🔍 Scenario

A software development team collects data on the estimated and actual number of defects, test cases, and development hours for each release. Over time, they analyze this data to identify recurring issues and adjust their quality assurance practices accordingly. They also use defect trends to improve their requirement and design review processes.

Question:
Analyze how this data-driven approach contributes to long-term software quality improvement.

Answer:

The team's data-driven approach enables them to detect patterns and root causes of quality issues. By analyzing defect trends and effort mismatches, they can proactively refine earlier phases like requirements and design. This reduces future defects, improves estimation accuracy, and enhances the overall software quality in the long term.