## Digital Marketing that Leverages Sporting Event Ticketing Data

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A variety of sporting events are held in Japan, ranging from international games to small competitions sponsored by local governments, private organizations, and so on. In many cases, however, organizers have difficulty securing a sufficient number of spectators, and only 24.7% of the population has experienced watching sporting events live at venues. Digital marketing that combines ticket data, membership data, social media, and so on is essential for expanding fan bases. Using digital marketing to attract spectators, Fujitsu provides multiple sports leagues a mechanism to better understand fans watching events. This paper introduces the work on digital marketing Fujitsu has done until now and describes future proposals.

### 1. Introduction

Recent years have seen the holding of a variety of sporting events in Japan, ranging from major international sporting events, to small-scale ones organized by local governments and private organizations. However, according to a poll conducted by the Japan Sports Agency, only 24.7% of people have been to venues to watch an actual sporting event at venues.<sup>1)</sup> It is essential to gather a large number of spectators to generate excitement at sporting events, and increasing spectators at venues is urgently needed.

By gender, the majority of spectators at venues are males, and by age group, a high percentage are in their teens. The survey that yielded the above results also revealed that "Because I like that sport" accounted for 63.2% of answers about the reason for watching sporting events, and the bulk of these answers is considered to have come from fans. On the other hand, "Just felt like it, for some reason or another" accounted for 19.6% of answers, and "Because I had a ticket" for 3.2% of answers. These results indicate the importance of appealing to other groups besides the dominant group of males in their teens for the development of new audiences.

In response, using digital marketing to attract spectators, Fujitsu provides various sports leagues with a service to better understand fans who attend events. This paper introduces the research and development work on digital marketing carried out so far and describes future proposals.

### 2. Trends in the sports industry

One reason for the small number of spectators at venues is the lack of marketing keenness of the sports industry until now. Even in professional sports, the advertising expenses for a team are in many cases borne by the company that owns it, and attracting fans has not been considered to be a high priority. For corporate sponsors, the greatest advantage of sponsorship has been boosted brand reach, and aspects related to attracting more spectators, such as increasing the win rate and the number of fans, have not necessarily been emphasized. However, in recent years, it has become common for popular professional sports players to work overseas, and the advertising value of professional sports is decreasing for domestic corporate sponsors.

In the case of amateur sports, sports associations, federations, and leagues are chronically underfunded and struggling to acquire sponsors. The consecutive major international sporting events to be held around 2020 in Japan are considered by some as the greatest opportunity to direct the public's eyes and attention to sporting events, and in this context the acquisition of new fans is considered to be of major importance.

Meanwhile, overseas, some sports have succeeded

in developing methods for attracting new fans and retaining existing ones that use digital marketing. For example, Major League Baseball (MLB) in the United States has created a unified service for digital marketing in the league through which customer information can be shared and thereby more effectively used. Further, through dynamic pricing that sets the price of tickets according to the popularity of the game, it maximizes customer capture and sales. This has had the result of increasing sales more than fivefold over the past 20 years. In soccer (football), the UK's Premier League succeeded in incorporating overseas markets as a new target during the same period, and likewise sales have risen more than fivefold.

Thus, as for other kinds of sporting events, integration of system operations such as ticketing, security, volunteers, and information dissemination is the key to success. In other words, skilled use of ICT has become a major determinant of sports sales and sporting event success. Stimulated by these trends, we are actively working toward the introduction of digital marketing in the Japanese sports industry.

### 3. Challenges in digital marketing

Table 1

Sports team targets.

This section describes the ideal form of digital

marketing for the sports industry.

Digital marketing related to sports faces the following three major challenges.

- 1) How to attract enthusiastic fans of teams and players (team fans) without missing any?
- 2) How to approach fans interested in a given category of sporting events although they are not fans of a particular team (sporting event fans)?
- 3) How to attract people who are not interested in sporting events (non-fans) and make them into fans?

**Table 1** shows the respective group sizes of the team fans, sporting event fans, and non-fans for a given professional sports team in Japan. Although there is a large number of local residents who are not interested in sporting events (non-fans), they are hard to reach even when information is output as their areas of interest differ. A strategic approach is needed as to which group to target and what kind of information to transmit.

Knowing how many customers out of all the spectators have come to watch a sporting event for the first time serves as basic information for marketing. However, this information is not known for most teams and sporting events, as this kind of information is

Category	Target	Population of venue locality	Percentage of fans from team's hometown	Tasks	Measures	Main party in charge
Team fans	Active, ongoing game spectators	50,000	30%	<ul> <li>Boost season tickets purchase rate</li> <li>Boost attendance rate</li> </ul>	Build up fan base through use of club's - contact data	Club
	Ongoing game spectators (once a year or more)	150,000	18%	Boost ongoing fan club membership or rejoining rate		
	With experience of having been to a match	650,000	15%	<ul> <li>Boost repeat match</li> <li>attendance rate</li> <li>Boost fan club membership</li> </ul>		
Sporting event fans	With interest in a particular team	1,000,000	6%	<ul> <li>Boost repeat match attendance rate</li> <li>Acquire visitor data</li> </ul>	<ul> <li>Attract amateur players (club members, ex-club members, etc.)</li> <li>Attract customers who visit website</li> <li>Attract spectators from venue locality (including from outside team's hometown)</li> </ul>	League
	With interest in pro-league, rather than a particular team	1,500,000	4%	Attract unenthusiastic fans		
Non-fans	With interest in the sport, rather than just pro-league	5,000,000	-	Enhance player data linking		
	No interest in sport	8,000,000	-	Create sporting event attendance opportunities		

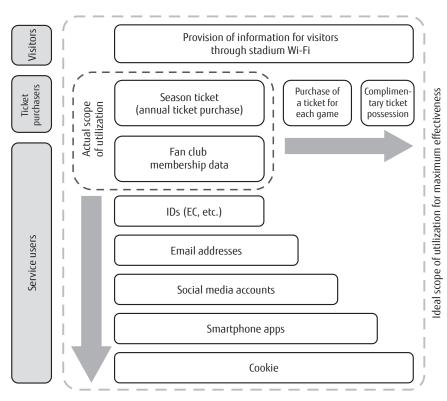
acquired only on occasion when considered necessary, through questionnaires.

This is due to the fact that customer information is not centrally managed in the first place. Even in professional sports, the data that a team can manage often consists only of season ticket holders and fan club membership information. The distribution of single game tickets is left up to ticket agencies and convenience stores, and the operation of electronic commerce (EC) sites is left up to EC companies, which means that information is often quite dispersed. Particularly in the case of conventional paper tickets, which are usually purchased with cash in a brick-and-mortar store, it is not possible to get information about purchasers. As a result, useful information, including the identity of loyal customers, cannot be obtained, thus preventing the development of high value added services. It is also not possible to get information regarding fans who attend sporting events only a few times a year, making it difficult to adequately attract soft-core fans.

Further, besides ticket purchaser information,

the analysis and effective use of other information, for example in the context of the diffusion of information on social media, is often sorely lacking. In MLB games, every time superb or interesting play occurs, this information is promptly put out through push notification. This is accompanied by the distribution of video clips on the Internet, and this provision of excitement to fans stimulates the purchase of tickets for the next game, with a very real customer capture effect.

In many cases, customer analysis by domestic sports teams is limited to data on fan club members and season ticket holders. Ideally, for each game, the data about the ticket purchasers, their email address, social media accounts, and so on, should all be linked to allow more effective use of such information. The creation of an approach for comprehensively acquiring customer information and analyzing customer behavior is the first step to expand the fan base of a team (**Figure 1**).



\* The arrows in the figure indicate the order of information utilization considered effective.

Figure 1 Expansion of available customer data for sports teams.

# 4. Fujitsu's approach to acquiring customer data

To meet the challenges described in the preceding section, Fujitsu provides the following services to multiple sports leagues to help them better acquire information about fans.

1) Provision of visitor point system

Fans earn points when they attend games, and can exchange these points for various benefits. The sports association, the league, and the team can know which fans attend games and when they do so.

2) Provision of visitor stamps

By being issued at random through a smartphone app stamps that feature players' pictures each time they attend games, fans can have fun collecting pictures of the players and completing players' picture books. They can also use those stamps for all-star fan voting, applying for presents, and various other enjoyable activities besides game watching.

3) Development of customer database

We provide a service for the integration and analysis at the league level of the dispersed customer data held by the various teams. This includes the customer data held by professional leagues as well as a service to link the registered data of amateur players.

4) Attraction of non-fans through social media

By supporting the organization of games in collaboration with anime works, and making announcements through anime broadcasting stations and through the authors themselves on social media, even people who are not sports fans can be effectively targeted and attracted.

In this way, we combine two approaches, one horizontally linking various data such as ticket data, membership data, social media, and so on, and one integrating data vertically through organizations such as sports associations, leagues, and teams. This makes it possible to know the behavior of fans over the long term and allows effective marketing that far surpasses short-lived attraction measures in effectiveness.

### 5. New roles for ticketing

Ticketing plays three new roles in the context of digital marketing.

1) Hospitality

By linking customer data and seat data, various services that generate customer satisfaction become

possible. For example, based on vacant seat information on the day of a game, fans with high loyalty can be offered seat upgrades as a surprise gift. It is well known that providing such perks impresses fans and turns them into more enthusiastic repeat customers.

2) Prevention of illegal reselling

In recent years, reselling of tickets has become a social problem that is not limited to sports. This practice consists in persons purchasing at the regular price tickets for games they do not intend to watch and making money by reselling them at a markup that can be several times the original purchase price. Besides the digitalization of tickets, preventing this requires the consideration of various measures at the system and institutional level, including personal identification, remedial measures for fans who were unable to watch games for some reason (such as a ticket repurchasing or secondary distribution method), a complimentary ticket distribution method, and so on.

3) Dynamic pricing

This method, which has already been introduced by the hotel and aviation industries, consists in adjusting prices according to the popularity of games and seats. In the sports industry, the momentum for its introduction is increasing due to the fact that properly raising the price of tickets for popular events would act as a countermeasure against the reselling problem by reducing the profits of resellers.

Focusing on the last of these three roles, the following addresses Fujitsu's approach to dynamic pricing. Dynamic pricing is a method that evaluates the popularity of tickets and increases or decreases their price within a range that fans feel to be appropriate, as described above. Fujitsu is currently engaged in demonstration experiments to evaluate psychological factors of fans through AI and to evaluate the appropriate valuation of tickets (**Figure 2**). This method cannot only change the price of tickets but also recommend seats (for example, the front row or the side of the aisle) suitable for a person's preferences, or conversely, recommend low-priced tickets for less desirable seats, thus making personalized marketing possible.

### 6. Conclusion

This paper introduced Fujitsu's approach to digital marketing through the use of ticket data.

The success of sporting events is supported by

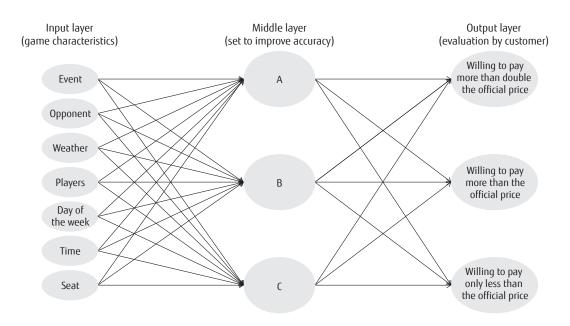


Figure 2 Example of customer classification using AI.

various systems. Until now, the information held by each system was locked inside the respective systems, but going forward, it will be important to aggregate and manage such log data, and analyze it from various angles. This will transform these disparate data that until now were managed separately and were far from fully utilized into big data that can be profitably used for spectator behavior analysis and other purposes. Further, by adding analysis by AI, it will be possible to devise individual measures according to spectator attributes and behavior attributes.

Big data emerged as a keyword quite some time ago, and Fujitsu has been practicing the utilization of big data in various usage contexts. Based on the know-how we have cultivated in the area of big data, we will use solutions such as FUJITSU Human Centric AI Zinrai<sup>2</sup>) to develop the data business for sporting events, and provide robust peripheral systems that support sporting events.

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