

THE FRAMEWORK OF QUALITY MEASUREMENT

Grzegorz Grela
Maria Curie Skłodowska University, Poland
grzegorz.grela@umcs.lublin.pl

Abstract:

The paper describes general determinants of quality measurement. There are discussed four assumptions that have been formulated to develop the framework of quality measurement. The assumptions are:

1. Quality is the degree to which a set of inherent characteristics fulfils requirements.
2. Requirements and inherent characteristics create finite sets.
3. Requirements may have both different importance and different values depending on who formulates them.
4. Requirements do not have to be constant in time.

The article contains the framework of quality measurement based on above four assumptions. There are proposed notation on the quality measurement on both synthetic and the analytical level. It also contains examples of selected distance metrics in m -dimensional space as well as examples of selected aggregate functions that may be used in quality measurement on synthetic level.

Keywords: quality measurement, quality management, TQM