



The Cost of Quality



“Quality is free” -Philip B. Crosby

Various articles have been published concerning the cost of quality and the importance of measuring it correctly. Some software managers have the mentality that quality control is an activity aiming to delay the delivery and raise the project costs. They simply ignore their own quality costs. Sadly, only a fraction of software organizations take good care of their investment in quality. In fact, just **50% of project costs are towards quality costs**, of which **40% in failure**, **7% in appraisal** and only **3% in prevention** ¹.

We can classify the cost of quality in three different categories :



Optimal Quality Cost Model
Juran's Quality Handbook

Prevention costs

Money required to prevent errors and to do the job right the first time is considered prevention cost. This category includes money spent on establishing methods and procedures, training workers and planning for quality. Prevention money is all spent before the product is actually built.

Appraisal costs

Appraisal costs cover money spent to review completed products against requirements. Appraisal includes the cost of inspections, testing and reviews. This money is spent after the product or subcomponents are built but before it is shipped to the user.

Failure costs

Failure costs are all costs associated with defective products. Some failure costs involve repairing products to make them meet requirements. Others are costs generated by failures, such as the cost of operating faulty products, damage incurred by using them, and the costs incurred because the product is not available. The user or customer of the organization may also experience failure costs.

Qualibre Technologies offers consulting services in the area related to costs of quality to help its clients to better estimate and measure their software quality costs. This gives them a strategic advantage because it helps them to make sound and solid business decisions. For example, some of our customers often ask us if it is profitable for them to hire an in-house software test specialist in a specific phase of the life cycle. Our consultants can implement a measuring system to help you ascertain the proportion of external failure costs that can be minimized in order to maximize your investment in appraisal costs.

1. Quality Assurance Institute, www.qaiworldwide.org

