



# HR DATA ANALYSIS: WORKFORCE INSIGHTS (2000-2020)

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Description: This presentation provides key insights into workforce demographics, turnover rates and tenure based on a comprehensive analysis of 22,000+ HR records of US based company.



# AGENDA

- Executive Summary
- Dataset Overview
- Key Analysis Insights
- Conclusion & Recommendations

# EXECUTIVE SUMMARY

**Objective:** To understand workforce composition and trends spanning over two decades, focusing on the distribution of gender, ethnicity, age and turnover across departments.

## Key Findings:

- Majority of employees are male with a strong representation of White employees.
- The age group 35-44 is the most prominent.
- Higher turnover was noted in Marketing, while legal has the longest tenures.

**Tools Used:** MySQL Workbench (data cleaning) and Power BI (visualization).



# DATASET OVERVIEW

Data Coverage: 2000 to 2020 over 22,000 employee records.

Attributes Analyzed: Gender, age, ethnicity, tenure, location, department, job title and turnover.

Scope: Analysis focused on identifying trends in employee demographics and departmental turnover rates. Analysis conducted using MySQL Workbench for queries; Power BI was used for visual insights.



# KEY ANALYSIS INSIGHTS

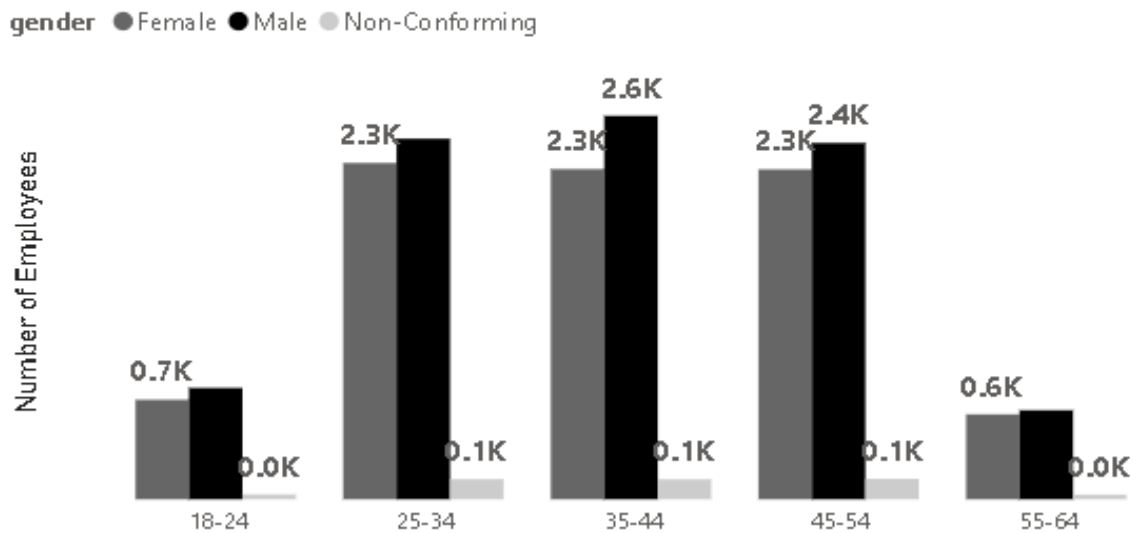
- Gender Distribution
- Racial/Ethnic Composition
- Age Distribution
- Work Location
- Turnover Rates by Department
- Tenure Analysis
- Geographical Distribution

# GENDER DISTRIBUTION

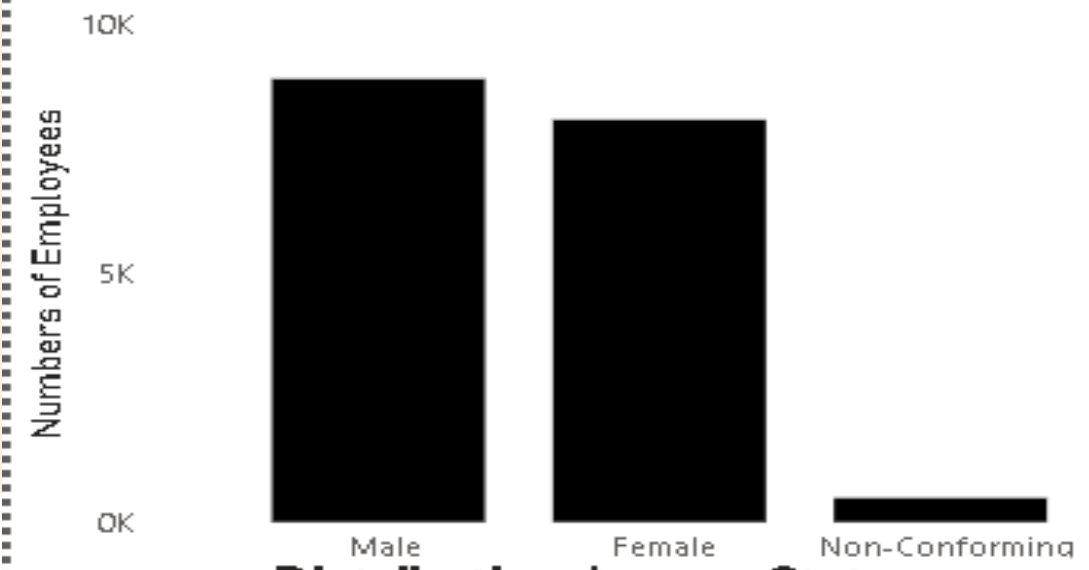
Insight: There is an overall higher percentage of male employees in the workforce.

Key Takeaway: Gender distribution is relatively balanced, but male employees slightly outnumber females.

Gender Distribution by Age Group



Gender Distribution

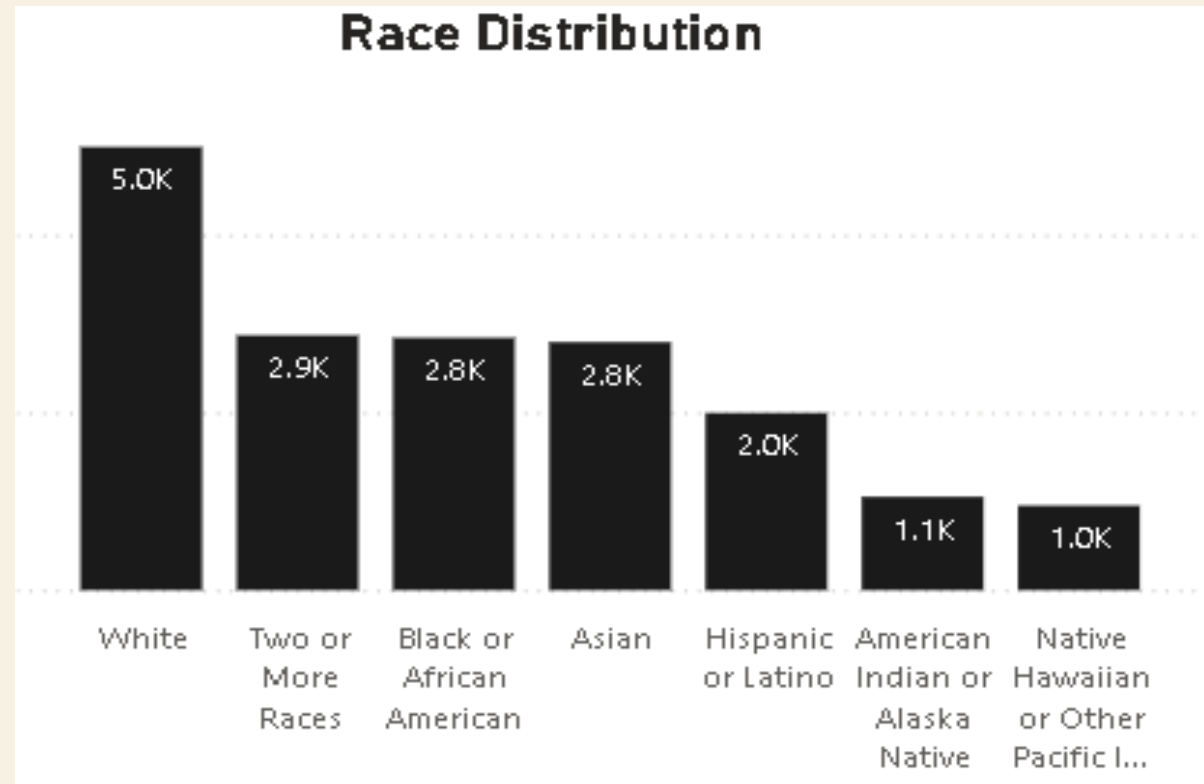


Visual: Bar chart showing male vs. female employee counts.

# RACIAL/ETHNIC COMPOSITION

Insight: The workforce is predominantly White, with Native Hawaiian and American Indian employees being the least represented.

Key Takeaway: While diverse, there is room for enhancing the representation of minority groups.



Visual: Bar chart of racial/ethnic groups.

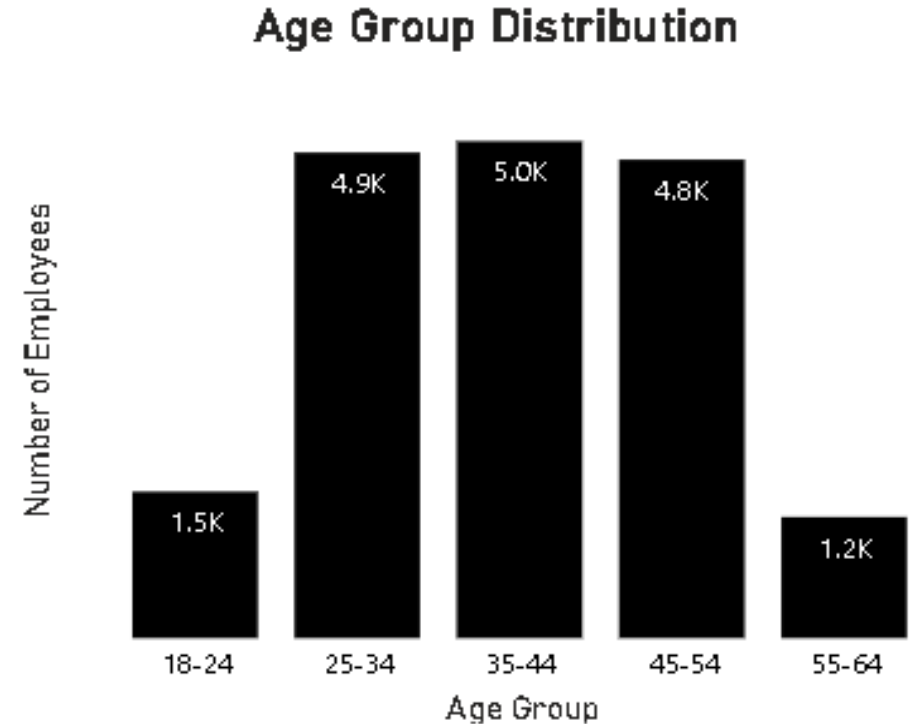


# AGE DISTRIBUTION

Observation: The largest age group is 35-44, indicating a mid-career workforce, with the second-largest group being 25-34. The smallest representation is in the 55-64 range.

Implication: With a significant portion of mid-career employees, the organization may focus on development programs that support career progression and leadership training for this demographic.

Action Point: Implement tailored growth opportunities for employees in their prime career years to maximize retention and productivity.



Visual: Bar chart of age groups



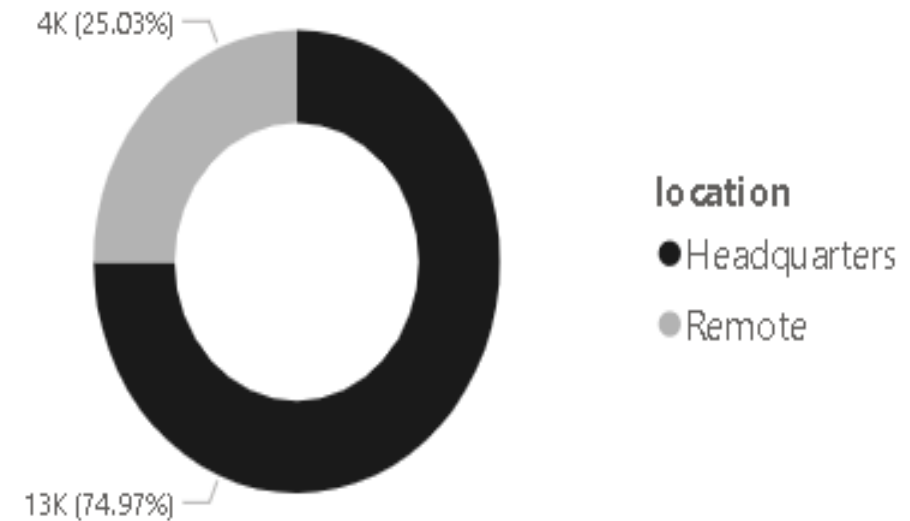
# WORK LOCATION

Insight: There is a significantly larger number of employees based at the headquarters compared to those in remote or satellite locations.

Implication: This may indicate a concentration of resources, collaboration and operational activities at the headquarters. For future growth, the organization could consider policies that support remote work, especially for departments where this model is feasible.

Action Point: As remote work becomes more common, the company might explore flexible work policies to attract talent from diverse locations, potentially reducing dependency on headquarters.

Distribution by Location



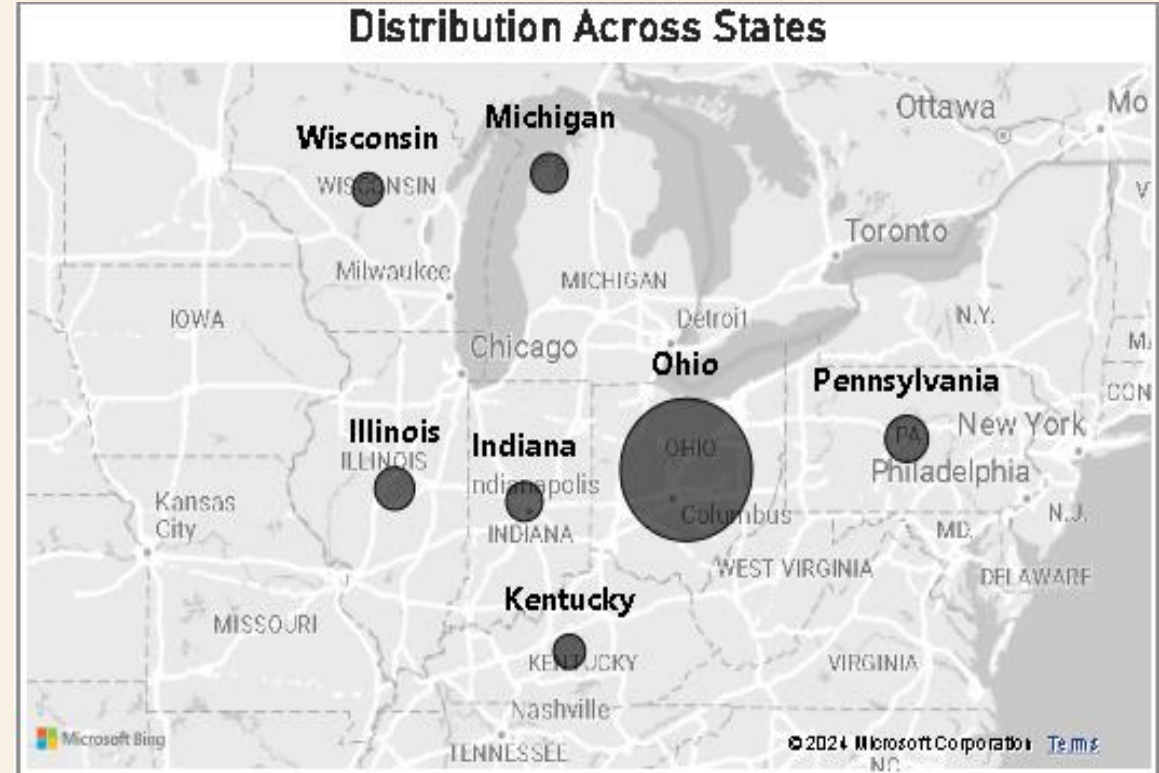
Visual: Donut chart comparing HQ-based and remote employee counts.

# GEOGRAPHICAL DISTRIBUTION

Insight: The largest number of employees are based in Ohio, with additional clusters in neighboring states.

Implication: This concentration in Ohio provides a strategic advantage for team collaboration but may limit regional diversity.

Action Point: Consider diversifying recruitment efforts in other regions to balance the workforce geographically, making the organization less dependent on Ohio for talent resources.

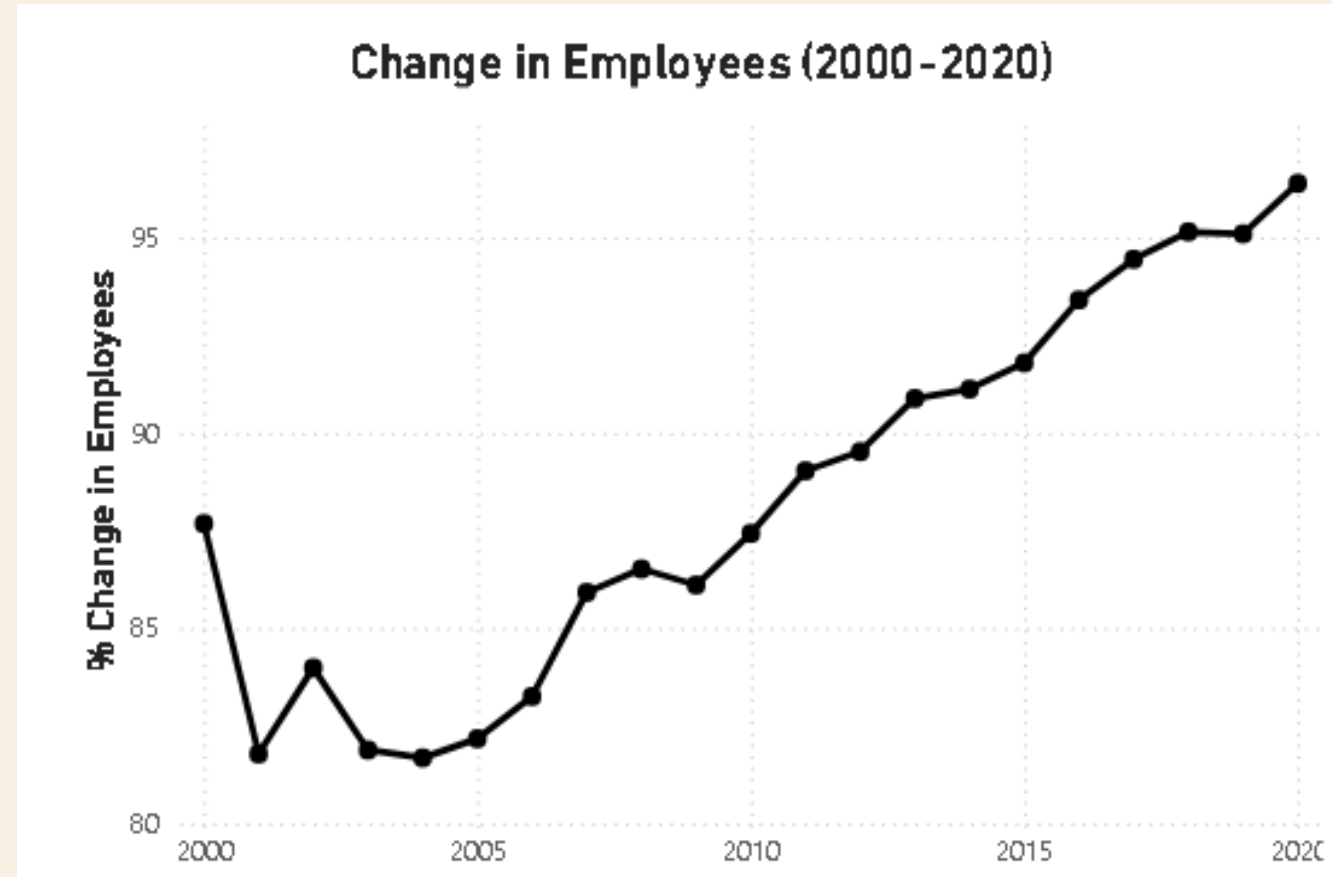


Visual: Map comparing HQ-based vs remote employee counts.

# EMPLOYEE COUNT OVER TIME

Observation: A general upward trend in employee count reflects growth, with some dips possibly indicating organizational restructuring or external factors (e.g., economic conditions).

Action Point: Historical trends guide future hiring plans, ensuring the organization has adequate staffing levels during growth periods while managing costs during slower times.



Visual: Line chart showing employee count over time, based on hire and termination dates.



# SUMMARY

**Demographic Composition:** The workforce is predominantly male and White, with the largest age group being 35-44, followed closely by 25-34. This reflects a mid-career employee base with unique professional development needs.

**Tenure and Turnover Insights:** High turnover rates are notable in Marketing and Training, suggesting a need for retention-focused strategies in these areas. Legal and Auditing show high employee stability, possibly due to established career paths.

**Geographical and Work Location:** With the majority of employees based in Ohio and centralized at headquarters, there is an opportunity to expand regional recruitment to diversify the workforce geographically.

## RECOMMENDATIONS

**Retention and Development Programs:** Implement targeted career advancement and engagement initiatives, particularly in Marketing and Training, to address high turnover. Development programs could include career progression planning, mentorship, and workload management.

**Diversity and Inclusion Efforts:** Introduce or expand diversity programs that focus on recruiting and retaining underrepresented groups, helping the organization build a more inclusive environment.

**Regional Hiring Strategy:** Expand hiring beyond Ohio, especially for roles suited to remote work, to diversify the workforce location-wise and reduce dependency on headquarters.



# THANK YOU

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