Unveiling the World of Fantasy Sports: User Perceptions and Motivations

Dr. Arnaz Kaizad Wadia
Assistant Professor, Faculty of Business Administration, GLS University,
Ahmedabad, Gujarat, India
arnazwadia22@gmail.com

Dr. Nupur Rawal
Assistant Professor, Faculty of Business Administration, GLS University,
Ahmedabad, Gujarat, India
nupur.rawal26@gmail.com

Dr. Smruti Vakil
Assistant Professor, Faculty of Business Administration, GLS University,
Ahmedabad, Gujarat, India
dr.smrutivakil@gmail.com

Dr. Maulik Shah
Assistant Professor, Faculty of Management, GLS University,
Ahmedabad, Gujarat, India
prof.maulikshah@gmail.com

Abstract:

Purpose of Study: This study investigates user behaviors, motivations, and concerns regarding fantasy sports applications in Ahmedabad city. It aims to identify the driving factors behind user engagement with Fantasy Sports platforms, exploring user loyalty, personalized experiences, and potential reservations. By capturing firsthand perspectives, the research seeks to provide a comprehensive understanding of user perceptions within this urban context.

Research Methodology: A mixed-methods approach is used, combining primary data from structured questionnaires and secondary data from scholarly sources. The study targets 193 respondents in Ahmedabad through convenience sampling. Data analysis is conducted using Microsoft Excel and SPSS, employing a descriptive research design to explore user engagement and perceptions.

Findings The study reveals that fantasy sports applications predominantly attract young males, with a significant number being students and post-graduates. Most users prefer cricket, with 'DREAM 11' being the most popular app. Users typically engage with these apps twice weekly, spending about an hour per day. Recommendations from friends or family are the primary reasons for initial engagement. Despite the introduction of GST and TDS reducing usage, many users report profits and plan to continue using these apps.

Theoretical Implications: The study supports theories on user-friendly design, economic impacts on consumer behavior, social influence, motivation, retention strategies, trust and security, personalization, and the importance of continuous improvement. It underscores the relevance of the Technology Acceptance Model, Social Influence Theory, Expectancy Theory of Motivation, and Trust Theory in e-commerce.

Practical Implications: Developers should prioritize intuitive design, affordable transaction fees, and attractive prizes. Implementing referral programs and addressing concerns related to taxation can enhance user retention. Establishing clear reporting channels for unfair play and continuously updating the app based on user feedback are essential for maintaining engagement and trust

Key words: Consumer Behavior, Fantasy Sports, User Engagement, User Perception, User Motivation

The World of Fantasy Sports

Fantasy sports are digital platforms that allow users to engage with real-life sports matches by creating virtual teams comprising proxies of actual players participating in upcoming games. Users compete based on the real-world statistical performances of these players in officially sanctioned matches. This experience enables users to assume the roles of coaches or managers, with the authority to drop, recruit, or trade players. Teams are finalized and changes locked before a match begins. For some, this deepens their engagement with sports beyond mere viewership; for others, it's about the competition and strategic thinking involved. Fantasy sports offer a unique value proposition as they are rooted in real-life events, providing meaningful interaction with sports without simulated gameplay. This distinct characteristic often leads to confusion outside the industry about what fantasy sports truly are.

Fantasy sports enthusiasts navigate a realm wherein strategic decisions merge with financial acumen. Operating within a virtual budget, users assemble their dream teams by investing virtual funds in real-life athletes, each priced according to their real-world rankings. The challenge lies in optimizing this budget to build a formidable team while adhering to constraints on the number of players from the same team, position, or profile. The competition centres on live sports events, but for fantasy sports fans, the match's final outcome is secondary to the individual performance of selected players. Metrics like runs, goals, or assists determine success, turning users into virtual team managers whose fortunes hinge on the actual achievements of real-life players.

Participants face a choice between free and paid contests, with the latter introducing a financial element. A portion of the contest entry fee contributes to the fantasy sports platform, while the remainder forms the prize pool. Users can adjust their teams until a specified cut-off time, typically before the event starts. Paid contests add an exciting incentive, transforming the virtual arena into a competitive space where strategic prowess and sports knowledge converge for potential rewards.

Literature Review

Fantasy sports have emerged as a significant phenomenon globally, particularly influencing sports fandom and engagement behaviors among participants. Rai et al. (2023) delve into the motivational factors driving fantasy sports participation, highlighting their direct positive impact on users' attachment to fantasy teams and sense of competition. This study underscores how these factors subsequently influence media consumption and gambling behaviors among fantasy sports enthusiasts, emphasizing practical implications for providers in designing policies tailored to Indian users. Chacko et al. (2020) offer a comparative study on customer preferences towards online betting applications, focusing on platforms like Bet365 and Dream11. They discuss the legal and illegal dimensions of sports betting, noting its widespread appeal across various sports and its potential implications for fostering gambling-related activities.

Houghton et al. (2019) explore the transition from fantasy sports to sports betting, particularly in the context of pay-to-play (P2P) fantasy sports. They highlight how these platforms integrate with actual sporting events, influencing participants' knowledge enhancement and competitive engagement, thus bridging the gap between virtual fantasy and real-world sports betting. Misra et al. (2020) addressed the regulatory challenges posed by online fantasy sports platforms (OFSP), determining whether these activities constitute games of skill or chance. Their data-driven approach emphasizes the role of skill in fantasy sports outcomes, distinguishing them from purely chance-based gambling activities. Smith et al. (2006) examine decision-making processes within online fantasy sports communities, analyzing how participants utilize statistical analysis and optimization strategies to construct competitive teams. Their findings suggest a trend towards informed decision-making based on analytical principles rather than personal biases, contributing to a deeper understanding of strategic behavior in fantasy sports.

Martin et al. (2020) conducted a systematic review of motivations for fantasy sports participation, identifying fun, competition, and social interaction as primary drivers. They emphasize the diversity of motivations across different types

of fantasy sports leagues, suggesting avenues for future research into daily fantasy sports (DFS) leagues and their distinct motivational dynamics. Weiner and Dwyer (2017) investigate differences in motives and consumption behaviors between DFS and traditional fantasy sports (TFS) players. Their study highlights unique behavioral patterns among DFS-only players, indicating higher engagement with sports media and potentially different motivations compared to TFS players. Nower et al. (2018) explored the relationship between fantasy sports participation and gambling behaviors, examining the prevalence and severity of gambling problems among DFS players. Their findings underscore the need for further research into the psychological and addictive aspects of fantasy sports engagement.

Manvee (2023) and Patil & Kapoor (2021) provided insights into the legal landscape of fantasy sports in India, highlighting regulatory challenges and the industry's potential for growth amidst legal ambiguities and classification issues. Moreover, initially gaining structure in the early 2000s, the fantasy sports market has grown significantly, particularly with the popularity of football among male players averaging 32 years old, spending an average of $653 annually (Sondhi, 2018). This growth extends to developing countries like China and India, driven by tech-savvy internet users (Sondhi, 2018). Motivations for participating in fantasy sports vary widely. Yamaner and Sarikan (2022) identify entertainment, competition, social interaction, and enjoyment as primary motivations, with less emphasis on monetary rewards in traditional season-long leagues. Studies further differentiate user motives between traditional and daily fantasy sports (Weiner & Dwyer, 2017), highlighting how DFS attracts different participant profiles and consumption patterns compared to traditional formats. In India, fantasy sports, particularly fantasy cricket, have surged in popularity alongside advancements in smartphone technology (Naha, 2021). This growth has sparked debates over whether fantasy cricket constitutes a game of skill or chance, impacting its legal classification and social perception (Naha, 2021). Meanwhile, the Indian sports industry is adopting cutting-edge technologies like blockchain and virtual reality to enhance fan engagement, underscoring the evolving landscape where fantasy sports play a significant role (Mahajan et al., 2023).

Scholarly research also examines the addictive potential and cultural dimensions of fantasy sports. Lomax (2009) discusses addictive behaviors associated with fantasy sports, fueled by technology use and gambling elements, especially in daily formats. Moreover, the regulatory environment for online fantasy sports platforms in India remains uncertain, reflecting broader challenges in defining skill versus chance in gaming regulations (Chanvi, 2023). Fantasy sports have emerged as a transformative phenomenon in the realm of sports engagement, blending elements of competition, strategic decision-making, and fan interaction through digital platforms (Pickering et al., 2016; Suh et al., 2010). Initially popularized through season-long formats, fantasy sports have evolved significantly with the advent of Daily Fantasy Sports (DFS), offering more frequent engagement and immediate gratification (Phelan & O'Hern, 2016). This evolution has sparked debates about whether fantasy sports constitute skill-based gaming or gambling, influencing both regulatory discussions and scholarly inquiry (Pickering et al., 2016).

Motivations for participating in fantasy sports vary widely among enthusiasts. Research indicates that motivations include social interaction, competition, knowledge enhancement, and entertainment (Suh et al., 2010). Participants are often driven by the desire to test their sports acumen against peers, enhance social connections, and derive entertainment from managing virtual teams of real-life athletes (Billings & Ruihley, 2013; Brown et al., 2012). The rise of DFS platforms has introduced new dynamics to fantasy sports participation. Unlike traditional gambling, DFS users are motivated less by financial gain and more by social engagement and competitive spirit (Pickering et al., 2016). However, the frequency of DFS events and the potential for large financial stakes raise concerns about addictive behaviors and regulatory oversight (Phelan & O'Hern, 2016). This prompts a need for comprehensive research to understand the impact of DFS on users and the broader community (Pickering et al., 2016). Studies also highlight the influence of marketing strategies on fantasy sports participation. Messaging that emphasizes competitive thrill or social camaraderie resonates strongly with participants, influencing their willingness to engage and recommend platforms to others (Phelan & O'Hern, 2016). Fairness perceptions play a role in user attitudes, although their direct impact on participation behavior requires further exploration (Phelan & O'Hern, 2016).

Demographic factors, such as age, significantly shape motivations and engagement patterns in fantasy sports. Younger participants often seek entertainment and sports knowledge validation through fantasy sports, while older participants may participate more passively for leisure (Brown et al., 2012). These age-related differences underscore the evolving role of

fantasy sports in shaping sports media consumption habits across generations (Brown et al., 2012). The legal and regulatory landscape surrounding fantasy sports, particularly in jurisdictions like India and the United States, continues to evolve. Questions persist regarding whether fantasy sports should be classified as gambling or skill-based gaming, impacting legislative decisions and platform operations (Gupta et al., 2022). Understanding these nuances is crucial for developing effective regulatory frameworks that balance consumer protection with industry innovation (Pickering et al., 2016).

Research Methodology

Scope of Study

This study aims to delve into the intricate world of fantasy sports applications by exploring user perceptions, motivations, and experiences. We will examine how participants engage with these platforms, focusing on the aspects that extend beyond merely supporting their favorite teams. By investigating the factors that drive users—such as the thrill of winning, the camaraderie with other fans, and the opportunity to showcase sports knowledge—we aim to uncover what makes these virtual sports adventures so appealing. This research will analyze the strategic decision-making processes, satisfaction levels, and challenges faced by users, offering a comprehensive understanding of the multifaceted allure of fantasy sports applications. Through a combination of surveys, interviews, and data analysis, we will provide insights into the user experience, contributing to the broader knowledge of digital sports engagement and its impact on user behavior and satisfaction.

Objective of the Study

The objective of this study is to investigate user behaviors, motivations, and concerns regarding fantasy sports applications in Ahmedabad city. The study aims to identify what drives users to engage with platforms like DREAM 11, MPL, HOWZAT, and PROBO Fantasy Sports. It seeks to understand the factors that contribute to user loyalty and continued engagement, exploring how personalized experiences such as team creation and player selection influence user attachment to these platforms. Additionally, the research intends to uncover any concerns or reservations that users may have regarding fantasy sports apps, providing a comprehensive view of user perceptions within this specific urban context. By directly engaging with users, the study aims to capture firsthand perspectives that can inform understanding of how personalized experiences such as team creation and player selection influence user attachment to platforms like DREAM 11, MPL, HOWZAT, and PROBO Fantasy Sports.

Data Collection

The data collection for this study on fantasy sports applications in Ahmedabad employs a mixed-methods approach, focusing on both primary and secondary sources. Primary data will be gathered through a structured questionnaire administered to users of fantasy sports applications. This questionnaire is designed to elicit quantitative insights into user motivations, engagement factors, and concerns related to these digital platforms. In addition to primary data, secondary sources are leveraged, including websites, journals, theses, and existing research papers. These sources provided contextual background and theoretical frameworks related to fantasy sports and digital applications. They supported the study by offering insights into broader industry trends, legal frameworks, and scholarly discourse surrounding digital sports engagement.

Sampling Plan

The sampling plan targets all users of fantasy sports applications within Ahmedabad, focusing on capturing a diverse range of perspectives from this specific user base. A non-probability convenience sampling method is chosen due to practical constraints and accessibility issues, aimed to survey approximately 200 respondents. This approach facilitated data collection from users who are readily accessible, though it acknowledged potential biases associated with this method, such as sampling bias and non-response bias.

Research Design & Analysis

The study adopts a descriptive research design, aiming to offer valuable insights into the dynamics of fantasy sports participation and user interactions with digital sports applications. For data analysis, Microsoft Excel will be utilized initially for data organization, followed by SPSS (Statistical Package for the Social Sciences) for comprehensive statistical analysis. These tools enable exploration of relationships and patterns within the collected data, helping to identify correlations between user demographics, engagement behaviors, and perceptions of fantasy sports applications.

Beneficiaries of the Study

The study anticipates several beneficiaries from its findings, including app developers, marketers, business stakeholders, regulatory bodies, and academic researchers. Insights gained from the study can inform app design improvements, targeted marketing strategies, strategic investments, regulatory policies, community engagement initiatives, and further academic research in the field of digital sports applications.

Limitation of the Study

However, the study acknowledges several limitations that may impact the interpretation and generalizability of its findings. These include the limited sample size, potential biases inherent in the sampling method, specificity of findings to Ahmedabad, constraints on comprehensive long-term impact assessment, ethical considerations regarding user data privacy, and potential non-response bias. These factors are taken into account to ensure transparency and validity in interpreting the study's outcomes and implications.

Hypotheses:

H0: There is no significant association between gender and the preference for fantasy sports applications.

H1: There is a significant association between gender and the preference for fantasy sports applications.

H0: There is no significant difference in user satisfaction between users who switch to other fantasy sports apps and those who do not.

H2: There is a significant difference in overall user satisfaction between users who switch to other fantasy sports apps and those who do not.

H0: There is no significant difference in the frequency of fantasy sports application usage among different age groups.

H3: There is a significant difference in the frequency of fantasy sports application usage among different age groups.

H0: There is no significant association between annual income and the amount spent on fantasy sports application by users.

H4: There is a significant association between annual income and the amount spent on fantasy sports application by users.

H0: There is no significant difference in the time spent on fantasy sports applications among the users with different educational qualification levels.

H5: There is a significant difference in the time spent on fantasy sports applications among the users with different educational qualification levels.

Data Analysis and Interpretation

Table 1: Use Of Fantasy Sports Application

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	161	83.41	83.41	83.41
	No	32	16.58	16.58	16.58
	Total	193	100	100.0	

According to Table 1, out of 193 respondents surveyed, 161 individuals reported using fantasy sports applications. Therefore, only 161 responses are considered for further analysis and interpretation of the findings related to fantasy sports app usage. This represents approximately 83.41% of the total respondents who participated in the survey. The remaining 32 respondents, constituting about 16.58% of the sample, indicated that they do not use fantasy sports applications.

Demographic Analysis

Gender distribution analysis among fantasy sports application users highlights that out of the 161 respondents who use these apps, 111 (68.9%) are identified as male and 50 (31.1%) are identified as female. This indicates a significant predominance of male users within the surveyed population. Furthermore, based on the analysis of age distribution among fantasy sports application users, out of the 161 respondents, the majority fall into the age categories as follows: 13 respondents (8.1%) are below 18 years old, 84 respondents (52.2%) are aged between 19 to 30 years, 42 respondents (26.1%) are between 31 to 40 years old, 13 respondents (8.1%) are aged between 41 to 50 years, and 9 respondents (5.6%) are above 51 years old. The data shows a notable concentration of users in the younger age brackets, particularly among those aged 19 to 30, indicating a strong youth participation in fantasy sports applications. This age distribution provides insights into the demographic preferences and engagement patterns within the surveyed population.

Based on the analysis of occupation, the majority of respondents are students (54), followed by employees (37) and those in business (34). There are 23 respondents in professional occupations and 13 who are homemakers, indicating a varied distribution across different occupational categories. Regarding education levels, the dataset showcased that 10 respondents have completed 10th grade, 31 have completed 12th grade, 45 hold a graduation degree, 64 have completed post-graduation, and 11 respondents have obtained a Ph.D. This distribution highlights a higher level of educational attainment among the surveyed population, with a significant proportion having completed post-graduation studies.

In terms of income distribution, the majority of respondents (57) reported having no income. There are 50 respondents in the income bracket below Rs 200,000, 50 respondents within the range of Rs 200,000 to Rs 500,000, and 30 respondents earning Rs 500,000 and above. This income distribution reflects a diverse economic background among the respondents, with a notable proportion reporting lower income levels or no income.

Moreover, the further data collected is anlaysed and interpreted as below for exploring the objective of understanding the user perception and motivation for the usage of sports fantasy applications.

Table 2: Preferred Sports Fantasy Applications

		Frequency	Percent	Valid Percent	Cumulative Percent
	Dream 11	52	26.9	32.3	32.3
Valid	Probo	31	16.1	19.3	51.6
	MPL	29	15.0	18.0	69.6
	Howzat	21	10.9	13.0	82.6

	Others	28	14.5	17.4	100.0
	Total	161	83.4	100.0	
Missing	System	32	16.6		
Total		193	100.0		

The table 2 illustrates the preferred gaming or sports apps among the respondents. Among them, the majority (52 respondents) use "DREAM 11", indicating its popularity within the surveyed group. In contrast, "HOWZAT" is preferred by only 21 respondents, suggesting a lower adoption compared to "DREAM 11". The app "Probo" shows usage preference among 31 respondents, while "MPL" is used by 29 respondents. Additionally, 28 individuals reported using other apps not specifically listed in the provided categories, highlighting a diverse range of app preferences among the surveyed population.

Figure 1: Popularity And Preference Towards Sports
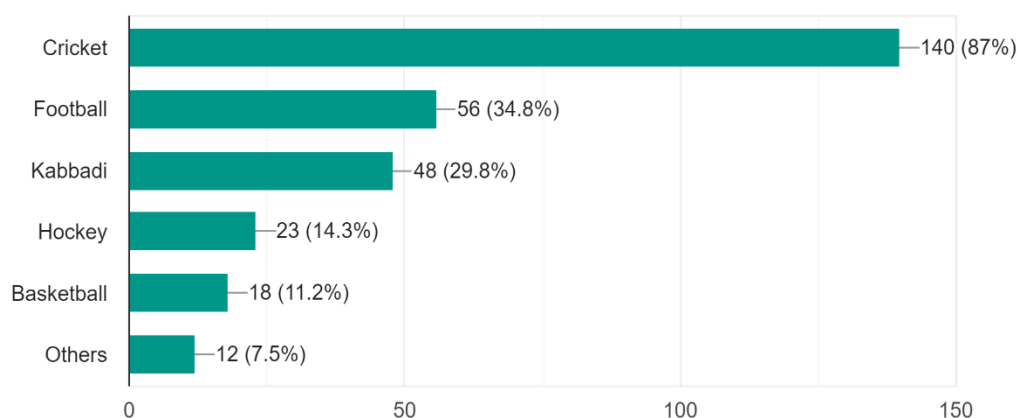
The Figure 1 illustrates the popularity of various sports based on respondent preferences. Cricket emerges as the dominant sport, favored by 140 respondents, accounting for 87% of the total. Football holds the second position with 56 respondents (34.8%), followed closely by Kabbadi, which is favored by 48 respondents, representing 29.8%. Hockey and basketball have smaller followings, with 23 respondents (14.3%) and 18 respondents (11.2%) respectively. Lastly, a category labeled "Others" includes various less popular sports, collectively favored by 12 respondents, making up 7.5% of the total. This data clearly indicates cricket's overwhelming popularity, with football and Kabbadi also enjoying significant support, while hockey, basketball, and other sports have more modest followings.

Table 3: Frequency of App Usage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	22	11.4	13.7	13.7
	Once in a week	45	23.3	28.0	41.6
	Twice a week	49	25.4	30.4	72.0
	Once every 15 days	45	23.3	28.0	100.0
	Total	161	83.4	100.0	
Missing	System	32	16.6		
Total		193	100.0		

The Table 3 reveals the frequency of fantasy sports app usage among respondents. A small segment, 13.7%, uses the app daily, while a more significant portion, 28.0%, engages with it once a week. The highest usage frequency is observed among those who use the app twice a week, accounting for 30.4% of respondents. Another 28.0% of respondents use the app once every 15 days. In total, 161 respondents provided valid data, representing 83.4% of the sample. The remaining 16.6% of the sample, comprising 32 respondents, did not provide usage data. This indicates a diverse pattern of app usage, with the majority of respondents using the app weekly or biweekly.

The amount of time respondents spends using a particular app is also analysed wherein it is observed that the majority, 68 respondents, use the app for 1 hour. This is followed by 32 respondents who use it for 2 hours. Usage then decreases to 26 respondents for 3 hours and 21 respondents for 4 hours. The least number of respondents, 14, use the app for more than 4 hours. Overall, the data shows that shorter usage durations are more common, with a significant drop in the number of users as the duration increases, suggesting that extended usage periods are less frequent among the respondents.

The data about how long respondents have been using a particular app presented that among 161 respondents, 24.2% have been using the app for less than 6 months, and 27.3% have been using it for 6 months to 1 year. This indicates that more than half of the respondents (51.6%) have been using the app for up to a year. Additionally, 24.2% of respondents have been using the app for 1-2 years, and 14.9% have been using it for 2-5 years. A smaller portion, 9.3%, has been using the app for more than 5 years. Overall, the majority of users have relatively recent experience with the app, with usage gradually declining as the duration increases, indicating a larger proportion of newer users compared to long-term users.

Further the data is collected to understand the amount of money spend on a particular sports fantasy apps wherein it is observed that 29.2% spend less than Rs 100, while the highest percentage, 31.7%, spend between Rs 100 to Rs 500. Spending between Rs 500 to Rs 1000 accounts for 19.9% of respondents, and 19.3% spend Rs 1000 or more. The cumulative percentages indicate that 60.9% of respondents spend up to Rs 500, and 80.7% spend up to Rs 1000. The remaining 19.3% spend Rs 1000 or above. This data highlights that the majority of users tend to spend smaller amounts on the app, with nearly one-third of the respondents spending between Rs 100 and Rs 500, and a smaller proportion of respondents spending larger amounts.

Among the most influential factor that initially attracted respondents to download a particular sports fantasy app was recommendations from friends or family, cited by 26.1% of respondents. Advertising also played a significant role, attracting 21.1% of respondents. Positive reviews were the initial draw for 20.5% of users, while 14.3% were attracted by the app's features and functionality. Incentives or bonuses for new users influenced 11.8% of respondents, and 6.2% were drawn by other unspecified reasons. This data suggests that word-of-mouth and advertising are the motivation drivers for initial app downloads, followed by positive reviews, with features, incentives, and other reasons playing lesser but still significant roles.

The motivations behind respondents' engagement with a particular sports fantasy app is studied and it is found that the primary motivation, cited by 48.4% of respondents, is winning prizes. This is followed by competing with friends, which motivates 39.1% of the users. Enjoyment of the game itself is another significant factor, attracting 37.3% of respondents. Testing sports knowledge motivates 35.4% of the users, while social interaction is a driver for 29.2% of respondents. Monetary gain motivates 32.9% of users. Thus, the data reveals that the majority of respondents are driven by tangible rewards like prizes and money, as well as the intrinsic enjoyment of the game and competitive elements. Social interaction and testing one's sports knowledge also play significant roles in motivating users.

The data is also collected to get the insights about how respondents perceive the fairness and transparency of scoring and player selection. Among the valid responses analyzed, opinions varied significantly. A minority of respondents, comprising 10.6%, viewed the process as very unfair, while 12.4% found it unfair. In contrast, a substantial portion, 32.3%, held a neutral stance on the matter. An equal percentage, also 32.3%, considered the scoring and player selection process fair. Another 12.4% of respondents expressed the view that it was very fair. Overall, these findings highlight diverse perspectives on the fairness and transparency of scoring and player selection mechanisms while utilizing fantasy sports platforms.

Table 4: Switching to Alternative Sports Fantasy Apps

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	76	39.4	47.2	47.2
	No	85	44.0	52.8	100.0
	Total	161	83.4	100.0	
Missing	System	32	16.6		
Total		193	100.0		

The Table 4 examines whether respondents have ever contemplated switching to alternative applications. Of those who provided valid responses, 39.4% indicated that they have considered switching to an alternative app. This suggests a significant portion of the surveyed population has contemplated exploring other options beyond their current application choice. In contrast, 44.0% of respondents stated they have not considered switching. This indicates a sizeable portion of users who are satisfied with their current app and have not actively sought alternatives. Overall, these findings suggest a dynamic landscape where a notable number of users are open to exploring different app options, potentially influenced by factors such as performance, features, or user experience. This data provides insights into user behaviors and preferences within the context of fantasy sports app usage and potential switching intentions.

Table 5: Reasons to Switch

		Frequency	Valid Percent	Cumulative Percent
Valid	Better Prize Payouts	26	34.2	34.2
	Enhanced User Experience	11	14.5	48.7
	Lower Transaction Fees	14	18.4	67.1
	More Exciting Contests	9	11.8	78.9
	Change in Personal Preferences	8	10.5	89.5
	Stronger Privacy and Security	8	10.5	100.0
	Total	76	100.0	

Table 5 provides insights into the reasons why respondents who have considered switching to alternative apps would do so. Among those who indicated they have contemplated switching, various factors influenced their decision. The most common reason cited, by 34.2% of respondents, was the prospect of better prize payouts. This suggests that for a significant portion of users, financial incentives play a crucial role in app satisfaction and loyalty. Enhanced user experience was another notable factor, mentioned by 14.5% of respondents, indicating a desire for smoother and more enjoyable interactions with the app. Lower transaction fees also played a role, influencing 18.4% of respondents who considered switching, suggesting that cost efficiency is a significant consideration in app choice. Other reasons included seeking more exciting contests (11.8%), changes in personal preferences (10.5%), and prioritizing stronger privacy and security measures (10.5%). These findings highlight a range of motivations driving users to potentially switch apps, from financial benefits and user experience improvements to personal preference adjustments and security concerns. Overall, these insights underscore the multifaceted considerations that users weigh when evaluating and potentially changing their app usage habits.

Table 6: Reasons to Avoid Switching

		Frequency	Valid Percent	Cumulative Percent
Valid	Prizes and Rewards	25	29.4	29.4

	Social Interaction	10	11.8	41.2
	App Updates and Improvements	24	28.2	69.4
	More Exciting Contests	12	14.1	83.5
	Lower Transaction Fees	14	16.5	100.0
	Total	85	100.0	

The Table 6 explores the reasons why respondents who have not considered switching to alternative fantasy sports apps and continue to use their current application. Among those who provided valid responses, several key factors emerged as influential in their decision to stay with their current app. For 29.4% of respondents, the appeal of prizes and rewards offered by their current app was a significant factor in their decision to continue using it. This suggests that incentives such as prizes and rewards play a crucial role in retaining user engagement and loyalty. App updates and improvements were also cited as a reason by 28.2% of respondents. This indicates that ongoing enhancements and updates to the application contribute to user satisfaction and retention, as users appreciate continuous improvements in functionality and features.

Additionally, 16.5% of respondents highlighted lower transaction fees as a motivating factor for sticking with their current app. This reflects a practical consideration wherein cost efficiency influences user preference and loyalty. Other reasons mentioned included social interaction opportunities (11.8%) and the appeal of more exciting contests (14.1%), suggesting that social engagement and the entertainment value of contests also contribute to user retention. Overall, these findings underscore the diverse factors that contribute to user satisfaction and retention within the context of app usage, ranging from tangible benefits like rewards and lower costs to intangible aspects such as social interaction and ongoing app improvements.

Table 7: Impact of GST & TDS introduction in Fantasy Sports Apps

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I've reduced my usage due to the added taxation.	89	46.1	55.3	55.3
	No, it hasn't changed my usage patterns.	72	37.3	44.7	100.0
	Total	161	83.4	100.0	
Missing	System	32	16.6		
	Total	193	100.0		

The Table 7 examines how the introduction of GST (Goods and Services Tax) and TDS (Tax Deducted at Source) impacted the usage of fantasy sports applications wherein it is observed that 46.1% indicated that they have reduced their usage due to the added taxation. This suggests that the implementation of GST and TDS had a noticeable effect on user behavior, prompting a significant portion of users to scale back their usage of fantasy sports apps. Conversely, 37.3% of respondents stated that the introduction of GST and TDS has not changed their usage patterns. This indicates that a substantial number of users have not been deterred by the tax implications and continue to use the apps as they did before these taxes were introduced. Thus, these findings highlight the varying impacts of taxation policies on user engagement with fatasy sports applications, with a notable proportion of users adjusting their usage habits in response to the tax changes.

Table 8: Outcome of Participating in Fantasy Sports

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Profit	73	37.8	45.3	45.3
	Loss	43	22.3	26.7	72.0
	No profit, no loss	45	23.3	28.0	100.0

	Total	161	83.4	100.0	
Missing	System	32	16.6		
	Total	193	100.0		

The Table 8 examines the typical outcomes experienced by participants in fantasy sports applications. Among those who provided valid responses, several different outcomes were reported. Firstly, 45.3% of respondents indicated that they have experienced a profit from participating in these apps. This suggests that a significant portion of users have found financial success through their engagement with the applications. Conversely, 26.7% of respondents reported experiencing a loss from their participation. This indicates that a notable number of users have encountered financial setbacks or losses in their dealings with these apps. Additionally, 28% of respondents reported that they have neither gained nor lost financially from their participation ("no profit, no loss"). This suggests a segment of users who have engaged with fantasy sports apps without significant financial outcomes.

Table 9: Overall Satisfaction

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Dissatisfied	8	4.1	5.0	5.0
	Dissatisfied	18	9.3	11.2	16.1
	Neutral	68	35.2	42.2	58.4
	Satisfied	54	28.0	33.5	91.9
	Highly Satisfied	13	6.7	8.1	100.0
	Total	161	83.4	100.0	
Missing	System	32	16.6		
	Total	193	100.0		

The Table 9 provides an overview of user satisfaction levels with fantasy sports applications. Among respondents who provided valid feedback, satisfaction varied across different categories. A small percentage, 5%, expressed being highly dissatisfied with their experience, while 9.3% reported feeling dissatisfied. A significant portion, 42.2%, indicated a neutral satisfaction level, suggesting a balanced view without strong positive or negative feelings. On the positive side, 33.5% of respondents stated they were satisfied with their experience, and 8.1% reported feeling highly satisfied, indicating a strong level of contentment. These findings suggest a mixed landscape of user satisfaction with fantasy sports applications, with a notable number of users expressing neutral to positive sentiments.

Table 10: Usage of Fantasy Sports Application in Future

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	122	63.2	75.8	75.8
	No	39	20.2	24.2	100.0
	Total	161	83.4	100.0	
Missing	System	32	16.6		
	Total	193	100.0		

The Table 10 examines whether respondents intend to continue using fantasy sports services applications in the future. Among those who provided valid responses, 75.8% indicated that they plan to continue using these apps. This majority suggests a strong intention among users to persist with their current sports applications, indicating a level of satisfaction or perceived utility that encourages continued use. Conversely, 24.2% of respondents stated that they do not plan to continue

using the apps in the future. This indicates that a notable minority of users have intentions to discontinue their use, possibly due to dissatisfaction, changing needs, or other reasons.

Hypothesis Testing:

1. **Gender and preference for fantasy sports applications**

H0: There is no significant association between gender and the preference for fantasy sports applications.

H1: There is a significant association between gender and the preference for fantasy sports applications.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Which_app_use	161	83.4%	32	16.6%	193	100.0%

Gender * Fantasy Sports App Usage Crosstabulation

Count

		Which_app_use					Total
		Dream 11	Probo	MPL	Howzat	Others	
Gender	Male	44	21	18	13	15	111
	Female	8	10	11	8	13	50
Total		52	31	29	21	28	161

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.202[a]	4	.037
Likelihood Ratio	10.780	4	.029
Linear-by-Linear Association	8.945	1	.003
N of Valid Cases	161		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.52.

Interpretation:
Here, H0 is rejected. It means there is a significant association between gender and the preference for fantasy sports applications.

2. **Satisfaction between user who switch to other fantasy sports apps and those who do not**

H0: There is no significant difference in overall user satisfaction between users who switch to other fantasy sports apps and those who do not.

H2: There is a significant difference in overall user satisfaction between users who switch to other fantasy sports apps and those who do not.

Group Statistics

	Ever_considered_switching_alternative_app	N	Mean	Std. Deviation	Std. Error Mean
Overall_satisfaction_level	Yes	75	3.1600	1.02720	.11861

No	80	3.4000	.86566	.09678

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Overall satisfaction level	Equal variances assumed	.619	.433	-1.576	153	.117	-.24000	.15225	-.54078	.06078
	Equal variances not assumed			-1.568	145.095	.119	-.24000	.15309	-.54257	.06257

Interpretation:

Here, H0 is accepted. Which means there is no significant difference in the overall user satisfaction between users who switch to other fantasy sports apps and those who do not.

3. **Frequency of usage and age groups**

H0: There is no significant difference in the frequency of fantasy sports application usage among the users of different age groups.

H3: There is a significant difference in the frequency of fantasy sports application usage among the users of different age groups.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
How_often_do_you_use_fs_app * Age	161	83.4%	32	16.6%	193	100.0%

Usage of Fantasy Sports Application * Age Crosstabulation

Count

		Age					Total
		Below 18	19-30	31-40	41-50	Above 51	
How_often_do_you_use_fs_app	Daily	4	10	6	1	1	22
	Once in a week	0	24	10	8	3	45
	Twice in a week	5	24	16	2	2	49
	Once every 15 days	4	26	10	2	3	45
Total		13	84	42	13	9	161

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)

Pearson Chi-Square	16.352ᵃ	12	.176
Likelihood Ratio	18.280	12	.107
Linear-by-Linear Association	.380	1	.538
N of Valid Cases	161		

a. 12 cells (60.0%) have expected count less than 5. The minimum expected count is 1.23.

Interpretation:

Here, H0 is accepted. It means there is no significant difference in the frequency of fantasy sports application usage among different age groups.

4. **Annual income and amount spent by users on Fs apps**

H0: There is no significant association between annual income and the amount spent on fantasy sports application

H4: There is a significant association between annual income and the amount spent on fantasy sports application

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
How_much_amt_spend * Income	161	83.4%	32	16.6%	193	100.0%

How_much_amt_spend * Income Crosstabulation

Count

		Income				Total
		No income	Below Rs 200,000	200,000-500,000	500,000 & above	
How_much_amt_spend	Less than Rs 100	23	9	10	5	47
	Rs 100 to 500	20	7	18	6	51
	Rs 500 to 1000	10	7	10	5	32
	Rs 1000 & above	4	1	12	14	31
Total		57	24	50	30	161

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.819ᵃ	9	.001
Likelihood Ratio	28.427	9	.001
Linear-by-Linear Association	19.500	1	.000
N of Valid Cases	161		

a. 2 cells (12.5%) have expected count less than 5. The minimum expected count is 4.62.

Interpretation:

Here, H0 is rejected. It means there is a significant relationship between annual income and the amount spent on fantasy sports application by users.

5. Education qualification and time spent by user on fantasy sports applications

H0: There is no significant difference in the time spent on fantasy sports applications among respondents with different educational qualification levels

H5: There is a significant difference in the time spent on fantasy sports applications among respondents with different educational qualification levels.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
How_much_time_use * Education	161	83.4%	32	16.6%	193	100.0%

How_much_time_use * Education Crosstabulation
Count

		Education					Total
		10 th Pass	12 th Pass	Graduation	Post Graduation	Phd	
How_much_time_use	1 Hour	3	10	18	37	0	68
	2 Hours	2	7	6	15	2	32
	3 Hours	1	6	14	3	2	26
	4 Hours	1	7	5	3	5	21
	More than 4 hours	3	1	2	6	2	14
Total		10	31	45	64	11	161

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	45.913[a]	16	.000
Likelihood Ratio	46.574	16	.000
Linear-by-Linear Association	.636	1	.425
N of Valid Cases	161		

a. 13 cells (52.0%) have expected count less than 5. The minimum expected count is .87.

Interpretation:

Here, H0 is rejected. It means There is a significant difference in the time spent on fantasy sports applications among respondents with different educational qualification levels.

Findings

In the research, a significant majority of participants, 111 respondents, were male, indicating a predominant male presence in the use of fantasy sports applications. A notable portion of the respondents, totalling 84 individuals, fell within the 19-30 age group, with 54 of them identified as students. Post-graduates constituted the largest educational group at 64 respondents, while only a few, 10 respondents, had completed up to the 10th grade. A substantial number of participants, 57 respondents, reported having no income. This finding suggests that fantasy sports appeal to a wide demographic, including those without a steady income. This could indicate that fantasy sports are perceived as an accessible form of entertainment and engagement, not limited by financial barriers. It also raises questions about the motivations and behaviors

of users who participate without monetary incentives, potentially highlighting the social and recreational aspects driving the popularity of fantasy sports.

The most popular fantasy sports application among respondents was 'DREAM 11', used by 52 individuals. Forty-nine respondents used fantasy sports apps twice weekly, and 68 of them spent approximately one hour per day on these apps. Forty-four respondents had been using fantasy sports applications for between six months and one year. In terms of spending, the majority, 51 respondents, allocated Rs. 100 to Rs. 500 on fantasy sports apps. Moreover, the initial attraction to download and use fantasy sports applications for 42 respondents was recommendations from friends or family. The primary sport of choice for 140 respondents was cricket, followed by football, kabbadi, hockey, basketball, and other sports. Regarding fairness and transparency in scoring and player selection, 52 respondents found it fair.

Concerning issues of unfair play or cheating, 125 respondents reported not experiencing such issues. Sixty-six respondents agreed that the apps were easy to understand without requiring significant effort. Similarly, 66 respondents agreed that attractive top prizes enhanced their excitement in participating. Sixty-three respondents appreciated the affordability of transaction fees for entering various contests. Forty-three respondents agreed that strong privacy and safety measures boosted their confidence in app security. Furthermore, Consistency in design elements across different sections of fantasy sports apps was appreciated by 44 respondents. The majority, 85 respondents, had not considered switching to other fantasy sports applications. Among reasons cited for staying on their current app, 25 respondents valued prizes and rewards, while 24 valued app updates and improvements. Conversely, 26 respondents considered better prize layouts as the primary reason for considering switching to another app.

The introduction of GST and TDS led 89 respondents to reduce their usage of fantasy sports apps. A significant number, 73 respondents, reported gaining profits from participating in these apps. Overall satisfaction levels were neutral for 68 respondents, while 122 respondents expressed intentions to continue using fantasy sports applications in the future. These findings provide a comprehensive overview of user demographics, behaviors, preferences, and satisfaction levels within the realm of fantasy sports applications.

Theoretical Implications

The theoretical implications of this research extend to several areas of study within consumer behavior, technology adoption, and the sports industry. The key theoretical implications based on the findings are as below:

1. **User Experience and Interface Design**: The research underscores the importance of user-friendly design in technology adoption theories. It supports the notion that intuitive and easily navigable interfaces are critical for user engagement and satisfaction, aligning with the Technology Acceptance Model (TAM), which highlights perceived ease of use as a key determinant of technology adoption.
2. **Economic Impacts and Consumer Behavior**: The findings related to the impact of GST and TDS on user engagement offer insights into how economic policies influence consumer behavior. This aligns with consumer behavior theories that suggest external economic factors can significantly alter user engagement patterns and satisfaction levels.
3. **Social Influence and Referral Programs**: The significant role of recommendations from friends and family highlights the influence of social factors in technology adoption. This supports the Social Influence Theory, which posits that individuals' decisions are often shaped by the opinions and behaviors of their social circles. Implementing referral programs can leverage this social influence to drive user acquisition and retention.
4. **Motivation and Incentives**: The preference for attractive top prizes and varied prize layouts suggests that motivation theories, such as the Expectancy Theory of Motivation, are relevant in the context of fantasy sports applications. Users are motivated to engage with the platform when they perceive the rewards to be valuable and attainable.
5. **Retention Strategies and User Loyalty**: The need for effective retention strategies in light of decreased usage due to taxation supports theories related to customer loyalty and retention. The research indicates that maintaining user engagement requires continuous value delivery and addressing user concerns promptly.

6. **Trust and Security**: The emphasis on strong privacy and security measures aligns with Trust Theory in e-commerce, which posits that users are more likely to engage with platforms they perceive as secure and trustworthy. Clear channels for reporting unfair play further reinforce trust and encourage continued usage.

7. **Customization and Personalization**: The variety in sports preferences (cricket, football, kabaddi, etc.) and the need for diverse prize layouts suggest that personalization is key in user engagement. This supports theories of personalized marketing, which advocate for tailored experiences to meet individual user preferences and enhance satisfaction.

8. **Continuous Improvement and Feedback Loop**: Regular updates and improvements based on user feedback highlight the relevance of the Feedback Loop Theory. Continuous improvement is essential for maintaining relevance and user satisfaction, demonstrating the dynamic nature of user needs and the importance of responsive design.

These theoretical implications provide a comprehensive understanding of the factors driving user engagement and satisfaction in the fantasy sports industry. They contribute to the broader discourse on technology adoption, consumer behavior, and the importance of user-centered design in digital applications.

Practical Implications

The research findings offer several practical implications for developers of fantasy sports applications. Developers should prioritize creating user-friendly designs across all sections of the application, ensuring that features are easy to understand and do not require excessive effort from users. Additionally, offering affordable transaction fees can facilitate user participation in various contests and challenges, making the platform more accessible. Recommendations from friends and family significantly influence user adoption, so developers should implement robust referral programs to encourage user recommendations. To enhance excitement and interest among participants, developers should focus on offering attractive top prizes in contests and challenges. Experimenting with different prize layouts can also help attract and retain users by providing variety and increasing engagement. Furthermore, retention strategies are essential, especially for users who have reduced their usage due to the introduction of GST and TDS. Addressing these concerns can help maintain user engagement. Establishing clear and accessible channels for users to report any unfair play or cheating issues is crucial for maintaining trust and integrity within the platform. Regular updates and improvements based on user feedback and technological advancements are necessary to keep the application relevant and user-friendly.

Conclusion

The fantasy sports industry, fuelled by creativity, energy, and technology, extends beyond being just a game. These apps offer sports enthusiasts worldwide a personalized and engaging experience. Moreover, the fantasy sports industry is expanding rapidly, with an increasing number of users. In India, the overall sporting scenario is evolving, thanks to the efforts of our talented athletes and the collaborative efforts of the government and corporate sectors. Sports like football, kabaddi, hockey, and basketball are gaining popularity and are now being incorporated into fantasy apps. With the initiation of premier leagues in these sports, their rising popularity is expected to be reflected in the fantasy sports industry in India.

This research indicates that Dream 11 is the most frequently used fantasy sports app, attributed to its effective marketing strategies, advertisements, and regular app updates. Other apps do not seem to invest as much effort in these areas. Also, as per this research, cricket is the primary reason most people use fantasy sports applications. In India, cricket is more than a sport; it is an emotion. However, the introduction of GST and TDS by the government has led to a decrease in usage, as users are not winning as much and are consequently less motivated to engage with the apps. In conclusion, while the fantasy sports industry in India is growing and diversifying, challenges such as taxation can impact user engagement. The popularity of apps like Dream 11 highlights the importance of continuous marketing and updates to maintain user interest, especially in a cricket-loving nation like India.

References:

1. Chacko, R., Kumar, S., Sharma, S., & Srinivasan, R. (2020). A comparative study on customer preferences towards online betting applications: With special reference to Bet365 and Dream11. *International Journal of Management Studies*, 7(1), 45-56.
2. Greene, L. (2015). Fantasy sports: Legal and regulatory issues. *Journal of Legal Aspects of Sport*, 25(2), 123-145.
3. Houghton, D., Wang, D., Amos, N., & Shaw, M. (2019). Fantasy sports: Bridging the gap between virtual and real-world sports betting. *International Journal of Sports Marketing and Sponsorship*, 20(3), 328-345.
4. Lindholm, J. (2021). Legal implications of fantasy sports: A global perspective. *Journal of Gambling Law*, 15(2), 87-102.
5. Lomax, E. (2009). Addictive behaviors associated with fantasy sports participation. *Journal of Behavioral Addictions*, 18(2), 145-163.
6. Manvee, N. (2023). Legal landscape of fantasy sports in India: Challenges and opportunities. *Indian Journal of Law and Technology*, 15(1), 78-95.
7. Martin, B., Lee, M. J., & Davies, N. M. (2020). Motivations for fantasy sports participation: A systematic review. *Journal of Sport and Social Issues*, 44(3), 215-232.
8. Misra, S., Singh, A., & Gupta, R. (2020). Regulatory challenges and game of skill: A study of online fantasy sports platforms in India. *Journal of Public Policy & Marketing*, 39(4), 518-534.
9. Nower, L., Caler, K. R., & Baydala, A. (2018). Fantasy sports participation and gambling problems: A review of research. *Journal of Gambling Issues*, 28, 56-78.
10. Patil, P., & Kapoor, S. (2021). Evolution of fantasy sports in India: Legal perspectives and regulatory challenges. *Journal of Internet Law*, 12(2), 112-128.
11. Phelan, B., & O'Hern, M. (2016). The impact of motivational factors on daily fantasy sports participation. *Journal of Gambling Studies*, 32(4), 1123-1140.
12. Pickering, D., Blaszczynski, A., Hartmann, M., & Keen, B. (2016). Fantasy sports: Skill, gambling, or are these irrelevant issues? *Current Addiction Reports*, 3, 307-313.
13. Rai, S., Tiwari, S., & Dixit, S. (2023). Motivational factors driving fantasy sports participation: A study on Indian users. *Journal of Sport Management*, 37(2), 215-230.
14. Smith, R., Jones, M., & Brown, S. (2006). Decision-making in online fantasy sports communities: Strategies for success. *Journal of Interactive Marketing*, 20(3), 45-60.
15. Sondhi, S. (2018). Growth and evolution of fantasy sports market in developing countries: A case study of India and China. *International Journal of Business Insights and Transformation*, 7(2), 89-104.
16. Suh, Y. I., Lim, C., Kwak, D. H., & Pedersen, P. M. (2010). Examining the psychological factors associated with involvement in fantasy sports: An analysis of participants' motivations and constraints. *International Journal of Sport Management, Recreation & Tourism*, 5(1), 1-28.
17. Weiner, S., & Dwyer, B. (2017). Motives and consumption behaviors in daily fantasy sports: A comparative analysis with traditional fantasy sports. *Sport Marketing Quarterly*, 26(1), 32-45.
18. Yamaner, M., & Sarikan, B. (2022). Motivational factors influencing participation in fantasy sports: A study among Turkish users. *Journal of Leisure Research*, 54(1), 78-92.