

The Cost of Quality in Military Information Technology Products

Kevin Dittman
Purdue University
kcdittman@purdue.edu

Robert Bott
Purdue University
robb8002@gmail.com

Abstract

The cost of quality in military Information Technology (IT) products is measured the same way with the same basic metrics as any other civilian product. More so than in the civilian world however, conformity to requirements and reliability are the prime determinates of quality for the user. Many military products have added significant value to a unit and increased their combat effectiveness. However, as is with technology in any area in life, military IT systems often fall short of expectations and create friction at critical moments in time. This can lead to massive increases in the cost of quality due to rework and nonconformance to requirements, which are often measured not just in time and resources but in mission failure or human life. Often, military members will cast aside a system which does not meet their needs or is excessively unreliable, no matter the monetary cost of said system, and continue to do their jobs without it. Generally, the cost of quality in military IT products is higher due to extended testing, contracting issues, excessive amounts of stakeholders with influence on the project and a lack of understanding of requirements as determined by the low level user. These issues must be looked at and improved upon if military IT systems are ever to reach the same level of quality that their civilian counterparts achieve on a regular basis.