The new century has started with a major setback to the information technology world, which was booming in the last decade of the twentieth century. When the Year 2000 issues evaporated there was a major breakdown in the growth of the IT industry. Hundreds of new companies vanished with closures and mergers and a state of consolidation began to occur in the industry. Major restructuring started happening in the multinational companies across the globe. The last three years were a period of consolidation and the one good thing that emerged is the importance of software quality.

- The adventure of Web business has necessitated the importance of sound, robust, reliable software else the hackers would vanish with millions of dollars. So all businesses have started giving special importance to their software quality assurance departments that were hitherto a neglected sector.
- The Sarbanes–Oxley Act, the new legislation passed in reaction to Enron, WorldCom, and similar fiascos, has greatly improved the importance of QA and testing in the United States and the corporate heads have started giving equal importance to their QA teams, which were another previously neglected sector.

Software quality is something everyone wants. Managers know that they want high quality, software developers know they want to produce a quality product, and users insist that software work consistently and be reliable.

The American Software Quality (ASQ) Institute and Quality Assurance Institute (QAI) have defined various quality assurance practices that are being adopted by various organizations. Many organizations form software quality assurance groups to improve and evaluate their software applications. However, there is no commonly accepted practice for quality assurance. Thus the quality assurance groups in various organizations may perform different roles and may execute their planning using different procedures. In some organizations, software testing is a responsibility of that group. In others, software testing is the responsibility of the development group or an independent organization.

Many software quality groups develop software quality assurance plans, which are similar to test plans. However, a software quality assurance plan may include a variety of activities beyond those included in a test plan. Although the quality assurance plan encompasses the entire quality gambit, the test plan is a part of the quality assurance plan that is one of the quality control tools.

The objectives of this section are to:

- Define quality and its cost.
- Differentiate quality prevention from quality detection.
- Differentiate verification from validation.

TEAM LinG