HR Intervention Playbook for High-Risk Employees

Purpose

This playbook outlines a proactive and structured approach to support employees identified as high-risk for attrition. Leveraging predictive analytics and qualitative inputs, the playbook ensures timely, fair, and effective interventions that align with both employee retention and broader business objectives.

Attrition Prediction

Our Model Is >80% Accurate For Historical Predictions

Why Use Attrition Prediction?

- By targeting employees at high risk of leaving ("Highly Likely" and "More Likely"), we can focus retention efforts on their key issues and plan for backfills.

Attrition Model Mechanism

- We analyzed historical data (2020-Jan 2025) from CR, using 5,591 records (73 values excluded*) to identify patterns.
- The model predicts if an employee is likely to leave (encoded as 1) or stay (encoded as 0)

What models have we worked on?

- 3 learning models utilized- Logistic Regression (83% prediction accuracy), Random Forest (91% accuracy) and XGBoost(97% accuracy).
- XGBoost: 97% predictions accurate (making it the best performing model, and utilized moving forwards)
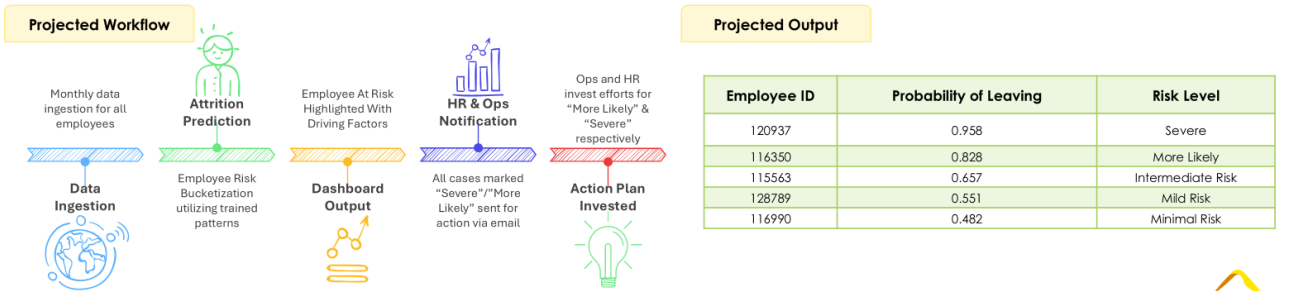
What is XGBoost?

- XGBoost is a machine learning algorithm that combines the results of multiple decision trees to make a prediction.
- 80-20 spilt followed- Training data (4472) vs Testing data (1119)

Parameters
1. Age
2. Years in Position
3. Years with Current Manager
4. Tenure
5. Years since Last Promotion
6. Total Base Pay - Amount
7. Salary Hike
8. Scheduled Weekly Hours
9. company worked count
10. Education
11. Manager Rating
12. Employee Category
13. Management Level
14. Gender
15. Work Shift
16. Employee Type
17. Time Type

Attrition Prediction

Feature Importance Summary (Random Forest)

Parameter	Correlation with Attrition	Insights
Years with Current Manager	High Correlation	**Longer time under one manager is associated with higher attrition**, possibly due to stagnation/goal orientation change/leadership association.
Tenure (Months)	High Correlation	**Longer tenure reduces attrition**—a critical focus area for early-tenure retention.
Salary Hike	High Correlation	Employees who received timely and meaningful **pay raises tend to stay**
Monthly Income	Medium Correlation	**Higher pay reduces attrition**, affirming that competitive compensation matters.
Manager Rating	Medium Correlation	**Lower-rated employees** contribute to **higher attrition**
Previous Organization Count	Medium Correlation	More previous employers = **higher attrition**, possibly due job-hopping. A risk flag in hiring pipelines.
Age	Low Correlation	Attrition shows a **declining trend** with increasing age.
Education/Field	Low Correlation	Weak correlation, HR correlation for Graduation Year vs Return To School planned

Projected Workflow

- Monthly data ingestion for all employees
- **Attrition Prediction**
- **Data Ingestion**
- Employee Risk Bucketization utilizing trained patterns
- Employee At Risk Highlighted With Driving Factors
- **Dashboard Output**
- **HR & Ops Notification**
- All cases marked "Severe"/"More Likely" sent for action via email
- Ops and HR invest efforts for "More Likely" & "Severe" respectively
- **Action Plan Invested**

Projected Output

Employee ID	Probability of Leaving	Risk Level
120937	0.958	Severe
116350	0.828	More Likely
115563	0.657	Intermediate Risk
128789	0.551	Mild Risk
116990	0.482	Minimal Risk

Roles & Responsibilities

Program Owner:

- Human Resources (HR): Owns governance, oversight, and continuous improvement.

Execution Partners:

- Operations Managers: Drive on-the-ground support through coaching, stay interviews, and performance monitoring.
- Employee Engagement Team: Delivers well-being, motivation, and culture-building initiatives.

Step-by-Step Intervention Workflow

1. Identification of High-Risk Employee

- Trigger: Employee appears on the weekly Attrition Prediction list.

- Timeline: **Day 0**

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2. Joint Evaluation of Risk Factors

- **Action:** HR and Operations jointly review employee data, including:
    - Attendance
    - Performance metrics
    - Coaching history
    - Prior feedback
- **Resources:** Use the Potential Exit Predictions Sheet.
- **Timeline: Complete by Day 3**

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3. Select the Type of Intervention

- Select the appropriate intervention based on risk signals:
    - Engagement: Offer well-being support or connect to engagement resources
    - Coaching/refresher training: Create a performance improvement plan or hold stay interviews
        - **Guided Interview Questions** (Ops Leader):
            - *How do you feel about your role right now?*
            - *What's working well vs. not?*
            - *What support is missing?*
            - *What could make your experience better?*
            - *(Optional) Scale-based responses (1–10) for trend tracking*
- Timeline: **By Day 5**

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4. Assign Actions by Department

- **HR:** Oversee the process, document interventions, and ensure ethical compliance
- **Operations:** Deliver assigned coaching, conduct interviews, and monitor progress
- **Training/Engagement:** Implement learning or engagement activities as needed
- **Timeline: By Day 6**

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5. Set and Communicate Follow-Up Schedule

- Continue regular 1-2-1's weekly
- Set expectations for documentation and updates
- **Timeline: By Day 7**

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6. Monitor Progress and Adjust Plans

- Monthly (or as needed) check-ins
- Update intervention plan as required
- Use Intervention Tracking Sheet to log:
  - Actions Taken
  - Observed outcomes
  - Comments and Feedback
- **Timeline: Ongoing**

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7. Evaluate Outcome at 30/60/90 Days

- Assess whether retention improved or further action is needed
- Based on progress, choose to:
  - Continue support
  - Revise the intervention plan
  - Recommend separation, if appropriate
- **Timeline: End of intervention cycle**

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8. Final Decision and Documentation

- **Document final outcomes:** Resolution, further support, or separation
- Confirm all actions align with ethical, legal, and policy guidelines.

Guidelines for Managers

- **Confidentiality:** Do not disclose that the employee has been flagged by predictive tools to avoid stigma or bias.

- **Documentation:** Use the tracker to document all interventions and outcomes.
- **Bias-Free Conversations:** Follow the FAQ/talking points and guide provided by HR for supportive and constructive coaching.
- **Resources:**
  - Employee Retention Training in Workday – Managing Employee Attrition: In this course, you will learn about attrition and how to manage it. You will also discover techniques to prevent and address it. Additionally, you will discover some key factors in deciding whether or not to retain an employee.
  - FAQs and sample talking points
  - Intervention tracking template
- Decision-Making: Do not base any employment decisions solely on predictive analytics.

Reporting and Monitoring

- Maintain a Centralized Intervention Tracker capturing:
  - Total employees flagged
  - Interventions completed
  - Resolution status (resolved, ongoing)
  - Retention impact metrics
- Quarterly Reviews by the HR Working Group to identify trends, evaluate success rates, and optimize processes.

Manager FAQs

- **What if I have concerns about the flagged employee?**
  Contact HR immediately for additional case-specific support and guidance.
- **What if an employee asks why they are being coached?**
  Frame the conversation around employee support, growth, and career development—do not reference predictive tools.
- **What documentation is required?**
  Complete all sections in the tracking template; document conversations, actions, and outcomes. **Please ensure all coaching's are documented in Workday.**