

# Developments In Business Simulation & Experiential Exercises, Volume 23, 1996

## MULTIMEDIA IN THE YEAR 2000: HOW WILL IT AFFECT OUR LIVES

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### ABSTRACT

The current computer buzzword is multimedia. This technology includes the combination of interactive video and audio on compact disc that utilize optical storage technology. This includes sound, still image, motion video, and animation, or any combination of these. These have created an inexpensive way to distribute large volumes of data-like encyclopedias, volumes of reference manuals, etc. This paper will discuss the technology chances related to multimedia and explains how it may affect at, life in the coming decade.

### DIGITAL TECHNOLOGY

Multimedia or digital Interactive technology is the next big technology and may be the greatest leap forward in communications since the invention of the transistor. The communications industry has embarked on its most ambitious development period in recent history and offers media companies, computer makers and telephone companies incredible. Television looks very different on this information highway. It's a grand vision and one that lands itself to grandiloquence. Quoting Gerald M. Levin, Chairman of Time Warner Inc. "When I turn on my television, I'll be able to switch to anything, anywhere" (Landler, 1993).

For the future a totally new product will be created. The ultimate multimedia "all-in-one-box" system will be able to offer new opportunities and have a significant impact on our daily lives. The following section makes a deeper examination of some of the service areas that can be affected with this newer technology: education, publishing and entertainment.

### EDUCATION

The technology will change the view of the learning process and the education process. In the place of "master teachers" will be "coaches" or super mentors" who will sit beside students as co-learners. The processes of career advising and teaching will more closely mentoring in corporations, but with many more students being involved on a regular basis with the instructor. The classroom of the future will have a handful of networked PCs and a teacher's multimedia computer linked into the school network, said Nelson Hailer, publisher of the "Heller Report on Education Technology and Telecommunications Markets" in Highland Park, Illinois (Lindquist, 1992). Such a setup would allow the teacher to use the system both for lecture support and for self-paced learning sessions.

One major change may be the abolition of classroom in both high school and university level training. As national electronic communications networks improve and telephone companies are given more freedom to provide services, students of any age may soon be able to simply dial a phone number and receive multimedia lessons on nearly any subject. Learning experiences can as easily go into the home, the school or the workplace just by connection to a modem. This can enhance the concept of lifelong education currently discussed at many universities (Lindquist, 1992).

### PUBLISHING

Hardware has improved in just a few years, however, and some publishers are testing the waters. The technologies may still be behind the demands of the market, but for the magazine industry, the buzzwords include multimedia, CD-ROM, the digital superhighway, and new media. Most major magazine companies have appointed technical specialists to decide how they should approach this market and to define just what it is. At Time Inc., relates Dick Helmenstamm, VP Advertising, every magazine is trying out some new project, like Time's planned on-line edition (Huhn, 1993). Rival Newsweek already has an interactive CD-ROM version up and running. Magazines as diverse as *The New Republic* and *National Geographic* are putting their issues and their editors on-line.

A small Seattle company, Mammoth Micro Productions, has been tackling the daunting task of defining what an electronic publishing house should look like and has developed an impressive list of clients (Churbuck, 1993). For one client, Mammoth has produced information displays for kiosks of the sort that show up in a shopping mall or at a trade show. Interactivity is of a low order, linked to guiding users through a menu of options with a touchscreen.

The ultimate payoff may not be so much in editorial content as advertising. On the first *Newsweek* CD, Sony, IBM, and Software Toolworks advertised. On the second, AT&T and Lincoln-Mercury are running 60-second video clips that aren't interactive and use up about 10 megabytes each 600 megabyte CD. Mammoth, however, is working on more sophisticated software to interrogate the ad viewer and give him choices. Lopez explains, "Multimedia advertising is not a way to expose people to a message, but a way to lead people through a sales presentation tailored to them" (Churbuck, 1993).

### ENTERTAINMENT

Cable companies plan on being dominant players in the industry. With 60 percent of U.S. households wired for cable

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And 90 percent nearby access, there is little resistance to developing the first superhighway. Time Warner, Inc. announced a two-way multimedia fiberoptic/coaxial cable experiment for 4000 homes in Orlando, Florida scheduled to begin in the near term. The full-service" network will be Time Warner's first complete of its digital compression capabilities, including video telephone, data transmission, interactive TV, and video-on demand. According to Gerald Levin, It will render irrelevant, the notion of sequential channels on a TV set" (Katz, 1993).

### CONCLUSIONS/IMPLICATIONS

In the United States, major computer, cable television, telephone, entertainment, and publishing companies are joining forces to bring affordable, interactive multimedia services to homes and businesses. Consumers will manage their affairs and entertain themselves - reading newspapers, shopping, trading stocks, paying taxes, calling up movies, visiting the library, banking, and even voting - all from a telecenter at home. This new personal computing system will become an information appliance where we can walk up and get information out of it as casually as getting into our car, starting it and putting it in drive. It will be familiar at home and at work (Herther, 1990).

The timing and office of the onslaught will depend on the speed with which the information superhighway - the Infobahn as it's being called currently - gets built, and how it is designed. A decade or more may pass before the needed networks or wireless links are in place. Despite the high-tech name, the Infobahn is simply a network, like AT&T's long-distance phone system. This one is defined by fiber-optic cables and highcapacity switches and computers that carry video, audio, and data signals into and out of our homes. Two-way video is the technology that gets merchants cranked up. Interactivity could intensify TV's appeal. Computers are better than TV because you can control what you see (Sherman, 1994).

Not everyone shares this technological enthusiasm. Some executives are very skeptical and are approaching multimedia applications very cautiously. "No more than 20% of households will be outfitted or fully interactive service by the year 2000 predicts H. Wayne Hultz, chairman of blockbuster Entertainment Corp., the home-video chain. 'It gives the appearance of moving quickly, but it will be a long time before the average family has it,' he says (Landler, 1993). Others have a completely different vision. Listed below are John Naisbitt's visions for our future:

**Free at Last:** The telephone will be fully freed from cords, and personal communication will follow us from home to work -and around the world. With a single personal telephone number, callers will be able to find us wherever we are.

**Telecommunicating:** More and more of us will gladly leave the car in the garage. We will work through home-based or neighborhood telecenters that link us to offices away. Our children will go to school via video, raising their hands to question a teacher who may be a thousand miles away.

**Beat the Clock** As companies expand globally, the sun will never set on the workday. Twenty-four hours a day, production will continue without losing a beat.

**The World's Fuel of the Future.** The world's economies, driven by information technology, will move in unison - buying, selling, and bartering instantaneously - with the electronic equivalent of universal currency.

**Shopper's Dream Come True:** Catalog shopping will be more widely available from stores such as LL Bean and J.C. Penny. Banking, brokerage, and insurance services will be available with consultants assisting customer in making financial decisions.

**Video Diplomacy** The business of government will be conducted by telecommunications. World leaders can meet via television.

**Getting to Know You:** The 21st century telecommunications system will have human-like skills. Networks will be intelligent communications highways that are personalized, proactive, and intuitive.

These technologies allow us to better manage time and space to the ultimate benefit of all consumers and providers. The time is now to embrace the change and improve the quality of our lives! (Rabkin, 1993)

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