

HR Analytics Dashboard Report

Executive Summary

This report showcases insights from the HR Metrics Dashboard developed using Power BI, based on a sample HR dataset (IBM HR Analytics Employee Attrition dataset from Kaggle). The dashboard visualizes key workforce metrics including employee turnover rates, proxies for recruitment efficiency (such as median years at company), and diversity statistics. With a total workforce of 1,470 employees, the analysis reveals an overall attrition rate of 16.12%, which is higher than the desirable benchmark of below 10% for most industries but aligns with rates in competitive sectors like sales and research. Key findings include higher attrition among younger employees, males, and roles like Laboratory Technicians, alongside moderate job satisfaction levels averaging around 2.8-3.0 on a 4-point scale. These insights support strategic decision-making for retention, diversity, and recruitment efforts. The dashboard incorporates interactive filters by department (Human Resources, Research & Development, Sales), enabling leadership to drill down for targeted reporting.

Key Overall Metrics

The dashboard provides a high-level overview of the workforce:

Metric	Value	Insight
Total Employees	1,470	Represents the full dataset sample.
Total Attrition	237	Indicates significant turnover, warranting retention strategies.
Attrition Rate	16.12%	Lower than U.S. average annual turnover of approximately 22% across industries, but closer to healthcare (18-20%) or retail (37%) benchmarks.
Average Age	37	A mature workforce, with potential for knowledge transfer programs.
Median Monthly Salary	\$5,000	Competitive mid-range; could influence cost-per-hire proxies.
Median Years at Company	5	Suggests moderate retention; lower values proxy for recruitment challenges.

These metrics are filterable by department, highlighting variations (e.g., Research & Development likely has the highest headcount and attrition, consistent with similar analyses).

Attrition Analysis

Attrition is a core focus, with breakdowns revealing patterns for targeted interventions.

Attrition by Demographics

- **By Gender:** Males account for 150 attritions (63.3% of total), females 87 (36.7%). This may indicate gender-specific retention issues.
- **By Age Group:**

Age Group	Attritions
30-50	123
Under 30	91
50+	23

Insight: Highest in mid-career (30-50), possibly due to career progression opportunities elsewhere, under-30s show early turnover, common in entry-level roles.

- **By Education Field (as % of total attritions):**

Education Field	Percentage
Life Sciences	37.55%
Medical	26.58%
Marketing	14.77%
Technical Degree	13.50%
Other	4.64%
Human Resources	2.95%

Insight: STEM fields (Life Sciences, Medical) dominate attritions, potentially due to high demand in external markets.

Attrition by Tenure and Role

- **By Years at Company:** Attrition peaks in the first year (60) and declines sharply, reaching near zero after 10+ years. This suggests a "honeymoon period" issue, where new hires leave quickly, proxying poor recruitment efficiency or onboarding.
- **By Job Roles:**

Job Role	Attritions
Laboratory Technician	62
Sales Executive	57
Research Scientist	47
Sales Representative	33
Human Resources	12
Manufacturing Director	10
Healthcare Representative	9
Manager	5
Research Director	2

Insight: Frontline roles in R&D (Lab Tech, Research Scientist) and Sales show highest turnover, aligning with benchmarks where R&D and Sales departments often have elevated rates due to competitive pressures. HR roles have lower attrition, possibly due to internal stability.

Compared to 2025 benchmarks, this 16.12% rate exceeds the national annual separation rate of 13.0%, but is moderate for tech/R&D firms.

Diversity Statistics

The dashboard incorporates diversity metrics through demographics like age, gender, and education field, supporting inclusive reporting.

- Gender split in attritions favours males, suggesting potential diversity retention gaps.
- Age distribution shows a balanced but attrition-heavy mid-age group.
- Education fields highlight a STEM-dominant workforce, with opportunities to diversify into non-technical areas

Job Satisfaction Insights

Job satisfaction is rated on a 1-4 scale (4 highest), with breakdowns by role providing actionable data.

Job Role	1 (Low)	2	3	4 (High)	Total
Sales Executive	69	54	91	112	326
Research Scientist	54	53	90	95	292
Laboratory Technician	56	48	75	80	259
Manufacturing Director	26	32	49	38	145
Healthcare Representative	26	19	43	43	131
Manager	21	21	27	33	102
Sales Representative	12	21	27	23	83
Research Director	15	16	27	22	80
Human Resources	15	16	15	6	52
Total	289	280	442	459	1,470

Insight: Average satisfaction hovers around 2.8-3.0, with higher-rated roles like Managers (avg 2.7) and Research Directors showing balanced distributions. Lower satisfaction in Sales and Lab roles correlates with high attrition. Benchmarking against U.S. averages, this is below top jobs like Real Estate Agents (4.24/5 equivalent) but typical for corporate roles, where overall satisfaction is ~51-64%. Departments ranked by satisfaction (from prior analysis): Research & Development likely highest (~3.2), Sales lowest (~2.2).

Recommendations for the Organization

Based on the HR Analytics Dashboard analysis, which highlights an attrition rate of 16.12%, moderate job satisfaction levels (averaging 2.8-3.0 on a 4-point scale), and diversity challenges such as male-dominant attrition and a STEM-heavy workforce, the following recommendations are proposed. These are data-driven, drawing from the dashboard's insights on high-turnover departments (Sales and Research & Development), roles (e.g., Laboratory Technicians and Sales Executives), and demographics (e.g., under-30 employees and early-tenure attrition). Implementing these could reduce turnover to below 10%, boost retention, and foster a more inclusive environment, ultimately supporting strategic workforce goals.

1. Strategies to Reduce Employee Attrition

The dashboard shows attrition peaking in the first few years and in frontline roles, suggesting issues with onboarding, career progression, and work-life balance. Prioritize targeted interventions to retain talent in high-risk groups.

- **Enhance Onboarding and Early-Tenure Support:** Develop comprehensive onboarding programs that include mentorship and clear career paths, especially for employees with less than 5 years of tenure (where attrition is highest at 60 in year 1). This aligns with best practices emphasizing practical empathy and meeting employees "survive and thrive" needs. Aim to reduce early exits by 20-30% through regular check-ins in the first 6 months.

- **Focus on Career Development and Training:** Offer tailored training and promotion opportunities, particularly in Sales and R&D departments, to address the high attrition in roles like Research Scientists (47 attritions). Implement employee training programs that are practical and applicable, including internal promotions to boost loyalty. Track progress using KPIs like retention rate by department, as recommended for 2025.

- **Improve Work-Life Balance and Benefits:** Address overtime and satisfaction correlates by introducing flexible work models and competitive benefits, targeting younger employees (under-30 group with 91 attritions). Strategies like showing empathy and actively listening to feedback can help, reducing turnover in competitive sectors. Monitor via quarterly surveys to ensure benefits meet evolving needs.

- **Segmented Retention Initiatives:** Create department-specific plans, such as retention bonuses for Sales Executives (57 attritions) and recognition programs for Lab Technicians (62 attritions). Use data from the dashboard to build trust and engage employees, proven to lower unwanted turnover.

2. Strategies to Improve Job Satisfaction

With lower satisfaction in Sales and Lab roles correlating to high attrition, focus on creating a positive work environment to elevate overall scores toward 3.5+.

- **Promote Transparent Communication and Feedback:** Conduct regular employee surveys and open dialogues, especially in low-satisfaction roles like Human Resources. Prioritize honest messaging and leadership development to make managers key drivers of satisfaction. This can bridge the generational satisfaction gap noted in recent surveys.

- **Foster Team-Building and Recognition:** Organize social events and recognition programs to build camaraderie, targeting roles with imbalanced satisfaction (e.g., Sales Representatives with higher low ratings). Encourage visible acknowledgments of contributions to enhance engagement and reduce burnout.

- **Support Well-Being and Work-Life Balance:** Introduce wellness initiatives like flexible hours and mental health resources, informed by dashboard correlations with overtime. Use engaging communication channels (e.g., webinars) to promote these, boosting overall satisfaction. Encourage internal role transitions for growth opportunities.

3. Strategies to Enhance Diversity and Retention

The dashboard indicates opportunities to diversify beyond STEM fields and address gender imbalances in attrition (males at 63.3%).

- **Inclusive Recruitment Practices:** Broaden job requirements and use creative strategies to attract diverse candidates, such as promoting diversity in marketing materials and targeting underrepresented groups. This can help balance the education field dominance (e.g., Life Sciences at 37.55% of attritions). Encourage staff referrals from diverse networks.

- **Build an Inclusive Culture:** Secure leadership buy-in for DEI policies, creating spaces for employees to connect and share needs. Regularly assess inclusion through surveys to retain diverse talent, addressing patterns like male-heavy attrition.

- **Retention-Focused DEI Programs:** Implement training on bias and inclusive practices, alongside mentorship for underrepresented groups (e.g., females and non-STEM employees). Foster belonging through team-building to improve loyalty and reduce turnover disparities.

Implementation and Monitoring

Roll out these recommendations in phases: Start with pilot programs in high-attrition departments, then scale organization-wide. Use the dashboard to track KPIs like attrition rate, satisfaction scores, and diversity metrics quarterly. Partner with HR to allocate resources, potentially leveraging AI tools for personalized retention strategies as emerging in 2025 trends. Expected outcomes include a 15-20% attrition drop, higher satisfaction, and a more diverse workforce, enhancing productivity and innovation.