## Computer Time Sharing Grows Up

## Sales Estimated at \$140-Million This Year

By WILLIAM D. SMITH

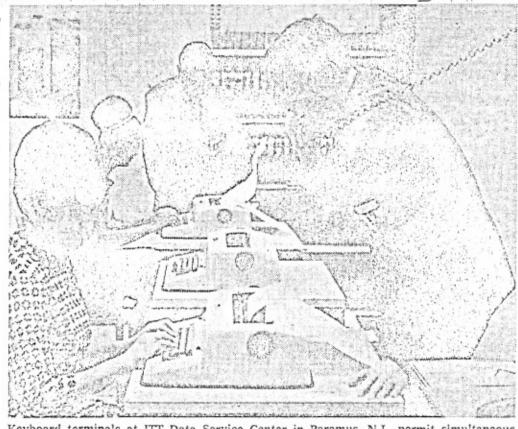
"I told you so, I told you so," old-line advocates of computer time sharing are joyfully saying these days as the long-researched data processing technique has turned into a real and booming business.

Time sharing is the simultaneous use of a single computer system by a number of people at various remote locations. The computer, linked by public telephone lines to a teletypewriter terminal, operates so fast that it appears to be servicing all users in the same split-second.

The market for time sharing services last year totaled about \$70-million, according to an extensive report prepared by the Auerbach Corporation, a Philadelphia-based data processing and information systems consulting concern.

The survey predicts that the market will double this year to \$140-million and increase again in 1970 to \$240million. The Auerbach group predicts a billion-dollar market within five years.

Time sharing has been a glint in the eye of computer experts since the industry's beginning in the years following the Second World War. The computer in every kitchen, easily accessible and simple to use by every housewife and plumber has been the ultimate goal of



Keyboard terminals at ITT Data Service Center in Paramus, N.J., permit simultaneous use of computers elsewhere by various customers. Telephone lines link the components.

goal were taken in the late fifties and early sixties in specialized military systems. Project MAC at the Massachusetts Institute of Technology and a similar experimental project at the Systems Development Corporation, went far toward establishing the technology and identifying the techniques needed for time sharing.

An experimental projectof Dartmouth College and the General Electric Corporation in which students used the computer without extenfeasibility of the average citizen's using the computer to solve problems.

Commercial time sharing began about four years ago. Within the last year and a half, it has come into its own and then some, according to William Osterman, project manager, on the study for Auerbach.

"When we started the survey in May, there were some 30 companies full-time in the field, when we finished it in October there were more than 50," Mr. Gorton said. Scores have entered since

volved depth interview with management, marketing and technical personnel of 19 representative commercial time-sharing services. Included were 16 general purpose time sharing services and three specialized services, which together account for about 90 per cent of the current market.

The study disclosed, not unexpectedly, that the leading competitive force in commercial time sharing is General Electric's Information Service Department, which is is estimated to have 40 per cent of the market. The International Business Corporation's Service Bureau Corporation follows with about 19 per cent of the market.

Ranked next are four independent tme-sharing services, Call-A-Computer, Inc., with 7 per cent; Com-Share, Inc., with 3 per cent; Tyn-Share, Inc. with 5 per cent, and Allen-Jabcock, Inc., with 3 per cent ITT Data Service and Keydda and Adams Associates are among other major conpanies in the field. Data Sysems and I.B.M.