

Maru Batting Center: Customer Lifetime Value

Eager to avoid being distracted by the Tokyo Kitasuna team's training for the summer 2012 Kōshien National High School Baseball Championship, Maru Keitou (丸継投) moved into the back office of Maru Batting Center (GK)¹ (丸バッティングセンター (合同会社)), in the Roppongi district of Tokyo's Minato ward, to contemplate her fledgling company's marketing strategy.

A decorated former collegiate softball player with a PhD from Oxford University, Maru had a deep knowledge of the game and of her customers. She lacked a marketing background, however, so she had recently signed up for a hosted customer relationship management service that would allow her to track the cost of acquiring and serving each of her four main customer segments, data she could use to determine which segments to target in the upcoming year.

Business Model

Unlike most batting cage facilities in the United States, Maru Batting Center (MBC) was open only for appointments made at least 24 hours in advance. (See **Exhibit 1** for pictures of batting cages in Japan.) Customers booked one or more of the eight batting cages that offered baseball and softball pitching machines for a specific period of time, typically in half-hour increments. Maru assigned one or more of her part-time workers—depending on the appointment—to open and supervise the facility. This not only avoided high fixed costs but also allowed MBC to avoid hiring full-time employees, which reduced labor costs by eliminating employee benefits.

Having a customer in the cage required one or two part-time workers to set up and fix any problems with the machines, retrieve and reload balls, and accept payments.² The hourly workers earned an equivalent rate of ¥1,500³ per customer hour in the cage.⁴

¹ Godo Kaisha (GK) is a type of Japanese business entity. It is often referred to as the “Japanese LLC,” though it has some legal differences from its American counterpart.

² Assume that only one customer is in the facility at a time, regardless of segment, and that because each segment has very different needs and schedules, double-booking is never a problem.

©2015 by the Kellogg School of Management at Northwestern University. This case was developed with support from the December 2009 graduates of the Executive MBA Program (EMP-76). This case was prepared by Evan Meagher '09 under the supervision of Professor Julie Hennessy. Cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management. To order copies or request permission to reproduce materials, call 847.491.5400 or e-mail cases@kellogg.northwestern.edu. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the permission of Kellogg Case Publishing.

Batting Cage Market

MBC marketed to four primary customer segments, each with its own price sensitivity, frequency of use, and attrition rate.

*Little Leaguers*⁵

Consisting of boys' and girls' baseball and softball players between the ages of 6 and 15, the Little Leaguers had an annual attrition rate of just 25 percent because children in Japan tended to play baseball or softball throughout their youth. This core segment was also very large, as baseball was the country's de facto national pastime. However, Little League customers required two part-time employees on hand to supervise them as well as a reasonably accomplished hitting instructor to support their training. For this task, MBC relied on freelancing middle and high school coaches, each of whom was paid ¥3,000 per hour.

Enthusiastic and—Maru had to admit—occasionally overbearing parents were willing to pay for this added value, which allowed MBC to charge ¥6,500 per hour. Every Little League customer purchased an average of ten hours in the cages per year. Purchases were typically concentrated in the preseason months of February and March.

In order to advertise its services to this large and avid customer segment, MBC sponsored all Little League and middle school teams in Tokyo's Minato ward. Although the sponsorship was expensive (it was financed by a revolving credit line), Maru believed that it helped make MBC the training facility of choice for families in the region and that it possibly helped her target other family members who might fall into adjacent customer segments. Children who joined a sponsored team received a team jersey with their name, player number, and the MBC logo and phone number on the arm.⁶ The league rulebooks, which were sent to players at the beginning of each season, featured a full-page advertisement for MBC. Maru estimated⁷ that it would cost her ¥1,000 to contact each Little Leaguer and that 10 percent of those players would become regular customers.⁸

Summer Sluggers

Summer Sluggers were Japanese adults who played baseball and softball during the summer, although Japanese men tended to continue playing baseball after high school rather than switching over to softball as their American counterparts generally did. These customers played on less competitive company teams and wanted to practice before or during the season. The slightly decreased intensity led to more price sensitivity, so MBC charged these customers only

³ Although not relevant to the calculations, the Japanese yen (¥) was trading at about 78 per U.S. dollar on December 21, 2011.

⁴ The workers arrived slightly before the customer's appointment to turn on the machines and left slightly after it was over, but the ¥1,500 equivalent rate takes this into account.

⁵ Assume that Maru can identify which segment customers fall into based on the staffing they require, the type of machine they wish to use, and the day of week/time of day they wish to reserve—and that as a result, she can charge different prices without repercussions.

⁶ Assume that the jersey is a one-time expense tied to acquiring the customer, not an annual expense.

⁷ Maru divided the total cost of the sponsorship by the anticipated total number of Little League players in the Minato ward.

⁸ The 10 percent figure includes both Little Leaguers who come with their parents and those who come as part of a team function.

¥3,000 per hour. Only one part-time employee was needed onsite during their appointments because they required minimal supervision and no hitting instructor. They practiced more sporadically than did their Little League counterparts, and as a result each customer on average purchased only four hours of cage time per year. Summer Sluggers experienced an attrition rate of 50 percent per year as injuries, increased professional demands, and parental responsibilities took their toll.

MBC targeted these customers by sending several kegs of beer as *oseibo* (traditional year-end gifts) to the sponsoring companies' holiday parties. Because the beer was invariably consumed both by players and non-players, the approach resulted in a higher contact cost of ¥1,500 per player. This generosity fostered goodwill among the players, however, which resulted in a 15 percent response rate.

Elite Ballplayers

This small but devoted segment was composed of Japanese men and women aged 16 to 35 who played baseball or softball at an elite level on varsity high school teams or in more competitive amateur or even semipro leagues sponsored by local corporations. These customers required only one part-time employee during their appointments, but because these customers perceived themselves as ballplayers, they demanded MBC's best equipment and services, including faster pitching machines and more skilled hitting instructors, often former players from the Tokyo Yakult Swallows, the local Nippon Professional Baseball franchise. These instructors commanded an hourly rate of ¥4,500. The Elite Ballplayers' devotion to training made them less price sensitive, which allowed MBC to charge them ¥7,500 per hour, and they tended to train year-round, averaging a full twenty hours per year in the cage, with a 60 percent annual retention rate.

Given their willingness to pay and their year-round training schedule, Elite Ballplayers were fiercely sought after by batting cages. MBC had done very little business with them, but Maru found them so tempting that she was considering purchasing a mailing list from a regional sporting goods retail chain that included all customers who had applied for a frequent buyer discount card and had spent more than ¥5,000 in the past five years on baseball or softball equipment. She was thinking about sending an elaborate brochure with an invitation to MBC's Preseason Launch Party, during which guests would enjoy a free batting session against her most sophisticated pitching machine and participate in a hitting clinic with two-time Central League MVP and Tokyo Yakult Swallows legend Wakamatsu Tsutomu.

Maru estimated that the contact cost per customer—including list purchase, cost of the launch party, and Wakamatsu's appearance fee—would be ¥12,500. It was a lot of money, but she wanted to improve on her previous efforts, which consisted solely of running an ad with a discount coupon in a local magazine for baseball enthusiasts. The publication was sent only to customers in the Elite Ballplayer segment and cost about ¥300 per subscriber. Historically, just 0.5 percent of the coupons were redeemed, but Maru thought her gala invitation could result in a 25 percent response rate.

Entertainment Seekers

People with no particular interest in baseball or softball made up the Entertainment Seekers segment. The Swallows and several other professional teams played nearby, and spectators sometimes visited a batting cage before attending a game. Other customers liked to visit the cages during a night out as a substitute for other leisure activities such as bowling, visiting an amusement park, or seeing a movie.

Lacking a strong devotion to the sport, Entertainment Seekers were slightly price sensitive, so MBC charged them ¥4,000 per hour. They tended to patronize the snack bar and use other diversions at the facility, which required MBC to staff a second hourly worker. MBC targeted these customers by buying banner ads on the “Things to Do Tonight” page of the *Daily Yomiuri Online*, the website of one of Japan’s most-read newspapers. The ads cost ¥50 per potential customer—even taking into account the small spillover of other customer segments accessing this particular webpage—and produced a 2.5 percent response rate. These customers had a retention rate of 35 percent and spent an average of only 1.5 hours per year in the cage. Customer data is summarized in **Table 1**.⁹

Table 1: Summary of Customer Data

	Little Leaguers	Summer Sluggers	Elite Ballplayers (Print Ad)	Elite Ballplayers (Party)	Entertainment Seekers
Contact cost	¥1,000	¥1,500	¥300	¥12,500	¥50
Response rate	10%	15%	0.5%	25%	2.5%
Acquisition cost	¥_____	¥_____	¥_____	¥_____	¥_____
Workers needed	2	1	1	1	2
Worker labor cost/hour	¥1,500	¥1,500	¥1,500	¥1,500	¥1,500
Instructors needed	1	0	1	1	0
Instructor labor cost/hour	¥3,000	¥0	¥4,500	¥4,500	¥0
Total cost/hr					
Price/hr	¥6,500	¥3,000	¥7,500	¥7,500	¥4,000
Margin/hour	¥_____	¥_____	¥_____	¥_____	¥_____
Margin/hour	____%	____%	____%	____%	____%
Annual hours	10	4	20	20	1.5
Annual margin	¥_____	¥_____	¥_____	¥_____	¥_____
Retention rate	75%	50%	60%	60%	35%
Interest rate	10%				

⁹ This table is also found in the accompanying student spreadsheet.

Assignment

Use the provided spreadsheet to answer the following questions.

1. What is the customer acquisition cost to Maru Batting Center for the following customers?
 - a. A Little Leaguer
 - b. A Summer Slugger
 - c. An Elite Ballplayer if MBC places the ad in the local baseball enthusiasts magazine
 - d. An Elite Ballplayer if MBC purchases the list and invites all target customers to the gala event
 - e. An Entertainment Seeker
2. Without discounting cash flows to take into account the time value of money, how soon will MBC break even on the following customers? In all cases, assume that revenues and variable costs to staff the cages occur on an ongoing basis but that the acquisition costs are a one-time event.
 - a. A Little Leaguer
 - b. A Summer Slugger
 - c. An Elite Ballplayer if MBC places the ad in the local baseball enthusiasts magazine
 - d. An Elite Ballplayer if MBC purchases the list and invites all target customers to the gala event
 - e. An Entertainment Seeker
3. Taking into account the time value of money and assuming that 100 percent of a customer segment will have experienced attrition once the net present value of annual profits per customer falls below ¥100, what is the lifetime value to MBC of the following customers? Assume that a customer's lifetime extends up to and including the year in which the net present value of annual profits falls below ¥100.
 - a. A Little Leaguer
 - b. A Summer Slugger
 - c. An Elite Ballplayer if MBC places the ad in the local baseball enthusiasts magazine
 - d. An Elite Ballplayer if MBC purchases the list and invites all target customers to the gala event
 - i. Should MBC throw the gala event?
 - e. An Entertainment Seeker
4. Which is the most attractive customer segment for MBC to target? Explain your reasoning.
5. MBC has been approached by Little League representatives from the nearby Chiyoda ward who are eager to gain the jersey subsidy the Minato ward has enjoyed due to the company's sponsorship. Because the parents of Chiyoda Little Leaguers will have to travel a greater distance, Maru believes there will be a lower response rate (8 percent) and a lower retention

rate (65 percent), which she can make up for by purchasing slightly lower-quality jerseys, reducing the cost of sponsorship to just ¥600 per player. However, the Chiyoda ward representatives demand that theirs be the only ward receiving such a sponsorship, which means MBC must choose between the two wards. The Chiyoda representatives argue that because their ward has twice the number of Little League customers, it is more attractive than the Minato ward. Should MBC pursue the Chiyoda ward sponsorship? Explain your reasoning.

6. Maru's brother suggested she focus on the Elite Ballplayers segment, targeting it by offering a ¥500 discount on all future purchases to Elite Ballplayers who purchase at least twenty batting cage hours in Year 1. (Assume all Elite Ballplayer customers book exactly twenty hours each year. Also assume that this discount is made on top of the gala event option above, instead of the magazine option for acquiring Elite Ballplayers.) Although this will decrease the amount MBC can bill Elite Ballplayers (from ¥7,500 per hour to ¥7,000 per hour from Year 2 onward), Maru believes it will increase the retention rate of these customers to 75 percent immediately. Should MBC offer this promotion? Explain your reasoning.

BONUS CHALLENGE

7. Alternatively, Maru has considered ignoring her brother's advice and targeting the Elite Ballplayers segment by attempting to increase the launch party's response rate. Instead of offering customers a discount from Year 2 onward, MBC could offer each launch party attendee who commits to purchasing at least twenty batting cage hours a free professional-grade baseball bat with the Yakult Swallows logo. This would cost MBC an additional ¥10,000 for each new Elite Ballplayer customer, but Maru believes it would increase the launch party's invitation response rate to 29 percent. Should she offer this promotion? Explain your reasoning.

Exhibit 1: Pictures of Batting Cages in Japan

