

Using Software Metrics and Measurements to Improve Software Productivity and Quality

Frank E. McGarry

NASA/Goddard Space Flight Center

Abstract

Experiences gained through 10 years of collecting software metrics and utilizing this metric data in assessing the software development process, the Software Engineering Laboratory (SEL) at GSFC has determined there are 5 key benefits to the collection of Software Metrics:

1. Provides a keener understanding of the specific software development environment.
2. Adds support to the management/discipline of active development projects.
3. Produces a foundation for planning future projects.
4. Provides a basis/rationale for adopting development practices and guidelines.
5. Produces evidence toward the assessment of applied software technologies.