DISCUSSION PAPER/ michel melton

An Overview of Display Terminals

Michael Melton
Battelle Columbus Laboratories
Columbus, Ohio

Overview

Display terminals can be generally classified into three categories: (1) dumb, (2) semi-stupid, and (3) intelligent.

Dumb terminals offer a limited number of functions and most closely resemble Teletypes. Semi-stupid terminals usually offer a certain amount of features, most likely, data input editing and formatting. Some terminals in this class can be tailored to fit a specific application via a limited programming capability. Intelligent terminals are supported by software programs. The vendors typically provide an operating system, an assembler or a compiler, I/O utilities, and one or more application programs such as text editing or data entry. Programmable terminals provide the user with the highest degree of flexibility, permitting the terminal to be tailored to the user's environment. Some programmable terminals are available as turnkey terminals, which means that the program is furnished by the vendor and the terminal is ready to use as soon as it is installed.

Cost is usually proportional to capability. Dumb display terminals are the least expensive at $1000 to $2000. Intelligent terminals range upward from $6000. Expensive items include increased memory, additional display units, and peripherals such as diskette or disk storage and printers. Semi-stupid terminals are priced somewhere inbetween.

Some brand names in dumb terminals include Applied Digital Data Systems, Beehive, Infoton, and Lear Siegler. Some of the semi-stupid terminals include Hewlett-Packard 2640, IBM 3270, ICC 40+, and the Univac Uniscope. Some intelligent terminals are Applied Digital Data Systems 70, the Beehive B800, Datapoint, Four-Phase Systems Incoterm, Sycor, and Univac UTS400.

Most terminals introduced on the market in the last three years have been microprocessed-controlled (i.e., intelligent). Microprocessors are cheap, cut design, development, and production costs, and they lend themselves to a variety of applications that can be implemented by the vendor or the user. Computer programs which control the functions of an intelligent terminal are called firmware. The user can control the terminal's functions by either changing a set of parameters or by adding new firmware to the microprocessor.

Display Functions

Some different terminal display functions are:

(1) Color - Few display terminals offer color but some offer up to eight colors
(2) Reverse video - A negative image of the data, data normally displayed in white or dark background is displayed in black or white background
(3) Programmable brightness level
(4) Character or field blinking

(5) Roll or scroll data is rolled up or down the screen, permits the user to scan a large volume of data
(6) Paging - Data is stored on pages (a full screen) user is able to review any selected page.

Editing Functions

Editing features include:

(1) Character deletion
(2) Line insertion
(3) Line deletion
(4) Erase
(5) Character repeat.

External I/O devices can add flexibility to the applications possibilities for display terminals. A cassette tape drive or diskette drive can be used to store display formats, data to be transmitted, or user programs. A printer can provide hard copy.

Selecting a Terminal

Some questions you should ask yourself when selecting a display terminal are:

(1) What are the essential parameters for a display terminal that will satisfy your needs?
(2) Who supplies the terminals with the features you desire?
(3) Maintenance provisions?
(4) Talk to users concerning problems encountered when installing it, failures that have occurred, and any incompatibilities.

DISCUSSION PAPER / alice robbin

The Issue of Confidential Data: The Need for
Formulation of Policy by the Data Archive and Library

by

Alice Robbin
Data and Program Library Service
University of Wisconsin-Madison

The Issue of Confidential Data

I.

During the last decade there has been increased concern about the problems of confidentiality involved in the collection and dissemination of individual microdata. Concern has revolved around the government's perceived need to collect increasing amounts of information at a microdata level for social policy formulation and evaluation, types of information which potentially compromise