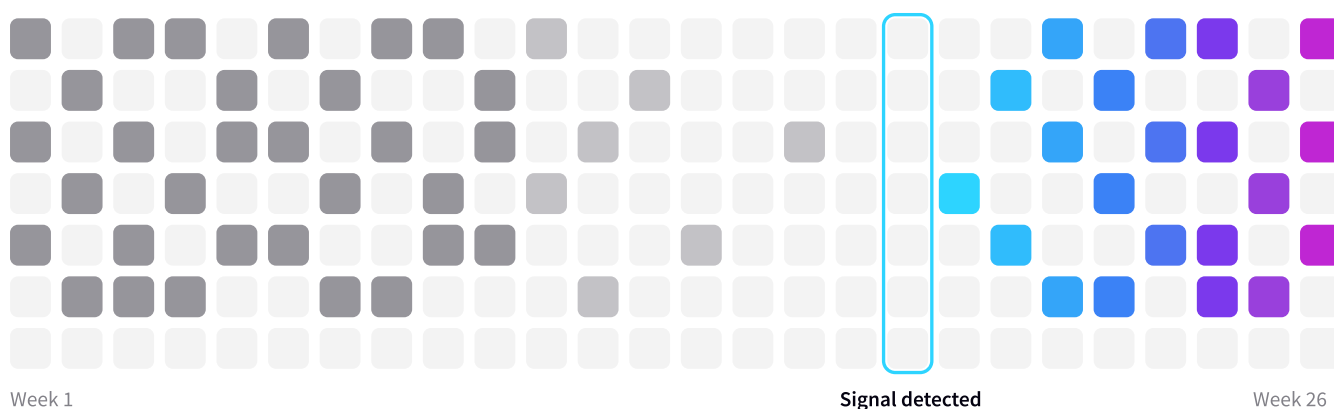


Research Paper

Bringing members back

Digital engagement, reduction in dormancy
and member retention



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Foreword

Members follow a well-understood pattern of churn. Visits start to fluctuate, the routine breaks, the member silently drifts, and later a cancellation arrives.

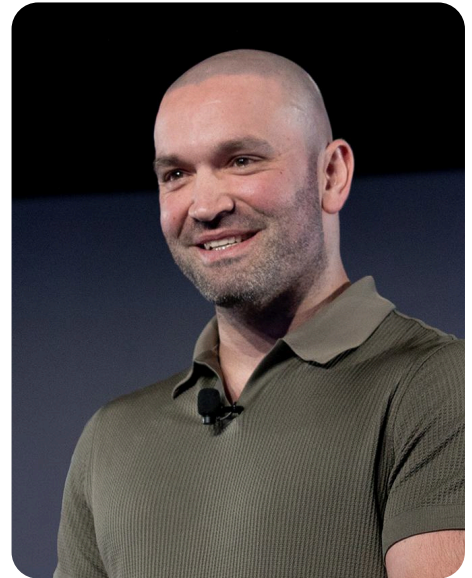
Only then does a reactive attempt to save that member begin (at best), even though the signal was present beforehand. MagicAI Engage is built to change that.

Before I joined Sport Alliance, I led technology across multiple fitness chains and worked in applied research and academia.

Now I'm applying the same principles, methods, and learning across thousands of operators, and I keep coming back to the same conclusion that members rarely leave in a single moment, and never for no apparent reason. The signs are visible, and proactive, personalised, context-aware, well-timed outreach can change outcomes.

This paper looks at how those outcomes can be influenced. At the two larger operators in this study, members who received MagicAI Engage interventions came back at higher rates than members in a held-out control group. Our separate look at membership history shows why that matters: members who had gone quiet were far less likely to stay beyond their first contract year.

This research aimed to give operators a clear understanding of attendance as a key early indicator of retention and to show how these insights can be used to encourage members to exercise longer and combat the mortal enemy of our industry: churn.



Karl Foster

Head of AI
Sport Alliance, parent company of Magicline

Abstract

Member attrition has been a long-standing challenge for the fitness industry, at around a third of members a year [1]. Service quality, perceived value, satisfaction and trust are widely accepted to influence member loyalty and retention [2, 3]. These factors are hard to measure, and their effect is hard to quantify. Behavioural data give operators a usable signal to understand and improve retention [3]. We show that automated MagicAI Engage messages increased the share of members who returned. At the operators studied, members who were still attending were more likely to stay than comparable members who had stopped attending.

We extended a previously published study of attendance patterns, using data from more than 430,000 members at more than 1,750 operators. The biggest drop came straight after the first month: the share of members who visited fell to 79.7% in month two and to 47.3% by year-end.

At two larger operators, MagicAI Engage drove higher return rates. Members who received communication from MagicAI Engage were between 5 and 26 percentage points more likely to return in the following two weeks. For the operators studied, we saw significantly higher membership continuation among attending members than among dormant members. At one operator, 47.8% of dormant members vs 77.3% of attending members retained their membership, while at another, the difference was 60.7% to 91.8%. As in other studies, members who kept a regular routine were more likely to stay.

1 in 3

members are lost every year
[1]

430,000

members at more than 1,750
operators in the extended
dataset

47.3%

still visited by year-end –
after 79.7% in month two

KEY FINDINGS

MagicAI Engage turns attendance changes into opportunities to reconnect with members. Higher return rates after lifecycle interventions, together with lower continuation among dormant members, support recognising attendance changes early and making return a central engagement outcome.

+4.8 to +14.0 points

Higher 14-day return rate in the MagicAI Engage group than in the comparison group after the dormancy trigger.

+5.1 to +25.7 points

The same comparison after the declining-attendance trigger.

47.8% vs 77.3%

Share of dormant and of attending members who continued after the first contract year at one operator.

60.7% vs 91.8%

The same comparison at a second operator.

Keeping Members

A member's relationship with a gym can change well before their contract does. A regular pattern may become less frequent, then stop altogether. These moments let the operator respond while the membership is still active: acknowledge the change, engage in a way that fits it, and invite the member back.

Research following 1,726 new members at six fitness venues found that attendance fell steadily, even though every member held a twelve-month contract that could not be cancelled [4]. All of them visited in their first four weeks. After six months, half visited. By the time a year had passed, only 22% did.

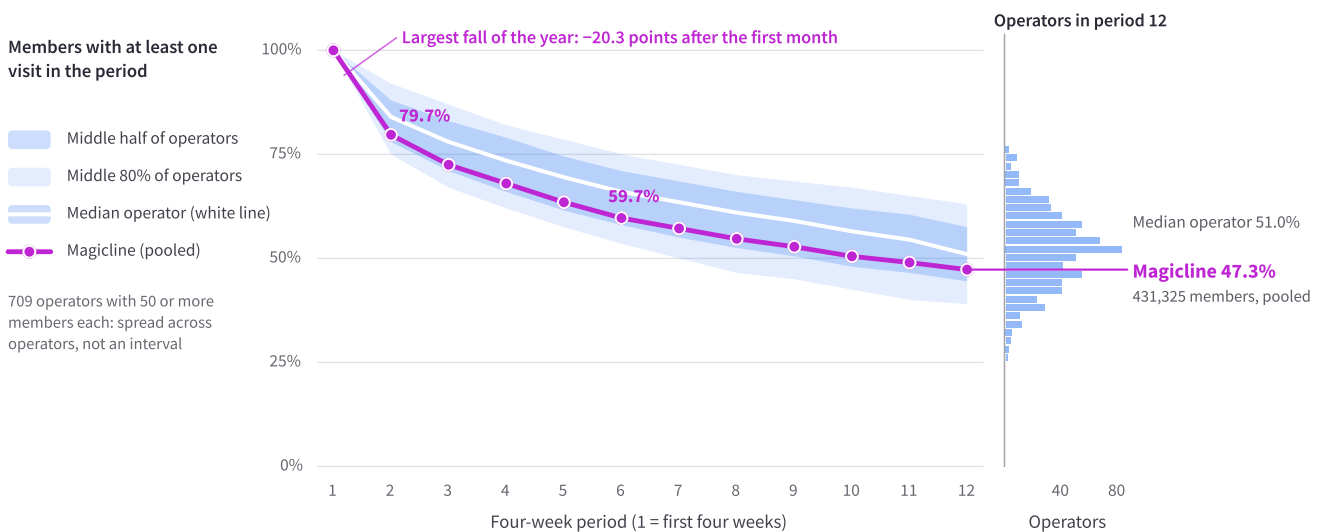
We extended and updated this study with Magicline data, with 431,325 adults. These members joined one of 1,752 operators between October 2024 and July 2025 on a twelve-month contract and made their first visit within four weeks. We followed only members who stayed under contract for 12 months.

22%

of new members still visited after one year – despite a non-cancellable twelve-month contract [4]

431,325

adults in the extended Magicline dataset



Bringing members back

We observed that the share of members visiting fell to 79.7% in the second four-week period. After half a year only 59.7% of members recorded a visit, while after 12 months only 47.3% still attended the gym (Figure 1). As in earlier research [4], the steepest fall came early: one in five members who visited in their first four weeks did not visit in the next four. These figures include only members who stayed under contract for the full twelve months. Counting members who ended their contract early as non-visitors lowers the final figure to 44.5%.

The first month after joining matters most. The fall between the first and second four-week periods, 20.3 percentage points, was the largest of the year and bigger than the fall over the following four periods combined (19.9 points). This is why MagicAI Engage includes onboarding triggers that act in a new member's first weeks, and a churn-prediction model that scores new members in their 6th week (Figure 5).

Published fitness-centre research supports paying attention to attendance and facility usage signals, since they predict member dropout. In a study of 5,209 members at one centre, the number of days without attendance was the strongest variable in the authors' dropout prediction models [5]. A separate study of 14,522 members across three centres found that more monthly visits were associated with lower dropout odds [6].

The gap between a last visit and a cancellation can be long. In a study of health-club records, members on monthly contracts cancelled on average more than two full months after their last visit, and one in five waited four months or more [7]. During this period, members have not yet made the final decision to leave, and a return is still possible.

Digital interventions have been observed to positively influence gym attendance. Another large study of 54 four-week digital programmes among 61,293 gym members found that 45% of the programmes raised weekly visits during the programme by 9% to 27%. Four weeks after the programmes ended, only 8% still had a measurable effect. Most of the programmes paired messages with small reward points [8].

In a randomised trial with nearly 2,500 members who had recently bought annual memberships, weekly email reminders raised visits by 13%, and a smaller increase persisted for three months after the reminders ended. However, the reminders did not change how long members kept or renewed their contracts [9].

That is why this paper measures return visits and membership continuation, and why the timing, content and behavioural outcome of an engagement programme are worth examining directly.

5,209

members: days without a visit were the strongest predictor of dropout [5]

**> 2
months**

on average between last visit and cancellation on monthly contracts [7]

8%

of programmes still had a measurable effect four weeks after they ended

Engaging Members with MagicAI Engage

MagicAI Engage is Magicline's digital member-engagement product. It checks each member's behavioural patterns, recognises when the pattern changes and triggers communication at the right moment.

MagicAI Engage offers a library of lifecycle triggers, described later in this paper. This paper studies two attendance triggers:

Dormancy: The dormancy trigger picks up an active member who has not visited for more than 15 days (the default), so the operator can reconnect.

Attendance decline: A member whose routine is weakening. The declining-attendance trigger identifies an active member whose visits have dropped sharply after a regular pattern. It tracks specific rates of change in visit frequency, for example, a member who has come consistently several times a week for a period and then visits only once in two weeks. It lets the operator respond while the routine is breaking down.

Operators can adjust both triggers in MagicAI Engage, and the results group each intervention by the trigger recorded with it. Some members picked up by the declining-attendance trigger are still visiting occasionally, and the dormancy trigger catches those who have just stopped.

The results are obtained from three distinct operators. We refer to them as Alpha, Beta and Gamma. Alpha and Beta are multi-studio operators. Gamma is a single-studio operator with fewer members.

Alpha and Beta relied on push notifications (Alpha also used WhatsApp for dormancy). In contrast, Gamma used email and push notifications, with slightly different messages. These differences may explain part of the variation in the results below.

Return visits after MagicAI Engage interventions

To make the results comparable, MagicAI Engage holds out a randomly drawn share of eligible members from its interventions. They form the comparison group. The MagicAI Engage group includes members selected for the intervention. A return means at least one visit in the 14 days that followed.

14 days

window in which a visit counts as a return

Members in the MagicAI Engage group had higher 14-day return rates at both larger operators for dormancy and declining attendance. Figure 2 shows the rates for each operator and trigger.

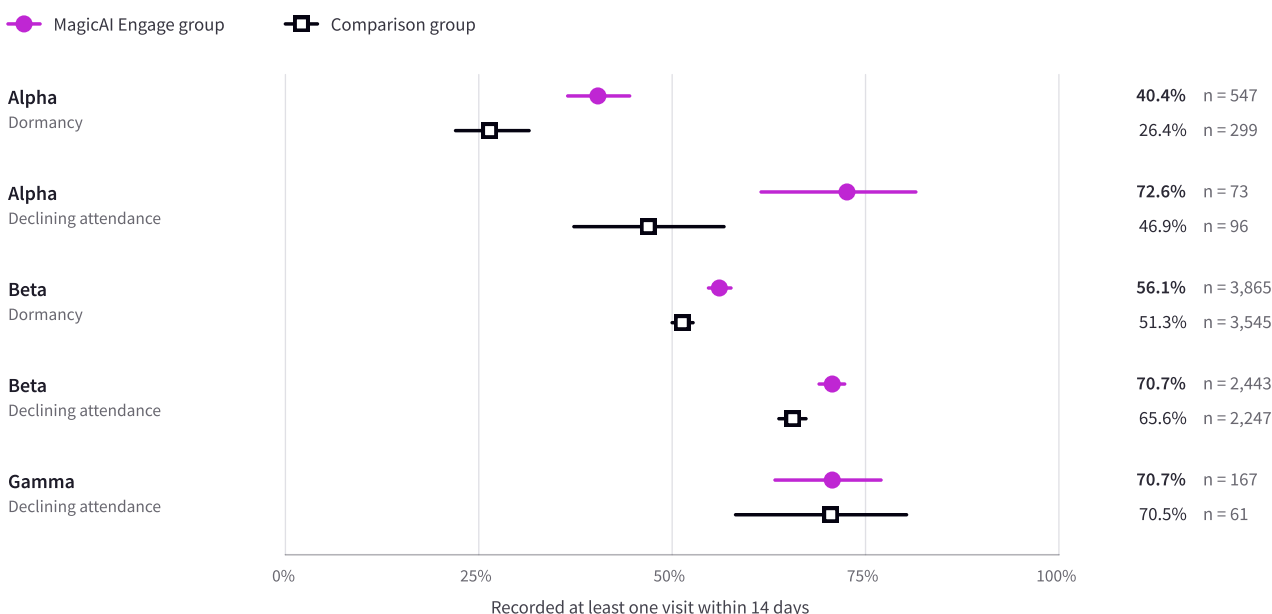


Figure 2. Return within 14 days, by intervention trigger. Points show return rates; lines show the range of statistical uncertainty (95% confidence intervals). Each label includes the number of members.

For dormancy, the 14-day return rate was 14.0 percentage points higher at Alpha and 4.8 at Beta. For declining attendance, it was 25.7 points higher at Alpha and 5.1 at Beta. All four interventions positively affected attendance in the MagicAI Engage test groups. At Gamma, the difference was +0.2 points. The sample was too small for a reliable result. Gamma's dormancy groups were too small to show and are reported in the supporting tables.

+25.7 pts

return rate at Alpha after the declining-attendance trigger

A consistent pattern at the larger operators

Across both triggers, all ten comparisons across 7-, 14- and 30-day windows at Alpha and Beta showed higher return rates (Figure 3). Gamma's comparisons have wide confidence intervals that include zero, so more data is needed. At the time of the study, Alpha did not yet have a complete 30-day comparison.

10 of 10

comparisons showed higher return rates – at 7, 14 or 30 days

Dormancy

Alpha / 7 days
n = 835 / 387

Alpha / 14 days
n = 547 / 299

Beta / 7 days
n = 4,078 / 3,840

Beta / 14 days
n = 3,865 / 3,545

Beta / 30 days
n = 2,926 / 2,648



Declining attendance

Alpha / 7 days
n = 135 / 175

Alpha / 14 days
n = 73 / 96

Beta / 7 days
n = 2,602 / 2,478

Beta / 14 days
n = 2,443 / 2,247

Beta / 30 days
n = 1,704 / 1,460

Gamma / 7 days
n = 185 / 64

Gamma / 14 days
n = 167 / 61

Gamma / 30 days
n = 124 / 40

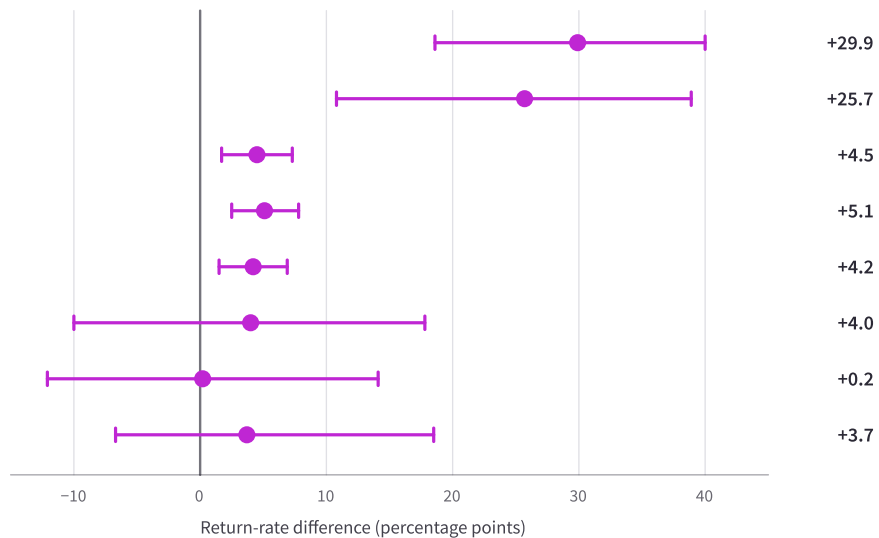


Figure 3. Return-rate differences across follow-up windows. Points show MagicAI Engage group minus comparison rates, in percentage points; lines show 95% confidence intervals. All dormancy and declining-attendance comparisons with at least 30 members in each group are shown. Sample sizes are shown as MagicAI Engage group/comparison group. Each window is analysed separately, and a member can appear in more than one window.

Bringing members back

Allowing for earlier attendance, studio and calendar week, the 14-day differences at Alpha and Beta stayed positive for both triggers. The adjusted differences were **+15.5 and +4.8 points for dormancy**, and **+23.6 and +5.1 points for declining attendance**.

Does attendance predict who stays?

In addition to the intervention study, a separate historical study asks what dormancy, the signal behind the MagicAI Engage dormancy trigger, means for membership. Here, dormant means no visits at all in the previous 30 days, a stricter test than the trigger's 15-day default.

We selected **members at operators Alpha and Gamma** who had used the gym earlier in their membership and were still members about nine months into their contract's first year. In total, we included 446 members. Here, the first contract year is the 12 months from the contract start, and all timings below count months from that date.

446

members at Alpha and Gamma in the analysis

30 days

without a visit: how strictly "dormant" is defined here

EXAMPLE OF AN ANNUAL MEMBERSHIP

About month 9

Look back 30 days:
Dormant: no visits
Attending: at least one visit



About month 12

End of the first contract year



About month 13

Check who is still a member

Membership is checked 120 days after the groups are defined. Timings are illustrative, not to scale.

At month 9: look back 30 days. About three months before the first contract year ended, we checked each member's visits over the previous 30 days. Members with **no visits** went into the dormant group. Members with **one or more visits** went into the attending group.

At month 13: check membership. We checked who was continuously a member. Changing or upgrading a contract counted as staying. Someone who left and later rejoined counted as having left.

Bringing members back

Same rules for both groups. Everyone had an annual contract, had attended earlier and had complete follow-up. Both groups met the same eligibility rules, including reliable visit records and no documented membership pause in the month used to define the groups.

Allow for other differences. We compared members within each operator and accounted for their studio, joining period, and earlier attendance. This compares dormant and attending members as if they were alike on those points.

The sample contained 287 members at Alpha and 159 at Gamma.

Dormant members were less likely to stay

Attending members were significantly more likely to stay after the first contract year. At Alpha, **47.8% of dormant members** continued, compared with **77.3% of attending members**. At Gamma, the corresponding rates were 60.7% and 91.8% (Figure 4).

29.5 pts

continuation gap between attending and dormant members at Alpha

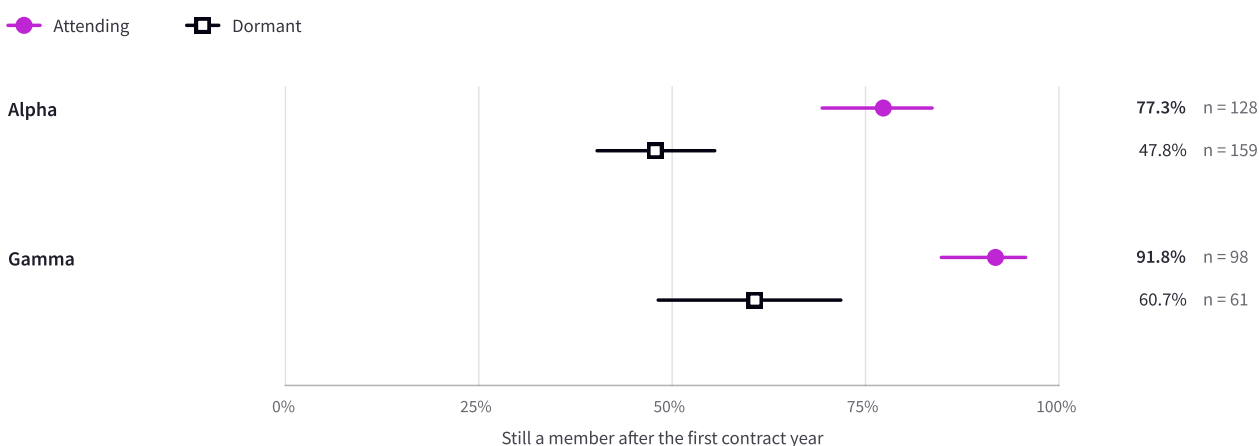


Figure 4. Membership continuation: dormant vs attending members. We defined the groups three months before the end of the first contract year using the preceding 30 days of visits. Points show uninterrupted membership one month after that first contract year; lines show 95% confidence intervals. Sample sizes appear alongside each rate.

The simple comparison showed a gap of **29.5 percentage points at Alpha** and **31.2 points at Gamma**, with lower continuation in the dormant group at both operators. In counts, 76 of 159 dormant members and 99 of 128 attending members continued at Alpha. At Gamma, 37 of 61 dormant and 90 of 98 attending members continued.

31.2 pts

the same gap at Gamma

Bringing members back

The dormant groups had also attended less in earlier months and were more likely to have already given notice. The supporting material examines these differences in more detail.

What the findings mean for operators

For operators, this supports a clear focus: **recognise the change in attendance, respond in the moment, and measure whether the member returns.** Declining attendance offers a chance to respond while a routine is weakening. Dormancy offers a chance to reconnect after attendance has stopped. At the two larger operators, MagicAI Engage measurably increased the share of members who came back. This rests on three findings.

THREE FINDINGS

- 1/3** First, members in the MagicAI Engage group returned at higher rates at Alpha and Beta, after both dormancy and declining-attendance triggers.
- 2/3** Second, established annual-contract members who became dormant were less likely to continue after their first contract year.
- 3/3** Third, on Magicline, one in five new members who visited in their first four weeks made no visit in their second, a break long enough for the dormancy trigger to pick up.

Beyond the return visit, dormancy is associated with a substantial continuation gap, including among members who did not give notice. This makes dormant members, the members the MagicAI Engage dormancy trigger is built to reach, a priority for targeted engagement and continued measurement.

Utilising the MagicAI Engage potential

MagicAI Engage turns the data operators already hold in Magicline into timely, measurable member engagement. It reads check-ins, classes, contracts, cancellations, freezes, payments, and member-app activity; checks every member against the triggers each operator has switched on; and sends the operator's messages on the channels the operator chooses. In its first two months, it sent over 25,000 automated, trigger-based messages for three operator brands. The two triggers studied in this paper are part of a library that covers the member lifecycle from first enquiry to win-back (Figure 5).

25,000+

automated, trigger-based messages in the first two months for three operator brands

From first enquiry to win-back

Studied in this paper

In development

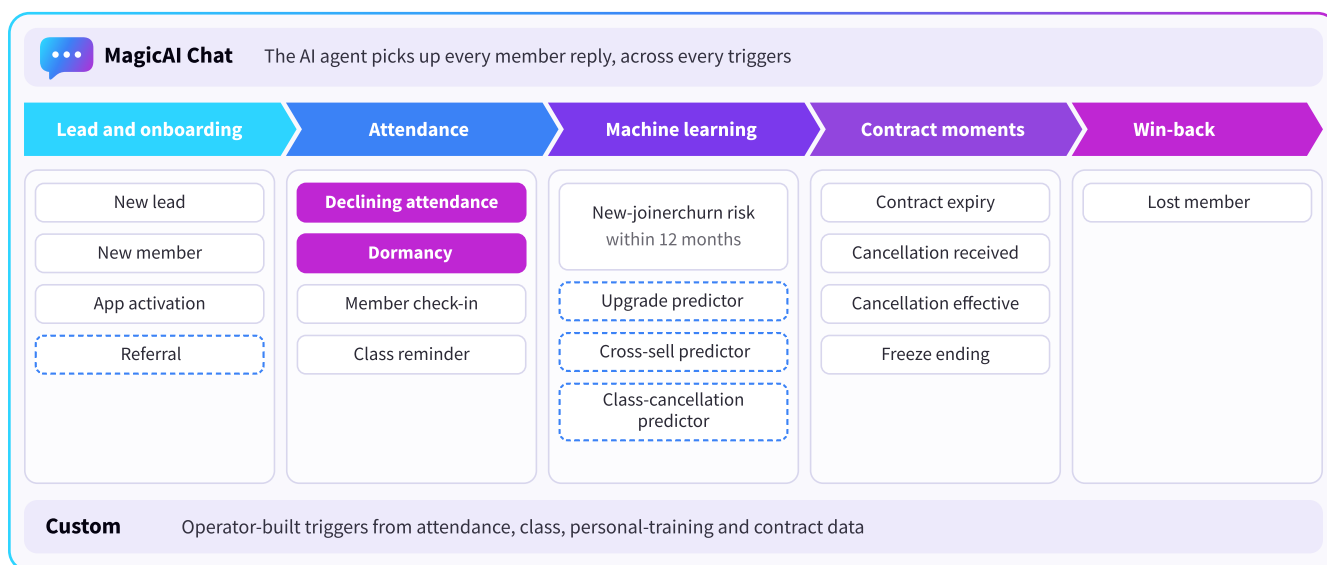


Figure 5. The MagicAI Engage trigger library across the member lifecycle. Each trigger responds to a moment in the relationship between a member and the studio, and MagicAI Chat picks up member replies across all of them. Filled chips mark the two triggers studied in this paper. Dashed chips are in development. The onboarding triggers and the new-joiner churn model act in the first weeks of a membership, where Figure 1 shows the largest fall in attendance. Operators choose which triggers run and can adjust their conditions.

Turning data into decisions with machine learning

Your member records hold thousands of signals. MagicAI Engage surfaces what needs action today and in the coming months and acts on it through the triggers you configure.

Its churn-prediction model scores new members in their 6th week and estimates their risk of leaving within twelve months, so operators can act on predicted risk early in the membership. Because it runs alongside transparent, rule-based triggers such as attendance, operators always see why they contacted a member.

12 months

forecast window of the churn-prediction model

Bringing members back

Three further models are in development. An upgrade predictor identifies members likely to move to a longer commitment. For example, a switch from a flexible monthly plan to a twelve-month membership. Operators can then make that offer at the right moment. A cross-sell predictor learns from purchase patterns to suggest the right product to the right member, from a protein shake after training to the extras a member is most likely to value. A class-cancellation predictor estimates which booked class places are likely to be cancelled, so operators can act before a place goes unused. Operators can exclude individual members from model training, for example at a member's request.

Enhance the on-site moments at the gate

Alongside its daily scheduled triggers, MagicAI Engage responds to what a member does as it happens. The member check-in trigger reacts the moment a visit is recorded and enables a new kind of engagement: a message a few minutes after the member walks through the gate, offering a protein shake at the bar, reminding them of today's classes, or recommending something personal. The message reaches members while they are in the studio and ready to act.

From message to conversation

A well-timed message often starts a conversation. MagicAI Chat, our AI agent, is part of the MagicAI Engage process. When a member replies, the agent picks up the conversation. It answers the member's questions, keeps the exchange moving toward a visit, booking, or renewal, and hands it off to the studio team when a person is the right next step. Operators choose, channel by channel, whether replies go to the AI agent or straight to their team. Every trigger then opens a two-way conversation, available at any hour.

Built to be measured

Operators can measure each trigger's outcome through A/B testing, the gold-standard method. They can then adapt their triggers to their members. To do this, they reserve a random share of active members for a comparison group. Each member is drawn once and kept. Held-out members pass through the same eligibility rules and contact limits as everyone else. That comparison group makes results like those in this paper possible.

It also guides where to focus: retention research shows that the members most at risk are not always the ones an intervention helps most, so each trigger is best judged by the response it measurably produces [10]. MagicAI Engage reports visits within 7, 14 and 30 days of each intervention.

7 • 14 • 30

days after each intervention:
MagicAI Engage reports
visits

Ready to see MagicAI Engage work on your own members?

This paper showed that MagicAI Engage brought more members back at the two larger operators.

But results from other studios only go so far. MagicAI Engage includes built-in A/B testing, so you can measure the effect on your own member base. You see the result in your own data and don't have to rely on ours.

In a 20-minute call, we will show you how to set up MagicAI Engage. We will also explain what you need to get started.

Book a 20-minute call, no commitment

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Supporting information

About the evidence

The two studies are separate. The intervention study covers 28 studios run by Operators Alpha, Beta and Gamma, and the historical study draws on studios from Operators Alpha and Gamma. Operators Alpha and Beta are multi-studio operators, and Gamma is a single-studio operator. The intervention study compares the MagicAI Engage group with the randomly held-out comparison group, and adjusts the 14-day results for earlier attendance, studio and calendar week. Its larger comparisons come from Operators Alpha and Beta.

The historical study's method was fixed before the dormant and attending groups were compared. Membership continuation counts any uninterrupted membership, including automatic continuation and contract changes, and a separate check moves follow-up beyond recorded term extensions.

The attendance analysis in Figure 1 is a third, descriptive analysis of the check-in records of 431,325 new members at 1,752 operators and 3,004 studios on Magicline, limited to operators whose agreements permit pooled analysis.