**Ethical Reflection – AI Bias & Fairness in Predictive Modeling**

When deploying a predictive model in a company setting, one critical ethical consideration is **bias in the dataset**. If certain employee groups or departments are underrepresented — such as teams from remote offices, contract workers, or minority-led departments — the model may produce skewed results. For example, a performance prediction system trained mostly on data from high-performing urban teams might unfairly rate rural or under-resourced teams as lower performers, not due to ability but due to a lack of representation in the training data.

**Tools like IBM AI Fairness 360 (AIF360)** can help address these imbalances. AIF360 offers fairness metrics (such as disparate impact and statistical parity) and bias mitigation algorithms that flag and adjust for uneven outcomes across groups. By using such tools during both training and evaluation phases, we can detect if our model unfairly disadvantages certain teams and correct this, improving transparency and trustworthiness. Fairness-aware AI isn't just a technical improvement — it's a commitment to ethical, inclusive design.