Part IV.

User Interfaces

One of the goals of the operating system is to minimize the human efforts needed to program and operate the system. To this end, the interface between operating system and its users of various kinds (application programmers, users at terminals, operators, casual non-DP users, and so forth) must be made easier and less complicated for efficient, error-free communication. With this in mind, the first paper by T. Takeshita has attempted to review the main aspects of the OS interface, classifying them into several categories, tracing back the evolution of their characteristics, and then projecting its future. The author predicts that low-cost, colour/graphics displays with both interactive dialogues and procedural command languages, supported by a powerful full-screen editor and a library management facility will become prevalent in the future. While this first paper discusses the OS interface from the overall viewpoint, the second paper by I. Arita discusses a rather specific case. It proposes "Intelligent Console (INC)," which is a microcomputer inserted between a computer and its operator's console. It offers an effective means for users to add new non-standard operating system functions without modifying the operating system. Its usefulness is successfully demonstrated by the actual implementation of non-trivial operating system functions such as an inter-job communication facility and a remote entry system.
PERSPECTIVE OF OS INTERFACE TO USERS

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ABSTRACT

An attempt has been made to classify various aspects of the OS interface, to review evolutionary changes in each aspect, and to project the future.

The advancement of the OS, the changes in its environment, and the future of the OS with particular emphasis on end-user orientation are briefly covered.

The author predicts that low-cost, colour/graphics displays with both interactive dialogues and procedural command languages, supported by a powerful full-screen editor and a library management facility will become prevalent in the future.