Evaluation

Evaluation

Evaluation measures how well the original goals of the new system have been achieved
Text pp302-304

Timing

[Remember that Evaluation is not finding faults (which is Testing and done in the Development Stage). Whilst Evaluation criteria are created in the Design Stage, the actual Evaluation is a Stage all of its own and takes place well after Development and implementation of the new system]
Evaluation is done well after the system is implemented, typically 2-6 months, maybe even 12! The users need to have had enough time to assess the strengths and weaknesses of the new system, but not so long as to have forgotten the issues of the old system

Strategy

Different systems will have different criteria that demonstrate their **efficiency** or **effectiveness**. Ensure that the criteria used are relevant to the goals of the system. Look back at the Analysis: view the goals as questions and craft criteria that will find the answers to those questions

The following suggestions need to be used in the context of the system under evaluation (referred to as the new system)

Possible efficiency criteria

Typically efficiency involves **time** &\or **cost** &\or **effort**

Time

How long does it take to:
- start the system
- enter data
- process data
- produce output
- communicate information
- maintain the hardware and software.

Cost

What is the cost of:
- initial purchase costs of hardware, software, installation, consultancy
- training and documentation
- wages
- consumables
- repairs, upgrades, maintenance, service contracts
- Interest
- leasing

Effort

Examples:
- the number of staff required to operate the new system compared to the system it replaced
- the number of hours spent operating the system (e.g. the new payroll system may take less time to process the monthly invoices compared to the old system

Possible effectiveness criteria

Effectiveness is a measure of how well a job is done, regardless of the time, money and effort poured into it
Criteria vary according to the type of system, so may be based on:
- counting errors recorded in an error log
- counting and assessing incidents of failure or downtime

- visually inspecting output for quality
- listening to sound reproduction
- observing users to see how quickly they learn to use the new system, how often they need help or make errors
- stress-testing the system in ways that would be expected in real-life operation
- using the system to its stated capacity, or beyond (e.g. filling a database or hard disk drive)
- using the system in conjunction with another system to see if data and hardware are compatible
- carrying out functions to see if they provide the required output
- attempting to break into the system or get access to secured data
- attempt to configure the system to different users, or add modules, or change the way it works to suit new needs
- weigh it, measure it, carry it around to see if it's comfortable

Report

Feedback, based on the actual evaluation, of how well the new system (the current system by this time) meets its determined goals and thus the requirements of its users

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