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Quality Management

“This project is a disaster – it follows no standard of quality.”

“This lacks quality.”

“No wonder things don’t work – there is no adherence to quality.”

How many times have we heard these complaints? Anything that goes awry is attributed to a lack of quality. So, what is this all-encompassing yet elusive thing called quality?

Most definitions of quality mention the degree to which goals are achieved and, therefore, the degree to which the customer is satisfied. To verify that quality is met, it can be formally tested. Quality control is the process of measuring something against a standard of quality. A consistent test result is considered desirable. For instance, for a web-site, quality control would imply adherence to HTML, coding styles, and graphic and content standards. Broken or wrong links, browser incompatibility, etc. are avoidable.

To appropriately carry out QC activities, a formal test plan is a prerequisite. The region of testing, the elements to be tested, and the summary of functionality all must be defined in advance. The test limits, the frequency testing, the precise point at which tests in the development process will be carried out, the duration of testing and the resources required should be clearly delineated.

On the other hand, quality assurance, an integral part of quality management, is the process of improving quality by increasing the quality of what goes into the production process and the quality of the components in the production process. The emphasis is on the process itself. The goal is to reduce the rate of defects as well as to increase the project’s usability and performance. It is the ability to meet a benchmark and to deliberately, premeditatedly foresee and eliminate problem areas and incorporate defect resolution. It is a consistent effort at improving design, following schedules, and providing better customer service and communication.

Quality Assurance involves the rating of problems. Problems are rated according to their Severity or Priority Levels.

Severity levels could be as follows:

- **Severity 1.** Entire project is affected
- **Severity 2.** Major functionality or module problem
- **Severity 3.** Problem could be at the level of data transfer/communication, formatting of inputs screens/outputs etc.
- **Severity 4.** Display, text or layout issues

Priority Levels could be as follows:



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- **Critical priority.** Immediate action / rectification required
- **High priority.** Interference in communication or functionality errors
- **Moderate Priority.** Web-sites could have broken graphics / links or page format problems
- **Low priority.** Typos or grammatical errors

Problems would be rated as a combination of priority and severity levels. They need to be tackled accordingly.

Quality management, therefore, needs to form the very core of any project. From a project's inception to tracking its progress to assigning ownership to consistent aim at improvement – it is a long and arduous, but nonetheless rewarding, route.