Multimedia Technology:
Social Issues and Implications

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Within the next decade, many of us will be able to turn on our digital television sets and receive programming that is tailored to our individual interests – as well as interactive access to worldwide databases and communications. Maintenance technicians will be able to rotate a picture of a machine on their workstation screens, identify a problem component or area, and call up a list of procedures to fix it. The advent of multimedia technology – the potent intersection of broadcasting, publishing, and computing – promises tremendous increases in professional productivity. Its responsive-ness and flexibility permit greater timeliness and personalization.

But multimedia technology also raises issues that will undoubtedly trigger intense debate and political concern. These include, in particular, regulation and censorship, privacy content, ownership, and social impact.

Regulation and Censorship

The quality of the substantive information to which users will have access will be a critical issue in both public information and education. Who will ensure the quality of information? Will this responsibility be exercised through government regulation? And as we control quality how will we prevent this control from becoming a form of censorship? Who will control the controllers?

Political pressures will merge with economic reality. Setting up information bases for public use will be expensive. There will be tendencies to protect domestic information sources from competition. The European Community has already shown an interest in limiting television programming produced outside the EC, providing economic protection under the guise of protecting local culture. Will „cultural protection" be used to justify censorship of databases containing information that may not conform to the ideas of the political establishment?

Today, we have multiple channels: telephone (including fax), television, mail, newspapers. Tomorrow, will information exchange all be concentrated over a single fiber optic cable? Will the ownership of the system support diversity of views and expression – the bulwark against political and cultural conformity?

Privacy

Interaction between the user and the on-line system will be a key characteristic of multimedia communication. The system will „know" a great deal about users' interests, beliefs, and habits – economic, political, and personal. How will users be protected from having system managers exploit this knowledge in improper or intrusive ways? Will system managers monitor user interactions to check on political activity or to direct intrusive marketing activity?

Content

Television news programs have been criticized for emphasizing image over content. A story with a dramatic picture almost always receives more attention than a serious issue that has little visual content. This bias in favor of visual images tends to focus attention on immediate, dramatic events rather than important continuing issues. Multimedia systems will continue to feed the habit of aural and visual communication, displacing the written exchange of ideas. Will these new systems reinforce public preoccupation with superficial but intriguing ideas at the expense of more serious issues?

Ownership

Developing multimedia systems will be expensive. While hardware and operating costs will fall, major investments will be made in software and programming. Those who seize the dominant position in software and programming are likely to dominate communications. This possible industry monopoly must not become a monopoly of values. The values of small or poor groups must not be drowned out as software investment is focused on the culture of the rich and powerful. This issue may become particularly significant in future efforts to bridge the economic gulf between rich nations and poor ones.

Social Impact

Multimedia communications technology can shape the way we live and work with other people. For example, it can reinforce the „work at home" movement. It can make shopping at home easier. It can make studying at home a feasible alternative to going to school. But work, shopping, school, and recreation all have a social dimension: they give us an opportunity to make personal contact with other people. Will multimedia technology – which is

inherently remote and impersonal – isolate individuals from social contact?

Or will it permit improved quality of personal association through networking? People already use computer networks to expand their circles of acquaintances across geographic distances and cultural boundaries. Studies show that the largest use of public personal computer networks is for exchange of personal messages, largely anonymously. The biggest group of users of the French MINITEL system, for example, are young, single Parisians, lonely for personal contacts in the large city. Multimedia systems may help individuals find and sustain greater numbers of friendships.

We live in exciting times. Multimedia technology will add to that excitement. How we manage this technology and how we address the issues it creates will go far toward shaping how we live, what we think, and who controls our lives.

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