COMPUTING TECHNOLOGY IN THE HOME

*The addition of computers to our homes
is impacting how we work
and how we relate to our families.*

Refrigerators. Dishwashers. Washing machines and dryers. It was just 50 years ago that these technologies transformed our households by substituting mechanical energy for human energy.

The technologies that will shape future households over the next 15 to 20 years are the computing, communication, and information technologies, according to Graduate School of Management Professors Nicholas Vitalari and Alladi Venkatesh. Together, their research efforts are focusing on computer technology and how its use in the home is transforming the nature of both the workplace and our home environments.

"Today there are about 25 million home computer owners in the United States," explains Vitalari, Professor of Information Systems and Associate Dean of Research at GSM. "While these home computers are used for children's education, household management, and games and entertainment, it is clear that nearly 70 percent of their use is for job-related work. The household, then, is increasingly becoming a place of work, and we need to study this trend because it directly impacts our work relationships and our lifestyles."

Vitalari, who received his Ph.D. degree in Management Information Systems and his M.B.A. degree from the University of Minnesota, is most

Associate Professor Nick Vitalari enjoys researching the changing nature of the workplace.

interested in the implications of alternate work arrangements on business organizations. Venkatesh, who earned his M.B.A. and Ph.D. degrees in Marketing from Syracuse University, concentrates his study on the social changes emerging as a result of home computing.

Their recent two-year study, called Project NOAH — for National Outlook for Automation in the Home — was funded by the National Science Foundation and included the study of 900 households nationwide.

"The study found that a personal computer can have an impact on the social life of the household by changing traditional patterns of time allocation," says Venkatesh. "Home computer owners spend more time alone and less time watching television, reading, or engaged in leisure activities with family members. Mental activities take the place of physical activities."

While personal computers are changing the dynamics at home, there are adjustments, too, at the office. Work-at-home arrangements are growing rapidly fueled by changing demographics, changing labor requirements and international competition.

"For those people whose primary place of employment is outside the home, the three most important reasons for doing work at home are greater control and flexibility, improved productivity, and additional time with family," explains Vitalari. "Working at home allows employees to balance the demands of their jobs with their family needs. As companies become more team oriented and more meetings are required, employees also believe working at home provides fewer distractions and much needed 'alone' time.