Case Study: Understanding Employee Retention Through Data Analytics

In a time where high turnover can cost companies heavily, knowing why employees stay is just as critical as understanding why they leave. This project dives into employee retention analytics to uncover key drivers of loyalty and long-term engagement.

Using a dataset of 1470 employees, I used SQL for data cleaning and transformation, segmenting variables such as salary hike bands, manager tenure, job involvement, and stock option levels. I then used Excel to create an interactive dashboard that makes these insights accessible and actionable.

The analysis revealed clear trends:
- Employees receiving a 17-19% salary hike had the highest retention
- Stock Option Level 2 showed the strongest loyalty
- Employees with high job involvement (Level 4) had the lowest attrition
- Longer manager tenure correlated strongly with employee retention.

Rather than simply reporting on retention, this dashboard tells a data-driven story about loyalty, highlighting the factors that keep employees engaged and motivated.

One of the biggest challenges was managing noisy or inconsistent data and defining meaningful analysis bands. But by combining SQL logic with thoughtful visualization, I delivered a retention strategy blueprint that HR leaders could genuinely act on.

This project demonstrates not just my technical ability but my focus on solving real-world business problems using data.