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Forester, Tom. (1989). High-Tech Society: The Story of the Information Technology Revolution. Cambridge, MA: The MIT Press, \$9.95 (Paperback), 320 Pp. (ISBN 0-262-56044-5)

Reviewed by Mark Snyder(1)

As we enter the final decade of the twentieth century, we find ourselves in a world of fierce competition to control the accelerating technologies of the information age. How did we arrive at this state of affairs? What are these technologies that are experiencing such immense growth and how do they work? Will all of this technological growth affect the way we live? Who will win the race for control of information technology? Such questions, which require answers ranging from very broad concepts to highly technical facts to predictions, are often asked of technology educators and are answered very effectively and perceptively by Australian information-studies professor Tom Forester in his book HIGH-TECH SOCIETY.

Forester has succeeded in meeting his objectives of writing a readable, comprehensive, and balanced book that describes the many facets of the technology revolution. His coverage of this topic provides an international schema from the outset by comparing how the high-tech snowball started rolling in the United States, Britain, Europe, and Japan.

Defining the "laws of microelectronics" in an intelligible manner, Forester explains how microchips are made and the impact that new chip manufacturing technologies have had in the development of computers. He further describes the role of microchips in the

growth toward supercomputers, the forecasted fifth-generation computer, and artificial intelligence.

Other technologies about which Forester reports include digital technology and its various spinoffs in the "information-processing" industry, which are the result of combining computers, office products, and telecommunications systems. He also discusses facsimile, fiber optics, cellular radio, satellite communications, electronic mail services, videoconferencing, videotex, interactive video, personal computers, software, and a variety of potential technologies for the future.

Technology educators might feel threatened when they discover that a computer science professor at the Massachusetts Institute of Technology feels that computer literacy is "pure baloney" and that those "who use a computer only for the applications never need to learn how the technology works." However, in the section "Computers in the Classroom" Forester provides an array of opinions and viewpoints on the future of computer applications in education and reports on how the computer revolution has been handled in education by the United States, Great Britain, and France.

Forester continues by predicting the outlook for "factories of the future," "the electronic office," and the effect of information technologies on banking and retailing. He recognizes that "the Great American Job Machine... has created 20 million jobs in the service industries in the past 10 years" but is skeptical in regard to the number of service jobs that will be generated in the future. According to one source, "technology has a place - but by no means a dominant one - in the job market of the future." Forester points out that there will be other "key problems for high-tech society" such as high-tech crime and invasion of privacy.

The author concludes with his point of

view on the international competition for supremacy in information technologies. Forester pictures the United States at a point where it must change its focus from service industries back to manufacturing so it may redevelop its once strong industrial base and maintain itself in the world market. He also points out that Japan and Europe have serious internal problems that make the imminence of a United States decline questionable.

Forester offers a wealth of background information for all of the subtopics which he has chosen. He employs an impressive variety of secondary sources and includes a few selective technical illustrations and cartoons which contribute agreeably to the text. HIGH-TECH SOCIETY is exceptionally informative and provides an overview of the Technology Revolution that is nearly definitive and quite comprehensible when explaining highly technical information. This book will provide technology educators with answers to broad questions through detailed information presented in manageable terms.

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