Man-Machine Communication

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INTRODUCTION

From the first computers, we have always been concerned with the man-machine interface. Our interface with the first stored program computers was by using punched cards for input and printer listings for output. Although computers are considerably faster, smaller and less expensive, our use of them has not significantly changed over the years. Today, most input to computers is in the form of cards (or card images) and output is still printed listings (or listing files). The CRT (Cathode Ray Tube or VDU-Video Display Unit) terminal (glass teletype) along with appropriate text editing software has greatly speeded up the preparation of text files. The words "DO NOT FOLD, BEND, SPINDLE or MULTILATE" have been replaced by "DO NOT DELETE".

The reams of paper (in some cases) have efficiently viewed on CRT terminals. Using the ever increasing local intelligence, these "listings" can be locally captured, searched, manipulated, and viewed in a manner not possible using only the printed page.

With all these advances however, we are still dealing with a system that uses essentially card images for input (one dimensional strings of text) and printed listings for output. Since the listings can be in the form of tables and or low resolution graphs, the output can be more than one dimensional. A model used for describing the present day use of computers is one which shows a human interacting with an application program which in turn interacts with a data base.

HUMAN <===> APPLICATION PROGRAM <===> DATA BASE

Figure 1.