Quality Metrics

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1. Acceptance  
   Acceptance is the quickness and the likeliness users will accept the product and use it. Companies use acceptance testing as a measure to know if the product passes. The International Software Testing Qualifications Board has set the standard that “formal testing with respect to user needs, requirements, and business processes conducted to determine whether a system satisfies the acceptance criteria and to enable the user, customers or other authorized entity to determine whether or not to accept the system”[[1]](#footnote-1) If a system is not going to be accepted by the users, then what purpose does it give? Why keep it if it won’t be used by anyone?
2. Changeability  
   Changeability is when the product is able to be changed quickly and promptly. Modifications and changes always happen to software products. Adding new features, fixing old features, or removing features that are outdated are always things that could happen to software. If the product is not easily changeable, then the product is not of good quality. Having to redo a lot of code vs. a little code can always be the key. “The approach taken to assess the changeability of an object-oriented (OO) system is to compute the impact of changes made to classes of the system. A change impact model is defined at the conceptual level and mapped on the C++ language.”[[2]](#footnote-2)
3. Efficiency  
   Efficiency is when the system or product is responsive in a timely manner. Any system can be responsive, but how long do you have to wait? No one wants to wait that long. If the system cannot hold the attention of a child, then it is too long because that is how long people have gotten for systems to be. An easy way to measure efficiency is the time it takes for the system to respond. If it is taking too long and loses the interest of the user, then it is not efficient.
4. Reliability  
   Reliability is when the system does what it is supposed to without crashing or failing. If the system is failing often, it is not reliable and a user does not like using an unreliable system. Users like to know that when they are using a system, it won’t suddenly quit or end, resulting in users losing all their work. They also do not want it misbehaving so that a button click does not do what it implied or said.

1. https://en.wikipedia.org/wiki/Acceptance\_testing#cite\_note-ISTQB\_Glossary-2 [↑](#footnote-ref-1)
2. http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=756690&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs\_all.jsp%3Farnumber%3D756690 [↑](#footnote-ref-2)