

*Technology and the American Economic
Transition: Choices for the Future*

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TECHNOLOGY
AND THE
AMERICAN ECONOMIC
TRANSITION
CHOICES FOR THE FUTURE

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Foreword

In many studies during the past decade and a half, the Office of Technology Assessment has analyzed hundreds of changes in American life that have been brought about by new technologies. In this study, for the first time, OTA steps back from the detailed analyses of individual industries and sectors to take a broad look at the combined impact of new technologies on American society. From this perspective it is possible to describe the opportunities and risks for the nation as a whole that are not apparent in studies targeted on topics that are more narrowly defined. The report highlights strategic choices available to Americans as we negotiate a period of major transformation. The choices we make will have profound consequences for the quality of work and the amenities available to Americans and for America's role of leadership in the free world.

Eight committees of Congress asked the Office of Technology Assessment to assess the new environment in which America's economy now operates as a result of new technologies, a global market, and related changes in consumer attitudes and behavior. OTA was asked to identify areas where existing policy might block attractive avenues of growth and where new policies could facilitate growth. The requesting committees represent a wide spectrum of congressional interest. They include the Senate Committee on Commerce, Science and Transportation; the Committee on the Budget; the House Committee on Energy and Commerce; the Committee on Post Office and Civil Service; the Committee on the Judiciary; the Committee on Public Works and Transportation; the Committee on Education and Labor; and the Committee on Science Space and Technology.

The analysis begins and ends by focusing on people in their role as consumers and as employees. It uses conventional economic accounting procedures to document economic growth, but also employs more qualitative standards for measuring progress in eight basic categories of demand or amenity: food, housing, transportation, health, clothing & personal care, education, personal communication & business, and recreation & leisure. It also uses standard methods for measuring gains in compensation paid to workers, but introduces other ways of evaluating job quality such as opportunities for learning and career advancement, the extent to which work and family responsibilities can be combined, and whether a person can take pride in his or her work.

The first chapter serves as an introduction to the themes developed in the document and a summary and guide to the entire report. Readers will find this a useful way to identify sections on consumption, business structure, trade, employment, education, or other topics that may be of special interest to them. We feel that the major accomplishment of this document, however, lies in the way it helps develop a perspective on these issues—showing how the networks of production and consumption are interconnected, how international and domestic economies are connected, and how changes in one area spread through the nation's entire economic and social fabric.

The study was undertaken with the help of many individuals and institutions around the United States. We owe a particular debt to individuals in the U.S. Department of Commerce and the U.S. Bureau of Labor Statistics who not only provided data and reviewed OTA's work but gave us crucial insights and guidance about their complex resources. Responsibility for the contents of this document, of course, rests with OTA.



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NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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