Software Quality: Role and Value of Quality Models 王素華,杜沙,陳登傑 Information Management Computer Science and Informatics swang@mi.chu.edu.tw

## Abstract

Software engineering and Software quality is the totality of features and characteristics of a product or a service that bears on its ability to satisfy the given needs. Poor quality of the software product in sensitive systems may lead to loss of human life, permanent injury, mission failure, or financial loss. So the quality of the project should be maintained at appropriate label. To maintain the quality, there are different quality models. "A high quality product is one which has associated with it a number of quality factors. These could be described in the requirements specification; they could be cultured, in that they are normally associated with the artifact through familiarity of use and through the shared experience of users; or they could be quality factors which the developer regards as important but are not considered by the customer and hence not included in the requirements specification".

In this paper, we will discuss all the quality models: McCall's quality model, Boehm's quality model, Dromey's quality model, and FURPS quality model. In addition, we will focus on a comparison between these quality models, and find the key differences between them.

Keyword: Quality Model, Software Quality, Implementing, Quality factors, Software Engineering, maintain the quality.