As the use of computer graphics in management decision making increases, this technology—like all computer-based technology before it—will highlight weaknesses in the overall information system and lead to their repair.

The future

What can we expect? Cheaper and better hardware? Well, of course—but the prices of pen plotters and microfilm recorders cannot be expected to behave like computer prices, because they involve mechanics and optics as well as electronics. For raster devices, such as CRTs and electrostatics, we can expect a significant price drop because of decreasing memory and logic prices.

Another major development is that computer power in general is becoming cheaper. The amount of computer processing necessary to produce quality graphs would have been unreasonable not so long ago. The development of these technologies can be expected to continue—even more advanced graphics, language processors, automatic layout utilities, etc. are becoming not only possible but practical, even for low-budget installations.

The most important development, however, will probably not be the extended capabilities, but rather the much more widespread use of computer graphics. As Keen and Morton have pointed out, “The development of time-sharing in the late 1960s began a parallel movement that is still accelerating—toward personalized systems, direct access to and interaction with models and data, decentralization of the computer resource, and increased differentiation of applications.”

We can expect graphics to be built into even the most ordinary application programs. A graph will be the expected form of a report or a presentation. Decision makers and problem solvers will have direct and simple access to the information they need, in a variety of graphic forms. As the industry evolves, much of the work now hand-drafted will be computer-generated. Computer graphics will be so commonplace that we will drop the word “computer” and talk only of “graphics.”

References