



Test Drive Your Software

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Whether you are in the market to purchase a new car, home, computer, television, or other high-priced item, the item's quality is sure

to affect your buying decision. Everyone wants high quality, but can we afford it? In today's society, we have been geared to expect higher quality when paying higher prices. Top-model products often demand top prices. Now and then, we do get lucky and get a *Cadillac* at a *Geo* price, but those instances are few.

Since quality and price seem to correlate, many of us do our homework before spending large sums of money on what we hope are quality products. We are careful to measure quality through our own individual methods. One method is usually related to our senses. For instance, we want to see how a new coat fits and to hear the sound of a new stereo before we determine if the quality is sufficient to meet our needs. Our other quality-measuring methods include research and testing. Before we buy a new computer, we research the technology details of memory and speed. And before we

purchase a new car or truck, we want to test drive it to see how it handles. In any case, for big-ticket items in our everyday lives, we generally pay much more attention to the details and to the quality before we feel comfortable in making our buying decision.

I see similarities in the software acquisition environment. Software acquirers want high-quality software if they are paying millions of dollars for it. And because of this, software acquirers are highly interested in measuring the quality of software products. They will monitor the software developer to ensure software test plans and test engineering processes are in use. And when possible, they will "test drive" the software to see if their requirements are satisfied. With mission-critical software, the requirement must be "crash free."

Software acquirers should also look for developers who embrace defect prevention and defect tracking processes. As Bala Subramaniam reports in his article (page 3), effective defect tracking can enhance software quality while reducing project costs.

Consider the Software Engineering Institute Capability Maturity Model definition for *quality*.

"The degree to which a system, component, or process meets specified requirements; or the degree to which a system or process meets customer or user needs or expectations."

Whether buying or developing software, many are faced with measuring this degree of quality.

Software developers should be eager to show the customer that they are quality conscious. Software developers need to assure the customer that defect prevention methods, such as peer reviews and test engineering, are employed in their development processes. Test engineering can help verify that requirements are satisfied at each development phase.

Software development teams that work together with their customer to set quality goals will best satisfy the end-user needs and desires. So, whether you are on the buying or the producing side of the software equation, software quality assurance through defect prevention and testing is a must. Perhaps you can take your software for a test drive today. ♦

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