender is slightly more insightful. According to polling, women are consistently more concerned about the long-term impact of COVID-19; we will seek to discern specifically for female purchasers. Sentiment will change rapidly as new information emerges. We will be analyzing the patterns across demographic groups over time and layering in additional factors to drive insights and decisions.

FIGURE 2. U.S. DEMOGRAPHICS COMPARED TO SPORTS FAN DEMOGRAPHICS





MARKET ANALYSIS AT A GLANCE

FIGURE 3. KAGR FAN DEMAND INDEX BY MARKET



The difference in COVID-19 impact across major U.S. markets is often stark. We will focus our analysis on 30 U.S. cities. Markets were chosen across a set of factors including:

- (1) Number of professional sports teams
- (2) TV market rankings
- (3) Representation of major college football markets

Using a variety of market demographics, COVID-19 factors, and other consumer behavior information, we performed an analysis to determine a Fan Demand Index by Market. While we expect results will continue to evolve, the initial findings provide a glimpse into the likeliness of certain markets to return to live events.

As shown in Figure 3, we have found 3 distinct groups of markets:

- “Most Likely to Return” – these markets have the least COVID-19 cases to date, lower unemployment claims, and a more diverse population. Teams located in these markets can expect strong fan demand
- “Slow to Return” – these markets have twice the number of COVID-19 related cases compared to those in the category of “Most Likely to Return.” These markets tend to be more Caucasian, liberal leaning, and have a lower percentage of people aged 18-34 and over 50. Our analysis has found a high degree of caution in these markets and we believe this will significantly impact fans willingness to return to live events
- “Too Early to Tell” – these markets have been the hardest hit by COVID-19. They have the highest number of unemployment claims, are liberal leaning, and have a larger African-American population. We will be closely monitoring additional factors, including local government guidance to better understand the impact to fan demand in these markets



FAN AVIDITY AT A GLANCE

To better understand the inconsistency of surveys suggesting fans likelihood to return, we explored the impact of several significant events over the past decade. While the COVID-19 pandemic is unlike any before, there are some learnings to glean on how these events impacted live event and venue experience (i.e. x-ray screening, clear bags), and ultimately consumer and fan demand:

- On April 15, 2013, the Boston Marathon bombing occurred. The **Boston Red Sox attendance** for the month of April was **down 13%** when compared to the two years before. Attendance for the rest of the 2013 season was large unaffected
- In the weeks following the Mandalay Bay shooting in Las Vegas on October 1, 2017, **Austin City Limits** (October 6 – October 15, 2017) saw an **8% drop in estimated economic impact** compared to the year prior. There was little impact to concerts later in 2017 or 2018
- Following 9/11, it **took three years for the airline industry to return** to pre 9/11 travel numbers. In July 2004 traveler numbers were 98.3% of August 2001 levels (65.2 million) and by July 2005 the number of airline passengers had reached 71 million
- We explored other non-tragic events across all major sports leagues including the NFL kneeling pro tests, Don Sterling racial remarks, and other owner, team, and player related off and on-field actions, all of which drew national publicity; however there was no conclusive impact to fan demand as a result of those events

IMPACT OF LEAGUE, TEAM, AND PLAYER ACTIONS DURING COVID-19

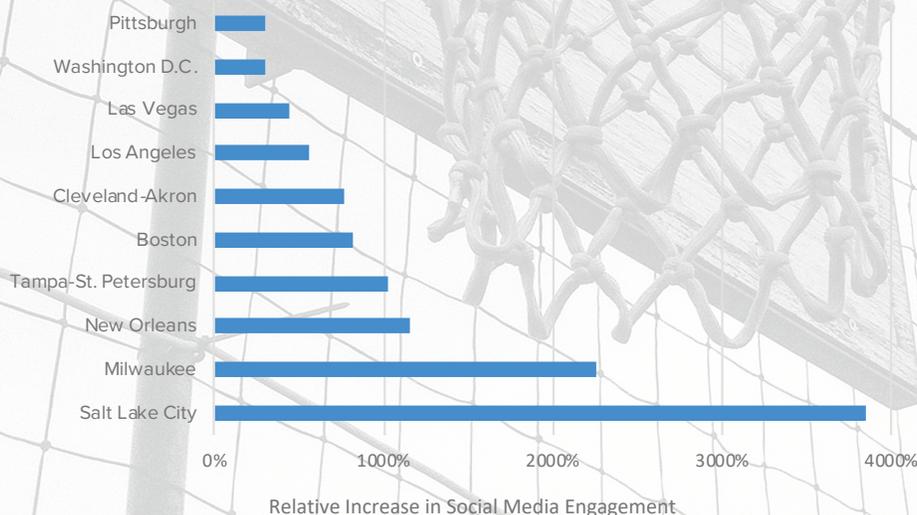
In April, Nielsen surveyed 1,300 (of which 850 were sports fans) to better understand impact of league, team and player actions:

- 70% of sports fans said “they would support a league based on how it conducted itself during the pandemic”
- Almost half off fans (45%) said they would “stop watching” a league if they disagreed with the way it comported itself

We analyzed further, collecting information across the major sports leagues on how teams and players have supported their communities and staff during the pandemic. In Figure 4, we track the impact of these actions on social media engagement at the market level across NFL, NHL, NBA, and MLB teams. Interestingly, the NBA alone drives the increase in social media engagement for the top three markets – specifically player donations to cover staff salaries. All of which occurred shortly after the NBA postponed the season. We will continue to collect this information to draw insights into fan sentiment and willingness to return.

FIGURE 4. MARKET-LEVEL SOCIAL MEDIA ENGAGEMENT BASED ON TEAM AND PLAYER GOODWILL

Top 10 Markets: Social Media Engagement Impact





PRODUCT/VENUE OVERVIEW

The venue experience will be different. We are anticipating capacity restrictions and a number of crowd-controlling measures. Teams will need to assess the “features” that best meet market, fan, and league requirements.

To set the baseline for ongoing evaluation, we performed an analysis of purchase and attendance behavior across fan segments. For three of the major sports leagues, our analysis shows:

- 79%-81% of fans bought tickets once over a four-year period. This suggests a large casual fan population in any given market
- For most professional sporting events, 65-75% of seats are purchased by fans who have bought in consecutive years. More importantly, more than 35%+ of attended seats are owned by season ticket members (STM)
- The remaining 36% are considered avid fans

As teams navigate the coming months, critical questions to address will include how many longstanding STMs will still come to a game post COVID-19? In addition, if venue capacity restrictions are required, how should teams consider inventory management challenges that may result?

LOOKING FORWARD: SUBSCRIBE TO KAGR'S UPDATES

Information is changing rapidly – leagues, teams, and other stakeholders require a flexible decision-making framework that accounts for new insights across many demographics, markets, fan avidity, and product/venue factors.

Over the next several months, we will extend our analysis and enhance the variety of sources to provide broader insights. Our regular report will focus on expanding beyond fan demand to explore the three overarching questions:

- (1) Will fans come to games and live events?
- (2) Will interest be higher than before?
- (3) Has the willingness to pay changed?

If you are interested in receiving regular updates or have interest in partnering with us on this effort, please contact us: contact@kagr.com.