



Lesson Objectives

- Quality
- Quality Characteristics
- Quality Assurance



15.1 Quality

- Quality
 - The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs
- Quality characteristic
 - A quality characteristic describes a property of an information system.

15.2 Quality Characteristics

- Connectivity
 - How easy a link with a different information system or within the information system can be made and modified
- Continuity
 - The certainty that the information system will continue uninterruptedly - which means that it can be resumed within a reasonable time even after serious interruptions
- Degradation factor
 - The ease with which the core of the information system can continue after a part has failed

15.2 Quality Characteristics

- Effectivity

- The degree to which the information system meets the demands of the organization and the profile of the end users for whom it is intended, as well as the degree to which the information system contributes to the achievement of business objectives.

- Efficiency

- The relationship between the performance level of the system (expressed in the transaction volume and overall speed) and the amount of resources (CPU cycles, I/O time, memory and network capacity, etc.) that are used.

15.2 Quality Characteristics

- Flexibility

- The degree to which the user may introduce extensions or modifications to the information system without changing the program itself.
- Or the degree to which the system can be modified by the controlling organization without being dependent on the IT department for maintenance.

- Maintainability

- The ease with which the information system can be adapted to new demands from the user, to changing external environments, or in order to correct defects

15.2 Quality Characteristics

- **Manageability**
 - The effort needed to get and keep the information system in its operational state
- **Portability**
 - The diversity of the hardware and software platforms on which the information system can run, and how easy it is to transfer the system from one environment to another.
- **Recoverability**
 - The ease and speed with which the information system can be restored after an interruption.

15.2 Quality Characteristics

- Reliability
 - The degree to which the information system remains free from interruptions.
- Reusability
 - The degree to which parts of the information system, or the design, can be reused for the development of different applications.
- Suitability
 - The degree to which manual procedures match the automated information system and the fitness for use of these manual procedures for the organization.

Other Characteristics

- The other characteristics that add to the Quality of a system are given below:
- Adaptive
 - The ability to split up an element into sub-elements that, in a different combination, result in a new, valuable element for the specific situation.
- Completeness
 - The certainty that all inputs and changes are processed by the system.

15.2 Quality Characteristics

Other Characteristics

- **Correctness**

- The degree to which the system processes the input and changes entered correctly, in accordance with the specifications, to produce consistent data sets.

- **Data controllability**

- The ease with which the correctness and completeness of the information (in the course of time) can be checked.

15.3 Quality Assurance

- All the planned and systematic activities necessary to provide adequate confidence that a product or service meets the requirements for quality.
- A document of checklist is the product of quality assurance

Summary

- Quality
- Quality Characteristics
- Quality Assurance

✓

✓


✓

—

—

—

Summary



Capgemini
CONSULTING TECHNOLOGY BUSINESS

Copyright © Capgemini 2015. All Rights Reserved 12

Add the notes here.

Review Question

- The characteristic that doesn't contribute to quality characteristic is
 - Efficiency
 - Manageability
 - Reliability
 - Robustness
- The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs is Quality
 - True/False



Add the notes here.