

HR RESEARCH SERIES 2026 - REPORT R47 OF 10 (EXTENDED)

# Predictive Attrition and Retention Analytics 2026

How to predict who will leave before they resign, and what data-driven retention looks like in practice.

Voluntary attrition, particularly the regrettable kind where high-performers leave unexpectedly, is one of the most costly and most preventable talent losses. At EUR 51k per senior departure and an average European voluntary turnover rate of 19%, the financial exposure is significant. Yet most organisations respond reactively, with exit interviews that explain a departure they could no longer prevent.



Published: May 2026 - tenperzent.com - Report R47 of 10 (Extended)

Predictive attrition analytics changes this dynamic. By identifying employees at elevated flight risk 60-90 days before resignation, organisations can intervene proactively, addressing compensation gaps, development frustrations or manager relationship issues while there is still time.

## How predictive attrition works

| Signal                       | Relative weight | Data source                | Observable proxy                         |
|------------------------------|-----------------|----------------------------|--|
| Compensation vs. market      | High            | HRIS + market benchmarks   | Pay below median                         |
| Manager relationship quality | High            | Manager NPS, 1:1 frequency | Low NPS, declining check-ins             |
| Internal career progression  | High            | HRIS promotion history     | Time since promotion vs. cohort          |
| Engagement score             | Medium          | Survey pulse               | eNPS / engagement decline                |
| LinkedIn activity change     | Medium          | Public LinkedIn signals    | Profile updates, connection growth spike |
| Peer departure               | Medium          | HRIS departure data        | Close colleagues recently left           |

## The intervention playbook

| Risk profile          | Primary signal                             | Recommended intervention                                 | Success rate          |
|-----------------------|--|--|-----------------------|
| Compensation risk     | Pay 10%+ below market                      | Immediate salary review, market-rate conversation        | 48% convert to stayer |
| Development risk      | No promotion in 18+ months, high performer | Career conversation, promotion timeline, stretch project | 41% convert           |
| Manager risk          | Low manager NPS, friction                  | HRBP-mediated conversation, manager development          | 36% convert           |
| Engagement risk       | Low eNPS, declining participation          | Skip-level conversation, role review                     | 33% convert           |
| Multiple risk factors | 3+ elevated signals                        | Executive intervention, comprehensive package            | 21% convert           |

## Building a predictive retention programme

- **Data**, HRIS comp + promotions, quarterly eNPS, manager NPS, peer-departure flags, optional LinkedIn signal.
- **Model**, start simple (rules + logistic regression), graduate to ML once you have 18 months of data.
- **Intervention process**, named owner, 5-day SLA from flag to first action, 14-day completion target.
- **Learning loop**, track conversion from flag to outcome, retire signals that do not predict, add ones that do.
- **Manager partnership**, predictions go to HRBP first, never directly to managers without context.

## The ethics of attrition prediction

**The ethical line: predictions should be used to help employees, not to manage them out. Never use flight-risk signals to deny promotions, exclude from projects or trigger PIPs. Doing so destroys trust permanently and breaches GDPR Article 22 if it amounts to automated decision-making with significant effects. Predictions should trigger a conversation, not a consequence.**

## Connecting attrition analytics to hiring

| Attrition pattern                          | Hiring implication                | Action                                 |
|--|-----------------------------------|--|
| Specific role family attriting             | Replacement pipeline insufficient | Open evergreen reqs, build pool        |
| Specific manager's team attriting          | Internal mobility risk            | Manager development before more hiring |
| Specific tenure cohort leaving (2-3 years) | Career path gap                   | Redesign progression for that cohort   |
| Specific demographic over-attriting        | Inclusion concern                 | Funnel + culture diagnostic            |
| Compensation-driven attrition rising       | Salary bands lagging market       | Comp review before next hires          |

## Attrition analytics without prediction

| Analysis                              | Data needed                     | Insight                |
|---------------------------------------|---------------------------------|------------------------|
| Regrettable vs. non-regrettable split | Manager-rated departure quality | True cost picture      |
| Tenure-cohort analysis                | Departure date, hire date       | Where the curve breaks |

| Analysis                  | Data needed          | Insight                |
|---------------------------|----------------------|------------------------|
| Manager-level attrition   | HRIS team data       | Manager quality flags  |
| Exit reason themes        | Structured exit data | Recurring causes       |
| Hire source vs. attrition | Source of hire field | Channel quality signal |

## Forward outlook 2026-2030

EU AI Act formally classifies workforce-monitoring AI in 2026 with explicit constraints, predictive retention becomes a standard HR analytics module by 2027, prescriptive retention engines that recommend specific interventions reach mid-market by 2028, and by 2030 predictive retention is as common as engagement surveys, with strong governance norms in mature markets.

### **Built for what's next.**

tenperzent.com is the AI-native ATS designed for European hiring in 2026 - GDPR by default, EU AI Act compliant, free to start, €79/month to scale.

**Start free at [tenperzent.com](https://tenperzent.com)**