

# Solving Acme Aroma's Employee Turnover Crisis

A Data-Driven Path to ₹318 Million in Annual Savings

**Ryan McCurry**

**December 15th, 2025**

# Agenda

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## **Problem**

The Turnover Crisis

## **Approach**

An Analytical Method

## **Insights**

What's Really Driving Employee Turnover

## **Recommendation**

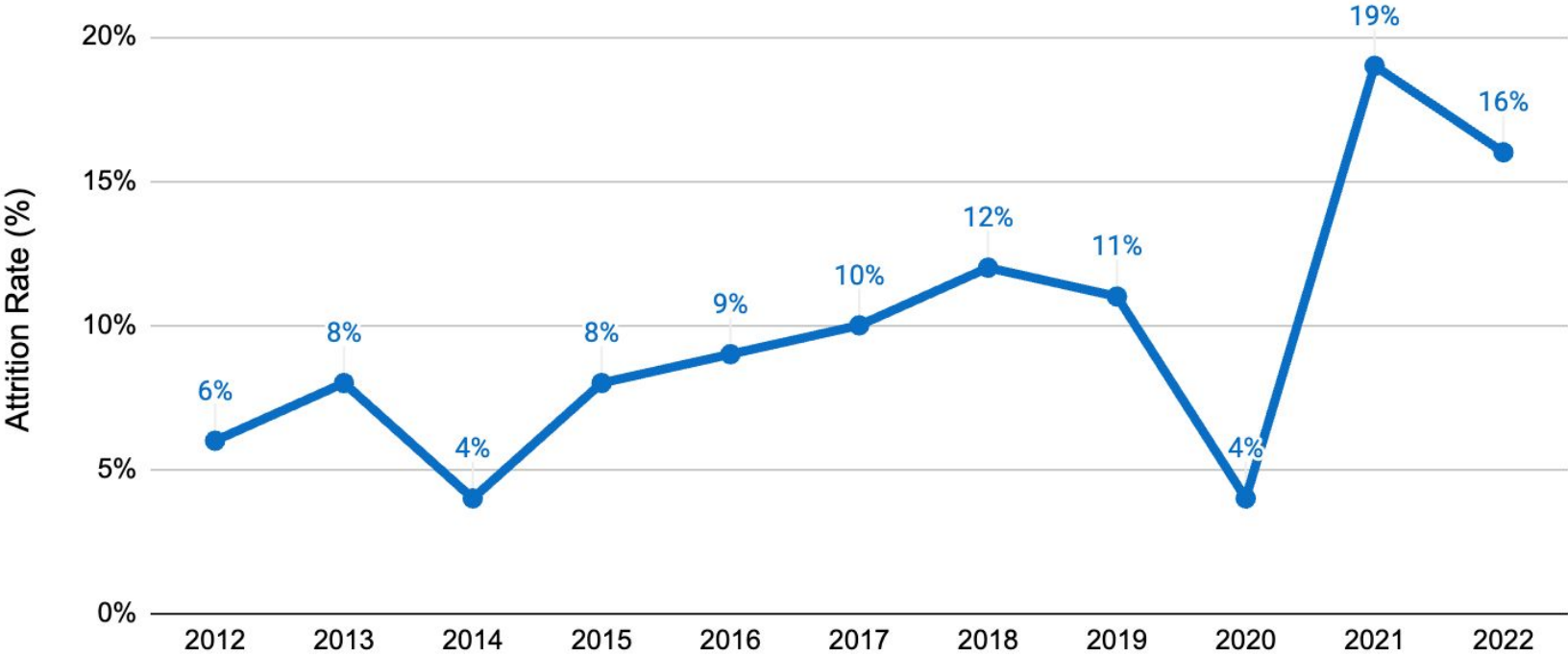
The Solution

## **Limitations**

What to Keep in Mind

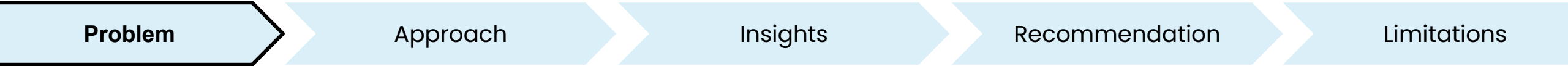
# The Problem: A 3x Increase in Employee Turnover

Employee Turnover Percentage by Year



**Key Takeaways**

- 3x increase over the decade
- 1,355 employees departed in 2021-2022
- Acquisition costs of ₹29.8 million (first in decade)



# Approach: Building a Predictive Solution

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## Data Source & Background

- Pegasus HRIS data
- 4,410 employee records
- Personal Characteristics, Professional History, and Engagement Survey Results

## Method

- Logistic regression model
- 5 key predictor variables
- Balanced training data

## Goal

- Predict at-risk employees
- Identify root causes
- Test retention strategies

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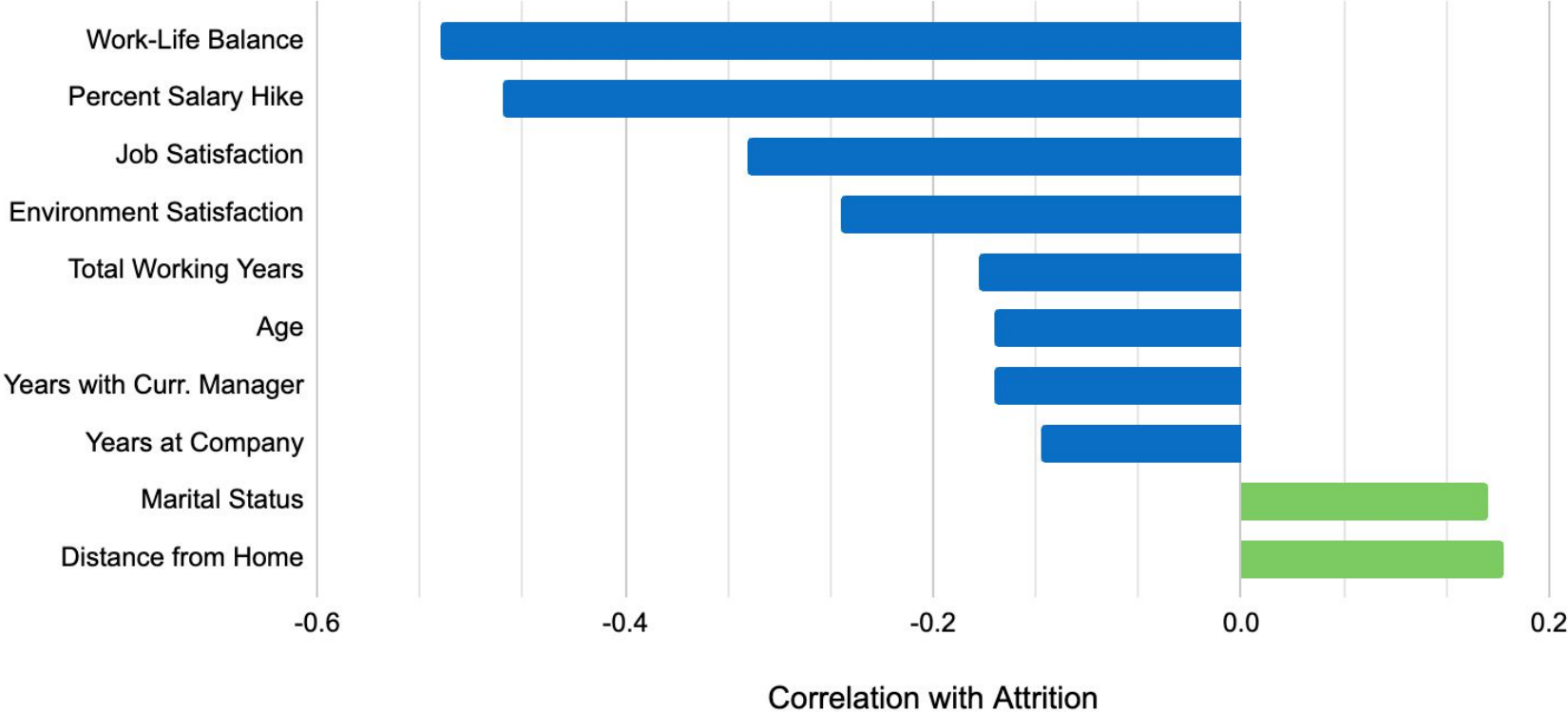
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# Insight #1: Employee Engagement Primarily Drives Turnover

Variables Correlated with Employee Attrition (correlation > |0.1|)



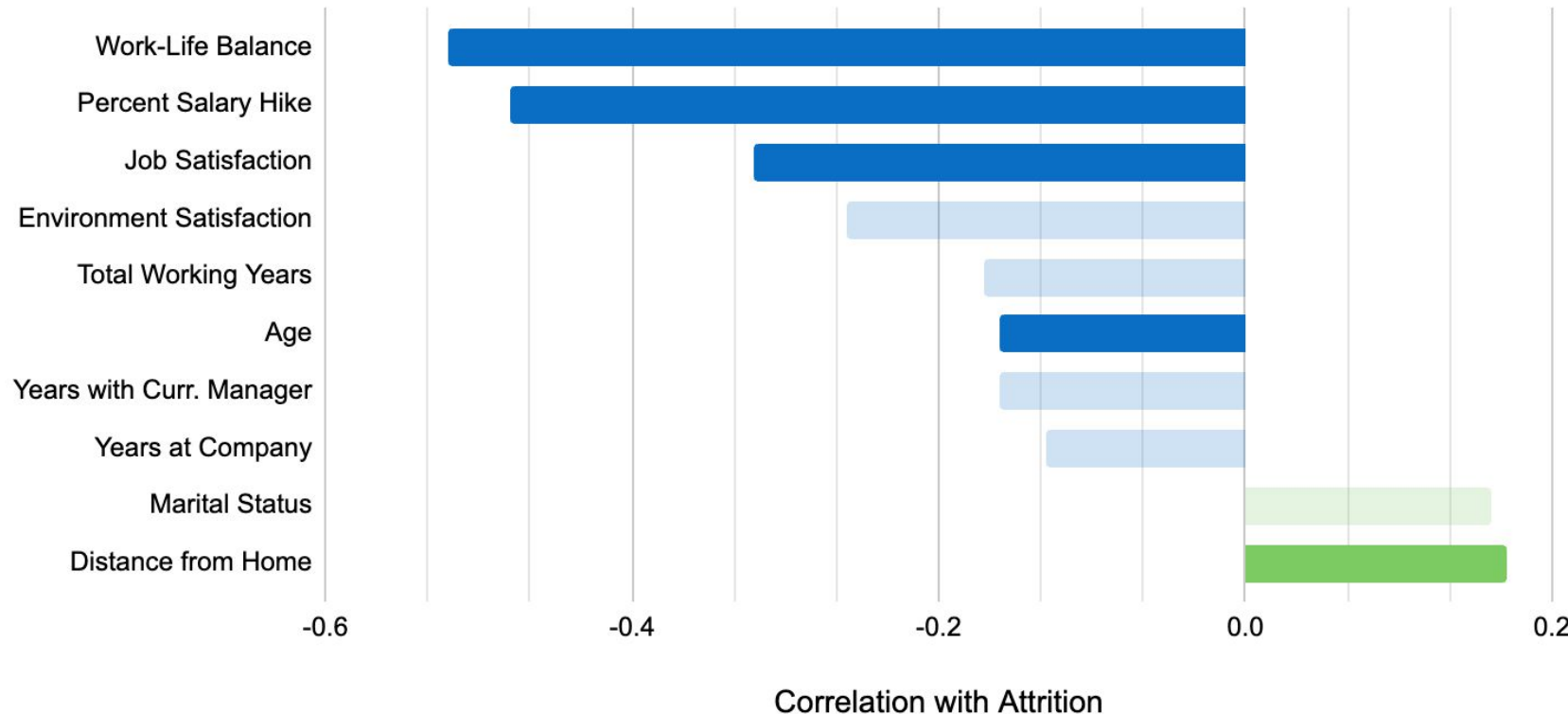
### Key Takeaways

- Employee engagement drives turnover
- Work-life balance is the strongest predictor (-0.52)
- Top 3 factors are all within company control
- Distance from home is the only risk factor (+0.17)



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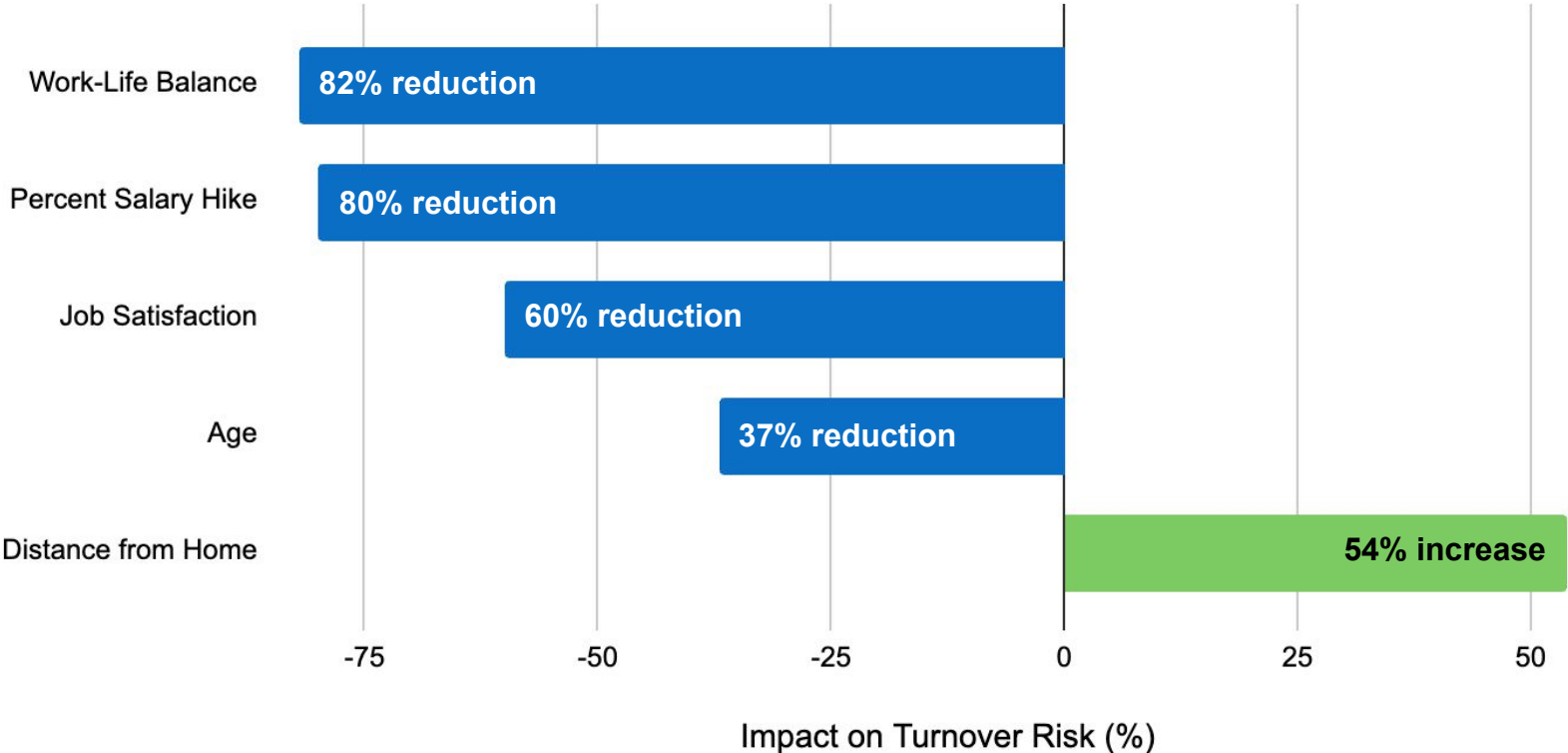
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# Insight #2: Work-Life Balance Has 82% Impact on Turnover

## How Each Factor Influences Turnover



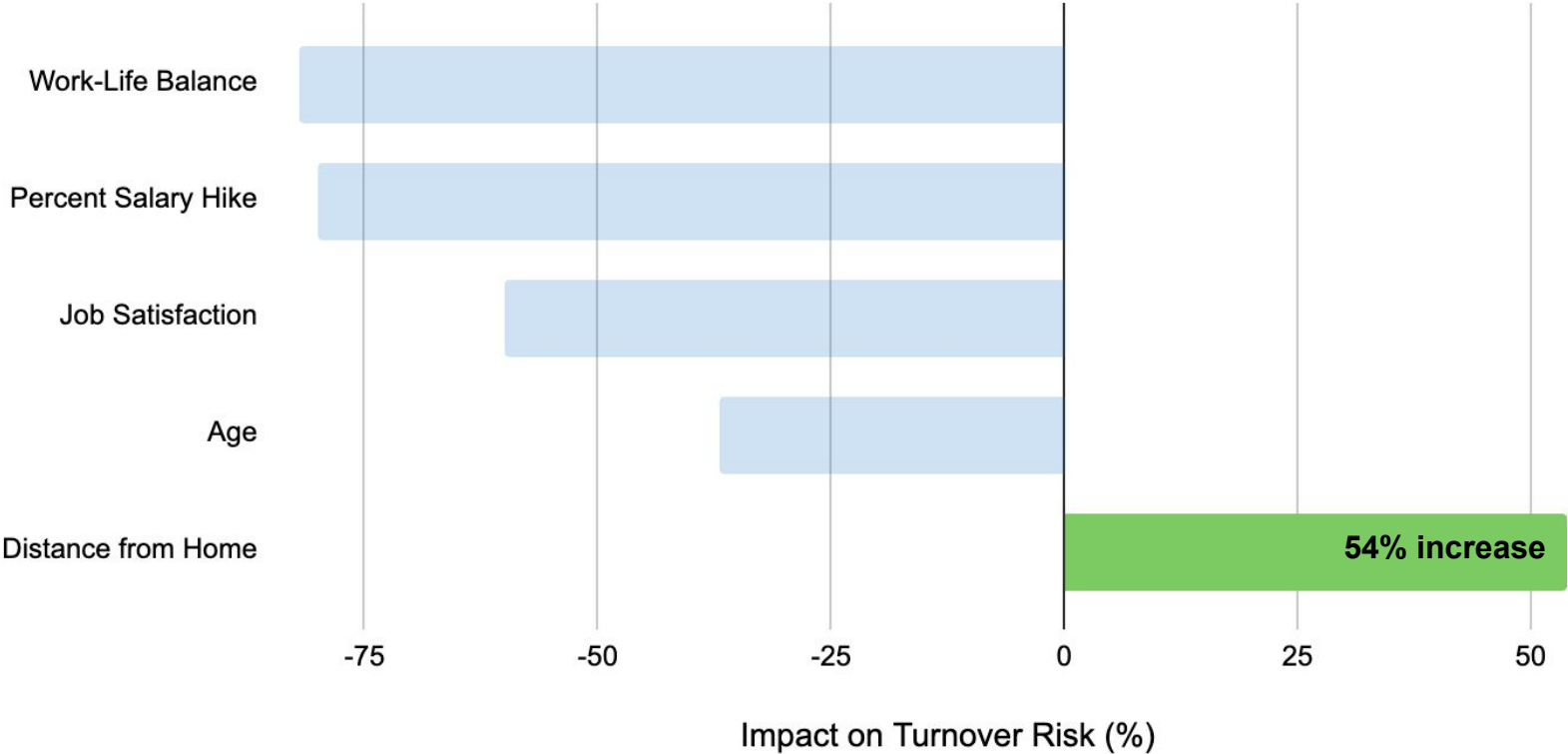
**Key Takeaways**

- Top 3 factors are all engagement related and reduce risk by 60-82%
- Work-life balance reduces turnover risk by 82% - the most protective factor
- Distance from home increases risk by 54%



# Insight #2: Work-Life Balance Has 82% Impact on Turnover

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## Insight #3: We Can Predict Departures with 91% Accuracy

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# 91% recall rate

The model catches 9 out of 10 of employees who actually leave

Problem

Approach

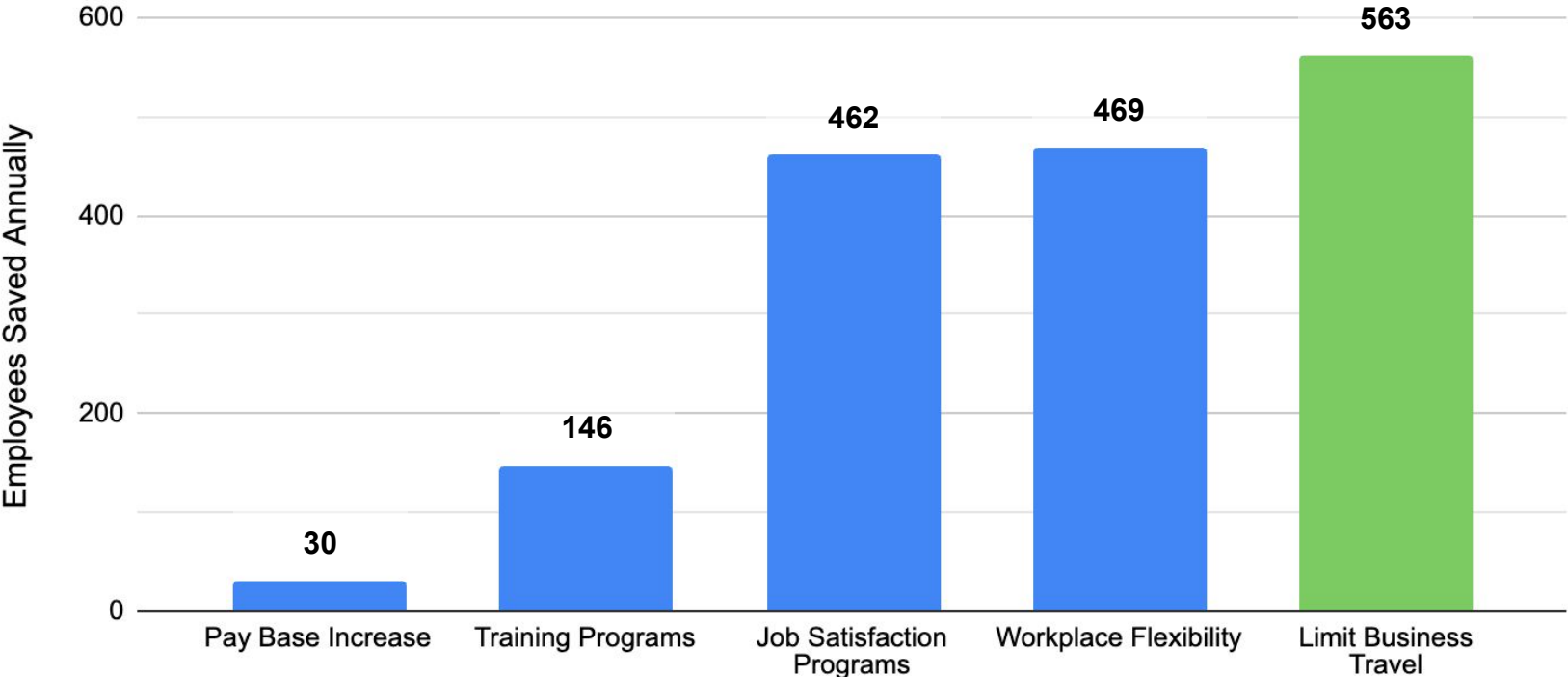
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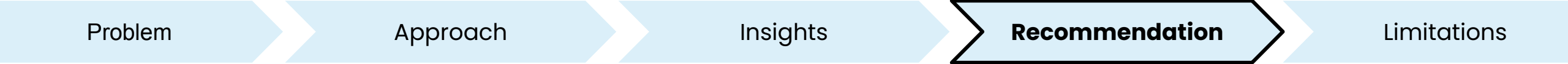
# We Tested 5 Initiatives Through Our Model

Impact of Each Initiative on Employee Retention



**Key Takeaways**

- Limiting business travel saves 563 employees annually
- 20% more effective than any other option
- Directly addresses work-life balance, the #1 employee turnover problem



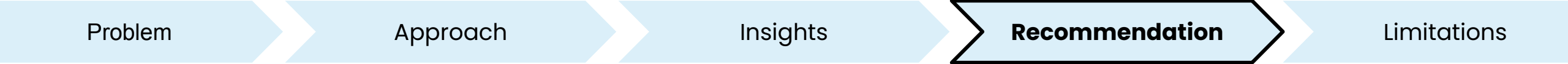
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# Recommendation: Implement Business Travel Reduction Policy

## The Initiative

- Reduce non-essential work travel
- +0.3 improvement in work-life balance score

## The Impact

- Attrition: 49.6% -> 35.4%
- 14.2% reduction
- 563 employees retained annually

*Directly addresses #1 turnover driver: Work-life balance (~82% impact)*

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## The Bottom Line: ₹318 Million Saved Annually

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**₹318 million**

Annual savings in recruitment, training, and onboarding costs

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# Limitations to Consider

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1. Model relies on historical patterns – requires updates if business changes
2. Cannot predict unprecedented external shocks (recessions, industry disruptions)
3. Minimal missing data (<1%) addressed through mean value assignment

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# Summary: Time to Act

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## **Problem**

3x turnover increase, ~₹30 crisis

## **Approach**

Predictive model with 91% recall

## **Insights**

Work-life balance = 82% impact

## **Recommendation**

Limit business travel

## **Limitations**

Manageable, don't alter conclusion