

ABL Digital Technologies

SHRINKAGE DIAGNOSTIC

A Practitioner's Guide

Decompose · Planned vs unplanned · Outliers · Opportunities

Companion to the other tool explainers.

SHRINKAGE DIAGNOSTIC

A Practitioner's Guide

Decompose · Compare planned vs unplanned · Spot outliers · Find opportunities

1 · What This Tool Does

Most contact-centre operations report a single shrinkage number — say "26%" — and leave it there. That number hides everything that matters: where the time is going, whether the loss is planned or accidental, which categories are getting worse, and where the realistic governance opportunities are.

The Shrinkage Diagnostic takes your historical shrinkage data — hours consumed by each category across one or more periods — and decomposes it. It shows:

- The headline shrinkage %, split into planned and unplanned
- A ranked breakdown by category, sorted by impact
- A trend chart across periods to see what is moving
- Outlier flagging — categories whose pattern is unstable
- Top opportunities — categories where a 25% reduction would save the most FTE

No major WFM vendor offers this as a standalone tool — they only deliver this view after you ingest their full real-time feeds. The Shrinkage Diagnostic gives you the same picture from any source of category-hours data.

2 · Vocabulary

Shrinkage

The fraction of paid agent time that is NOT spent on productive work (taking calls, handling cases, completing tasks). Higher shrinkage means more headcount needed to deliver the same productive output.

$$\text{Shrinkage \%} = \text{Non-productive hours} \div \text{Total paid hours}$$

Planned vs Unplanned

- Planned — scheduled events: lunch breaks, training, team meetings, annual leave, public holidays, project work. Predictable, manageable.
- Unplanned — deviations from schedule: sick leave, late, no show, system downtime, attrition gap. Disruptive, often signals governance issues.

A healthy operation has unplanned shrinkage below 5%. Above 8% suggests systemic problems — culture, supervision, scheduling rigour, or all three.

Coefficient of Variation

A statistical measure of stability: standard deviation divided by mean. The tool flags categories with coefficient of variation above 0.3 as outliers — they swing too much across periods, suggesting either bad data or an underlying issue.

3 - The Inputs

3.1 Total Paid Hours per Period

The denominator. Each period has its own total paid hours — the sum of all paid time for all agents in that period. Set 1-12 periods (months are typical).

3.2 Category Hours per Period

The numerator, by category. A standard 12-category default list is loaded:

Planned categories

- Lunch & Breaks — schedule-included breaks
- Training & Coaching — classroom + 1:1 development
- Team Meetings — huddles, briefings, town halls
- Annual Leave — vacation, paid time off
- Public Holidays — calendar holidays paid as off
- Project Work — non-production assignments

Unplanned categories

- Sick Leave — medical absences
- Personal Leave — emergency or compassionate
- Late / Tardiness — partial-day deviations
- No Show — full-day absences without notice
- System Down — infrastructure/tool unavailability
- Attrition Gap — vacant seats between exit and replacement

Enter hours for each category per period. Categories with zero hours are ignored in the breakdown.

4 - The Maths

4.1 Per-Category Aggregates

```
total[c] = sum of hours across all periods for category c
```

```
period%[c,p] = hours[c,p] ÷ paidHours[p]
avg%[c] = average of period%[c,p] across all periods
shareOfShr[c] = total[c] ÷ totalShrinkageHours
```

4.2 Headline Numbers

```
totalShrinkage% = sum(category totals) ÷ sum(paid hours)
plannedShrinkage% = sum(planned categories) ÷ totalPaid
unplannedShrinkage% = sum(unplanned) ÷ totalPaid
effectiveProductive% = 100 - totalShrinkage%
```

4.3 Outlier Detection

A category is flagged as an outlier if it has noticeable presence ($\text{avg}\% > 0.1\%$) and either:

- Coefficient of variation > 0.3 — too unstable across periods
- Max period exceeds $1.8\times$ the average — a single-period spike

4.4 Opportunity Ranking

For each meaningful category ($\text{avg}\% > 0.5\%$), compute the FTE equivalent saved if it were reduced by 25%:

```
fteSaved = (avg% × 25%) × (avgPaidHours per period ÷ 168
hrs/FTE/month)
```

168 hours = ~ 40 hours/week $\times \sim 4.2$ weeks/month, a standard FTE-month proxy. Top six categories by impact are returned, each with a category-appropriate governance recommendation.

5 - The Outputs

5.1 Shrinkage Summary Card

- Total Shrinkage %
- Planned %
- Unplanned % (colour highlighted)
- Effective Productive %
- Periods Analysed
- Categories (count of non-zero)
- Top Category by impact
- Outliers Flagged (colour highlighted)

5.2 Category Breakdown Table

Every category, sorted by impact: category name, type (Planned/Unplanned colour-coded), total hours, average % of paid, share of total shrinkage, and a "■ Outlier" flag where applicable.

5.3 Trend Chart

Top six categories plotted across periods. Useful for spotting "creeping" categories (steady upward trend), seasonal patterns (annual leave spike in December), and one-off events (a sick-leave spike during flu season).

5.4 Top Opportunities Table

Up to six highest-impact categories with: current %, "if reduced by 25%" target, FTE equivalent saved, and a recommendation appropriate to the category type.

6 · The Excel Workbook — Four Sheets

- Summary — headline numbers and category counts
- Category Breakdown — full sorted table with coefficient of variation
- Period Detail — per-period %s for every category (the heatmap data)
- Opportunities — top opportunities with recommendations

7 · A Worked Example

Three months of data from a 100-agent voice operation. Total paid hours ~17,000/month.

7.1 Headline

```
Total Shrinkage: 25.2%
Planned: 16.4%
Unplanned: 8.8%
Effective Productive: 74.8%
```

7.2 Top Categories

From the breakdown table, sorted by impact:

```
Lunch & Breaks 6.6% (planned, stable)
Annual Leave 4.6% (planned, lumpy – outlier flag)
Training & Coaching 2.7% (planned, stable)
Attrition Gap 1.3% (unplanned, increasing – outlier flag)
Sick Leave 2.6% (unplanned, seasonal – outlier flag)
```

7.3 Outliers

Three flagged: Annual Leave (December spike), Attrition Gap (rising 0.9% → 1.6% → 1.8%), Sick Leave (winter month higher than others). The Annual Leave spike is expected; the Attrition Gap trend is a real signal — investigate replacement velocity.

7.4 Opportunities

Top opportunity: reducing Attrition Gap by 25% (from 1.5% avg to ~1.1%) saves ~1.7 FTE-equivalent across the operation. The recommendation surfaces "Governance: investigate root cause patterns; tighter approval workflow" which for Attrition Gap translates to faster replacement hiring.

8 - Limits

- No real-time integration — the tool expects historical totals, not live feeds
- Single-site analysis — for multi-site comparison, run the tool once per site and compare manually
- No per-agent analysis — works at category level for the whole operation or a team
- No automatic root-cause analysis — surfaces patterns; you investigate causes

9 - Tips

Where should I focus first?

Unplanned categories first, because they signal governance issues. Within unplanned, go for the largest one with an upward trend. A 25% reduction in unplanned shrinkage is achievable in 3-6 months with focused attention.

What is a healthy unplanned shrinkage?

5% or below is good. 5-8% is normal. Above 8% suggests systemic issues — culture, scheduling rigour, sickness policy, or attrition cycle.

Why does my Annual Leave look high in some months?

Probably real — leave clusters around December and major festivals. The outlier flag catches this. If you want a "leave-smoothed" view, compute averaged annual leave per month rather than reported, or extend the period range to a full year.

My data is messy — categories overlap

Pick the dominant category for each event type and standardise. Overlapping definitions ("Training" vs "Coaching" vs "Development") will spread impact across too many rows and dilute insight.