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Evaluation of Information Systems using Software Metrics and Measurements

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Information system users, administrators, and designers are all interested in performance evaluation since their goal is to obtain the highest performance at the lowest cost. Performance evaluation is required at every stage in the life cycle of an information system, including its design, manufacturing, sales, use, and upgrade. The evaluation is applied when designer wants to compare a number of alternative designs and find the best design. The first step in performance evaluation is to select the right measures of performance, the right measurement environments, and the right techniques. Evaluation of information systems can focus on a variety of technical properties, including data transmission speed or bandwidth, data quality, system functions and features, ease of use, reliability, and service or maintenance requirements. This work introduced the reader to software metrics that are used to provide insight about different elements of systems software. It presented internal metrics that can be applied prior to the release of the product to provide indications relating to quality characteristics, and external metrics applied after product delivery to give information about user perception of product quality. These factors include estimation, early detection and prevention of problems, product assessment.