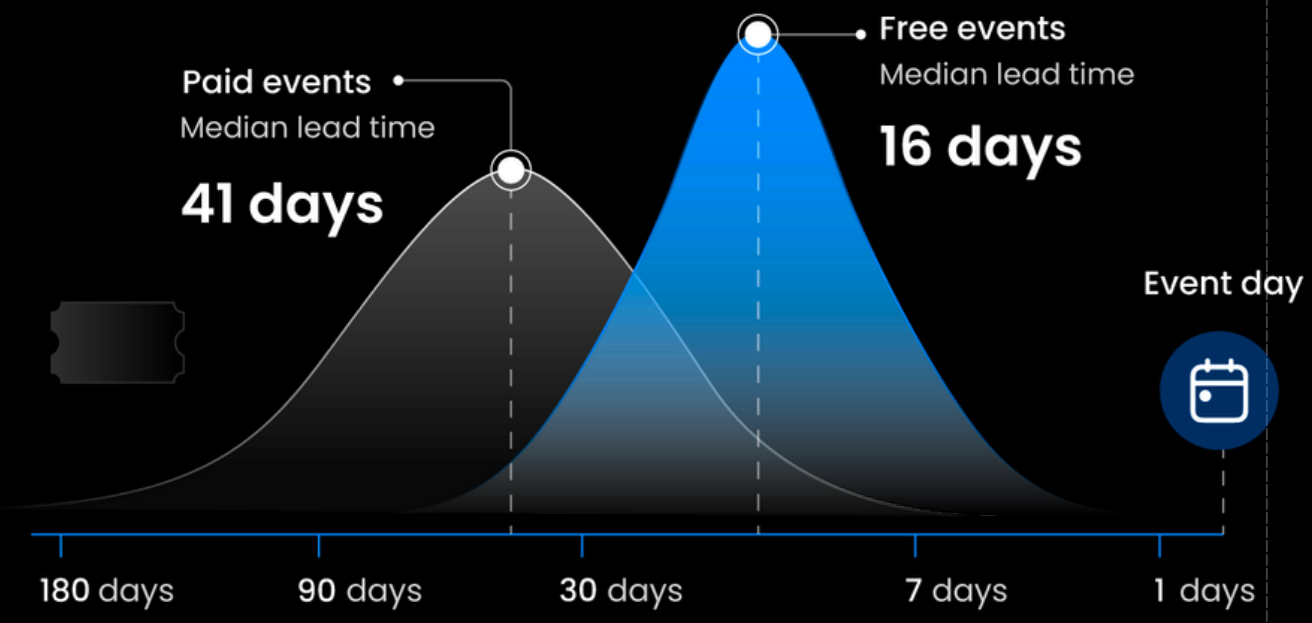
Event Data Lab Report #09

Late Registrants Aren't Flakier. Their Events Are Different.

Data-backed benchmarks from real-world events



pheedloop

Executive Summary

This report tests a widely held belief in event management: that attendees who register close to an event are less likely to attend it. The analysis covers 216,282 completed registrations across 467 live events where both registration and check-in timestamps are available.

KEY FINDINGS INCLUDE:

- **Pooled across all events, registration timing appears to predict attendance strongly.** Same-week registrants no-show at 42.4% against 18.4% for registrations placed six or more months ahead. A 24 percentage point spread with no reversals.

- **Within individual events, the relationship disappears.** Comparing early and late registrants at the same event, the median difference in attendance is 0.6 percentage points. Late registrants attend more reliably at 44% of events.

- **The apparent effect is composition, not behaviour.** Free events attract registrations a median 25 days later than paid events and attend worse at every lead-time band. That mix produces the entire gradient.

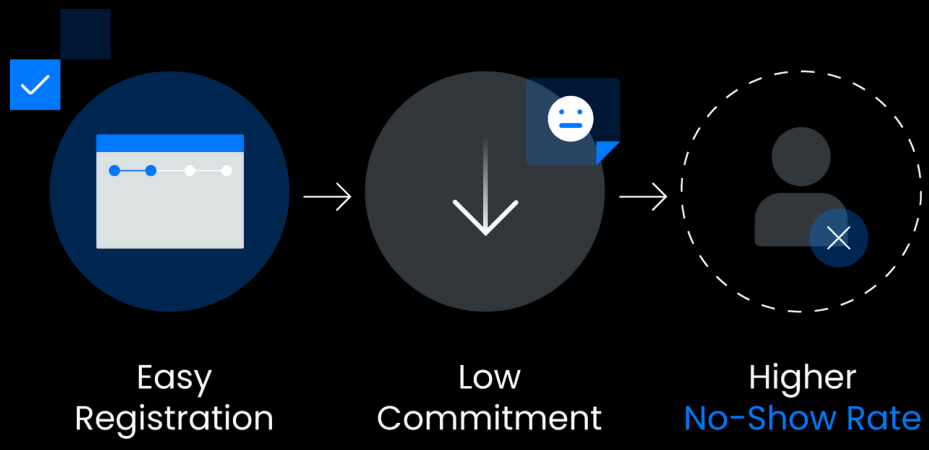
- **The finding is robust.** Six cohort variants, including cutoffs at 14, 30, 60 and 90 days, all produce median within-event gaps between minus 0.6 and plus 0.8 percentage points.

The practical consequence is that closing registration early does not filter for commitment. It reduces registration volume without improving show rate.

About the Event Data Lab

The Event Data Lab is an ongoing research initiative focused on analysing real-world event performance using aggregated and anonymised data. Reports published under the Event Data Lab aim to surface empirical benchmarks and operational insights across registration, onsite operations, engagement, and ROI.

This report extends the attendance work begun in Reports #05 and #06. Report #05 established no-show benchmarks by event size and pricing model. Report #06 tested them against registration friction. This report tests them against registration timing.



Dataset Overview

Scope

- 467 live events with both registration and check-in data
- 216,282 completed registrations with a usable registration timestamp
- Median registration lead time 35 days; 25th percentile 13 days, 75th percentile 68 days
- Data aggregated and anonymised across live events

Inclusion criteria

- 50 or more completed registrations
- At least one recorded event check-in
- Check-in-to-registration link rate above 90%, so that per registration attendance can be attributed reliably

Exclusions

- Test, sandbox, and internal events were excluded
- Registrations dated after their event date were excluded (11,582 records, 5.1% of the cohort). These are backfilled or corrected records rather than genuine post-event registrations.
- Disabled events were excluded

Cohort construction

Step	Events
Delivered in extract	2,733
Not disabled	2,733
Not internal or test	2,730
50 or more completed registrations	2,730
Valid event data	2,730
At least one event check-in	914
Check-in link rate above 90%	467

The binding constraint is check-in adoption, consistent with Reports #05 and #07. Two thirds of events with 50 or more registrations recorded no check-ins at all, and a further third of those that did fell below the link-rate threshold.

Comparability note:

This cohort applies a stricter check-in link-rate filter than Report #05. Absolute attendance rates are therefore not directly comparable between the two reports. Differences expressed in percentage points are comparable. Where this report cites Report #05 figures, it compares gaps rather than levels.

Metric Definitions

Registration Lead Time

Sessions Per Person	=	Event Start Date - Registration Completion Timestamp

Attendance and No-Show

Arrival offset	=	Registration produced at least one event check-in

No-show rate is the inverse of attendance. Both are computed per registration, then aggregated. This differs from Report #05, which computed no-show rate against total expected attendees at event level.

Within-Event Comparison

For each event, registrations are split at a lead-time cutoff into early and late groups, and attendance is computed separately for each. The reported gap is late-group attendance minus early-group attendance. An event is included only where both groups contain at least 20 registrations, so that each rate is stable. This design holds the event constant and removes event-level characteristics as a confound.

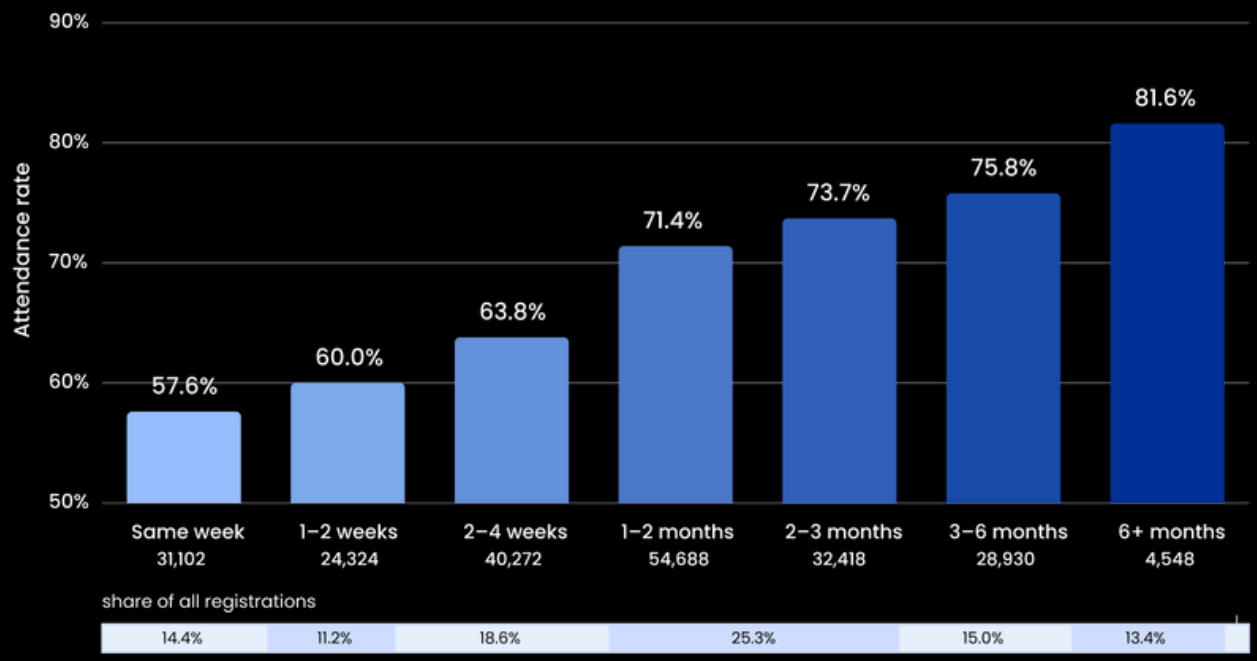
Finding 1: The Pooled Gradient

Across all 467 events, attendance rises monotonically with registration lead time.

Registered	Registrations	Share of cohort	Attendance	No-show
Same week	31,102	14.4%	57.6%	42.4%
1 to 2 weeks	24,324	11.2%	60.0%	40.0%
2 to 4 weeks	40,272	18.6%	63.8%	36.2%
1 to 2 months	54,688	25.3%	71.4%	28.6%
2 to 3 months	32,418	15.0%	73.7%	26.3%
3 to 6 months	28,930	13.4%	75.8%	24.2%
6 or more months	4,548	2.1%	81.6%	18.4%

Attendance by Registration Lead Time, Pooled

216,282 registrations across 467 events



Attendance is the share of completed registrations producing at least one event check-in. Registrations dated after their event date excluded (5.1%). Test events excluded.

A 24 percentage point spread with no reversals. Taken alone, this appears to confirm theconventional view that late registrants are less committed.

It is also the number most likely to be quoted out of context from this report. The remainder of the analysis explains why it should not be used to score registration quality.

One useful operational figure does come out of this table. 14.4% of registrations arrive in the final week and a further 11.2% in the week before that. Over a quarter of a typical event's registrations land inside the final fortnight, which is a genuine planning input for badge production and check-in staffing.

Finding 2: Within Events, the Effect Disappears

The pooled table compares registrations across different events. Holding the event constant produces a different answer.

Across 374 events with at least 20 registrations on each side of a 30-day cutoff:

Group	P25	Median	P75
Registered 30 or more days out	57.4%	84.1%	92.5%
Registered inside 30 days	51.9%	80.8%	91.8%

The distribution of the within-event gap, calculated as late-group attendance minus early-group attendance:

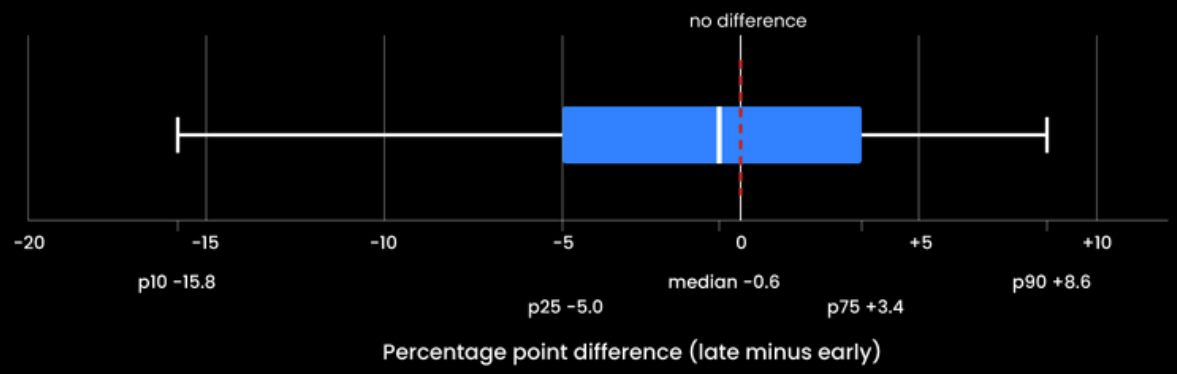
Percentile	Gap (percentage points)
10th	-15.8
25th	-5.0
Median	-0.6
75th	+3.4
90th	+8.6

Measure	Value
Events where the late registrants attend better	166 of 374 (44%)
Events where the gap is within 5 points either way	206 of 374 (55%)

A median gap of 0.6 percentage points, with late registrants ahead at almost half of events, is not a predictive relationship. It is noise around zero.

Within-Event Gap Between Late and Early Registrants

374 events. Negative means early registrants attended more reliably.



44%

of events had late registrants attend MORE reliably

55%

of events had a gap smaller than 5 points either way

Late-group attendance minus early-group attendance at the same event, 30-day cutof events.

f. Events required 20 or more registrations on each side. 374

Measure	Value
Events where the late registrants attend better	166 of 374 (44%)
Events where the gap is within 5 points either way	206 of 374 (55%)

A median gap of 0.6 percentage points, with late registrants ahead at almost half of events, is not a predictive relationship. It is noise around zero.

Robustness

The result holds across every variation tested.

Variant	Events	Early	Late	Median gap	Late better in
30-day cutoff (base)	374	84.1%	80.8%	-0.6pp	44%
14-day cutoff	330	78.0%	76.0%	-0.2pp	48%
60-day cutoff	295	84.3%	83.4%	+0.3pp	52%
90-day cutoff	193	86.4%	87.6%	+0.8pp	58%
50 registrations per side	268	84.4%	82.2%	-0.2pp	47%
Ticketed registrations only	373	84.5%	82.1%	-0.6pp	44%

Median gaps range from minus 0.6 to plus 0.8 percentage points. At the 90-day cutoff the sign everses and late registrants attend marginally better. No variant produces an effect of operational size.

Key Finding:

Registration timing does not predict attendance. It predicts what kind of event someone is registering for. Late registrations cluster at free events, and free events have a no-show problem that has nothing to do with when people signed up.

Finding 3: The Gradient Is Made of Free Events

Two facts about free events, taken together, manufacture the pooled result.

Free events register later

Event pricing	Registrations	Median lead time	Share inside 30 days
Events with paid registrations	174,958	41 days	38%
Events with no paid registrations	41,324	16 days	69%

Free-event registrations arrive a median 25 days later. More than two thirds of them land inside the final month, against under two fifths at paid events.

Free events attend worse at every lead time

Pooled attendance within each group, by lead-time band:

Registered	Paid events	Free events
Same week	72.8%	28.2%
1 to 2 weeks	69.6%	42.5%
2 to 4 weeks	67.9%	50.6%
1 to 2 months	73.8%	56.8%
2 to 3 months	75.7%	59.3%
3 to 6 months	76.3%	56.8%
6 or more months	81.6%	not enough volume

The same-week band is disproportionately composed of free-event registrations, which attend poorly at any lead time. The six-month band is almost entirely paid registrations, which attend well at any lead time. The pooled gradient is the mix changing across bands, not behaviour changing within a person.

Note the residual gradient inside paid events is small and not monotonic. Same-week registrants attend at 72.8%, those registering two to four weeks out attend at 67.9%, and only the six-month band exceeds 80%. An 8.8 point range with a reversal in the middle.

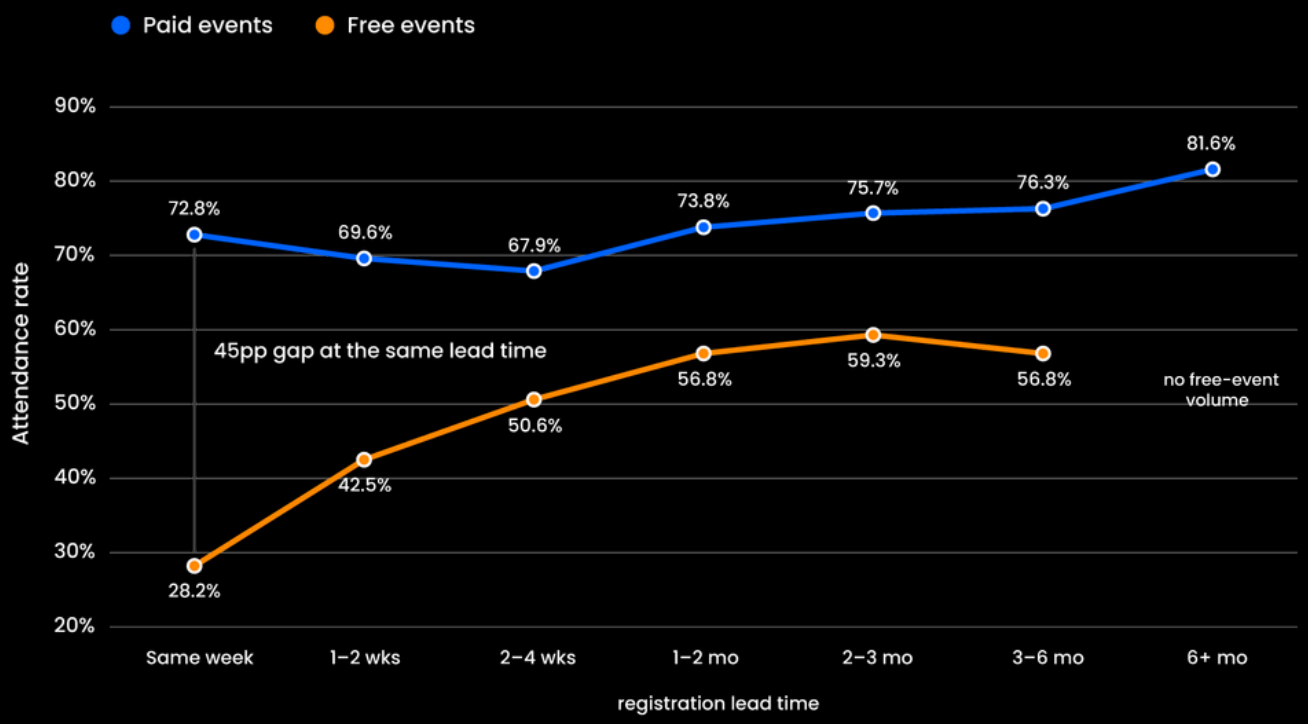
Within-event comparison, split by pricing

Event pricing	Events	Early	Late	Median gap	Late better in
Paid events	306	86.8%	84.6%	-0.7pp	42%
Free events	68	69.1%	60.5%	+1.0pp	53%

Neither group shows a meaningful within-event effect. At free events the sign is positive: late registrants attend marginally better than early ones, the opposite of the conventional expectation. The free-event subsample is small at 68 events and this specific figure should be treated as directional.

The Gradient Is Made of Free Events

Pooled attendance by lead time, split by whether the event had paid registrations



16 vs 41 days

median lead time, free vs paid events

69% vs 38%

share of registrations arriving inside 30 days

-0.7pp / +1.0pp

within-event gap, paid vs free events

Paid events are those with at least one paid registration. 174,958 registrations across paid events, 41,324 across free events. The 6+ month band has insufficient free-event volume to report.

Practical implications for event teams

- **Do not discount late registrations in headcount forecasting.** At your event, someone registering in the final week is about as likely to attend as someone who registered three months out. Applying a penalty to late registrations will make your forecast worse, not better.
- **Closing registration early will not improve show rate.** It will reduce registration volume. The commitment filter that an early deadline is expected to provide is not present in this data at any cutoff between 14 and 90 days.
- **For free events, the lever is pricing or commitment mechanisms, not timing.** Free events lose between 40% and 72% of registrants across every lead-time band. A registration deadline does not address a problem that exists uniformly across the registration window.
- **Use lead-time data for capacity planning, not quality scoring.** Knowing that over a quarter of registrations arrive inside the final fortnight is directly useful for badge production, catering deadlines, and check-in staffing. Treating those registrants as lower quality is not supported
- **Check whether patterns in your own data survive holding the event constant.** Any variable correlated with event type will appear to predict outcomes it does not cause. Across a portfolio containing both free and paid events, that describes most variables.

How to Use These Benchmarks

These benchmarks are most useful as:

- Planning inputs for the timing of badge production, catering commitments, and onsite staffing

- A reference distribution for assessing whether your own registration curve is unusually front- or back-loaded

- Evidence for internal decisions about registration deadlines

- A caution against quality-scoring registrations by arrival date

They should not be interpreted as performance targets. Individual event performance will vary based on audience, pricing, promotion schedule, and how consistently check-in is operated.

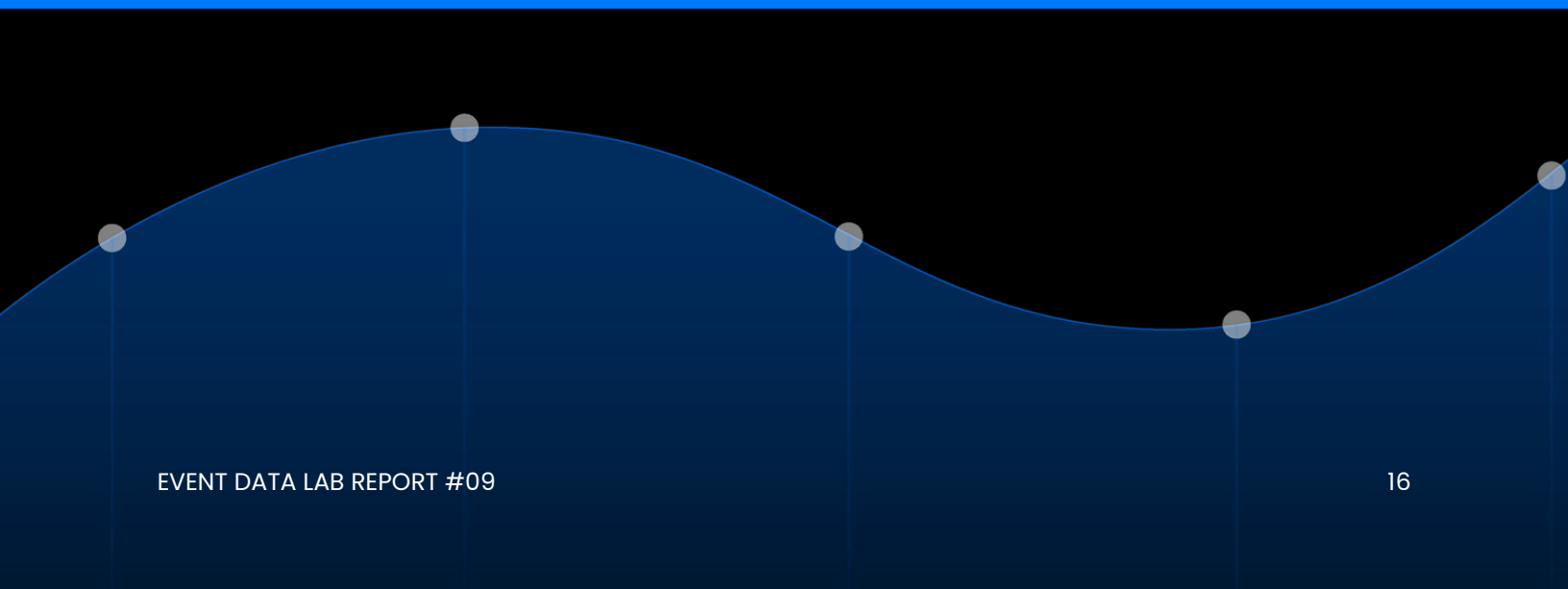
A Note on Method

This is the third occasion in this series on which a strong relationship has dissolved under event-level control.

Analysis	Pooled appearance	After controlling for the event
Report #06: registration friction	Easier registration associated with more no-shows	No relationship among paid events
Ticket class follow-up	Free events no-show 11 points more than paid	Paying attendees 2 to 4 points better within the same event
Report #09: registration timing	24 point spread across lead-time bands	0.6 point median within-event gap

The pattern is consistent enough to state as a general caution. Event portfolios contain very different kinds of events, and any variable that correlates with event type will appear to predict outcomes it does not cause. Free versus paid is the dominant such variable in registration and attendance data, and it has confounded every relationship examined in this series so far.

The practical version for anyone analysing their own event data: before acting on a correlation, split the analysis by event and check whether the relationship survives. If a pattern only exists across events and not within them, it is describing your event mix rather than your attendees.



Limitations

- **This is observational.** No event randomised registration timing. Attendees choose when to register, and that choice may correlate with characteristics not captured here.
- **Absolute rates are not comparable to Report #05.** This cohort requires a check-in link rate above 90%, which is stricter than Report #05's cohort. Comparisons across the two reports should use differences in percentage points, not levels.
- **The check-in adoption ceiling constrains the sample.** Two thirds of events with 50 or more registrations recorded no check-ins. The cohort is therefore weighted toward events that operate onsite check-in consistently, which may differ systematically from those that do not.
- **The free-event subsample is small.** 68 events support the free-event within-event comparison. That figure is directional.
- **Lead time is measured to event start date, not to a registration deadline.** Events with hard registration deadlines and events with open registration are treated identically.
- **Event type segmentation is unavailable.** Event type classification was not delivered with this dataset, so benchmarks cannot be segmented by conference, trade show, or association format as in Report #01. This is the fourth consecutive report affected.

Closing

The belief that late registrants are less likely to attend is one of the more durable pieces of conventional wisdom in event management, and the pooled data appears to support it emphatically. Within events it does not survive at any cutoff tested.

What the data does support is a different and less convenient conclusion: free events have a substantial and uniform attendance problem, and because their registrations cluster late, that problem has been misattributed to timing. Teams acting on the timing hypothesis have been optimising a variable that does not matter, using a deadline that costs them registrations.

Future reports will examine engagement concentration and exhibitor performance.

Appendix

Definitions

- **Registration lead time:** days between registration completion and event start date.
- **Attendance:** whether a completed registration produced at least one event check-in.
- **Within-event gap:** late-group attendance minus early-group attendance at the same event. Negative values mean early registrants attended more reliably.
- **Paid event:** an event with at least one registration carrying a paid payment class.
- **Check-in link rate:** the share of event check-ins that resolve to a specific registration. Used as a data quality filter.
- **Median:** the 50th percentile. Used as the primary measure throughout because attendance distributions are skewed.

Data Exclusions

Events were excluded if disabled, if they matched internal or test naming patterns, if they carried fewer than 50 completed registrations, if they recorded no check-ins, or if their check-in link rate fell at or below 90%. Registrations were excluded if the registration timestamp fell after the event date.

Data Quality Observations

- 5.1% of registrations in the cohort carry a registration timestamp later than their event date. These are consistent with backfilled or corrected records rather than genuine post- event registrations, and have been excluded.
- Registration timestamps were populated on 100% of the 903,400 registration records delivered, which is the highest field coverage seen in any Event Data Lab extract to date.
- Check-in timestamps were populated on every record flagged as checked in, with no discrepancies between the boolean and the timestamp.

Notes on Causality

All findings describe associations. The within-event design removes event-level characteristics as a confound, which is a substantial improvement over a pooled comparison, but it does not establish causation. Attendees who register late may differ from early registrants in ways that are not captured in this dataset and that happen to offset any commitment effect. What the analysis does establish is that registration timing has no predictive value for attendance once the event is held constant, which is sufficient for the operational conclusions drawn.

This report is part of the Event Data Lab, an ongoing research initiative analysing real-world event performance across registration, onsite operations, engagement, and ROI.