

a.m. to hold an open joint hearing on the PFIAB DOE.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEE ON AGING

Mr. JEFFORDS. Mr. President, I ask unanimous consent that the Committee on Health, Education, Labor, and Pensions, Subcommittee on Aging, be authorized to meet for a hearing on Older Americans during the session of the Senate on Tuesday, June 22, 1999, at 2:30 p.m.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEE ON WESTERN HEMISPHERE,
PEACE CORPS, NARCOTICS AND TERRORISM

Mr. JEFFORDS. Mr. President, I ask unanimous consent that the Subcommittee on Western Hemisphere, Peace Corps, Narcotics and Terrorism be authorized to meet during the session of the Senate on Tuesday, June 22, 1999 at 10:00 a.m. to hold a hearing.

The PRESIDING OFFICER. Without objection, it is so ordered.

ADDITIONAL STATEMENTS

TRIBUTE TO MARY ELIZABETH
MONTAGUE

• Mr. DODD. Mr. President, sadly, on January 24th of this year, the state of Connecticut lost a resident of upstanding character who had dedicated her career to public service. Mary Elizabeth Montague led an accomplished life for 87 years and our state owes her many thanks for all of her extraordinary contributions.

Born in Middletown, Connecticut, Mary Elizabeth established a distinguished record as a public servant. While in Middletown, she worked as a social service investigator for the Family Welfare Association and went on to become the first woman president of the local Parent-Teachers Association. She eventually became the PTA's state district director.

Mary Elizabeth's diverse accomplishments led to her appointment as a congressional liaison to the Small Business Administration during the Kennedy Administration.

Then, in 1965, she joined Vice President Hubert Humphrey's Capitol Hill staff handling such issues as cities, the arts, and the economy.

Upon leaving Vice President Humphrey's office, Mary Elizabeth launched her own public relations firm in 1968. She published numerous editions of "A Woman's Guide to Washington, D.C." and created and published "On the Hill," a monthly magazine about Capitol Hill that was distributed to all congressional offices.

In March of 1998, Mary Elizabeth was presented with the Key to Norwalk, Connecticut, her most recent home, for her 30 years of service as a communications consultant. This was only one of the 14 different keys she had received from cities and towns around the state. In addition, Mary Elizabeth was award-

ed numerous commendations and citations for her dedicated community service.

My Connecticut office shared a relationship with Mary Elizabeth for the past 6 years as she tirelessly continued to better the lives of those around her. Her life and work were committed to serving the public good and are testaments to how one person can touch so many people in a positive way.

Mary Elizabeth Montague is survived by her three children, Louis, William, and Miriam, four grandchildren, and one great-granddaughter. I offer each of them my heartfelt condolences.

I ask to have printed in the RECORD the full text of the eulogy offered by Mary Elizabeth's daughter, Miriam. I believe her words have truly captured the remarkable spirit of her mother and the outstanding life that she led.

The eulogy follows:

THE PASSING OF A GREAT COMMUNICATOR AND
A GREAT CONTRIBUTOR TO LIFE—MARY ELIZABETH MONTAGUE

Her life was and is a story, each chapter better than the next. She was the central figure in many lives—a daughter, a mother, an advisor, a friend, teacher, a companion, a politician, a writer and a coordinator of events that surrounded her life and all those she touched. She was a woman ahead of her time managing political campaigns, speaking out for the rights of children, concerned for the people instituted by the system, promoting reading and literacy, all in the 50's when women were supposed to be quiet—she spoke. Never shy to give her opinion or back down from her beliefs, she taught us to be strong, independent, and to think for ourselves.

As a single parent, she sacrificed and made choices to improve her children's lives and off to Washington we went. There she continued her political endeavors as an administrator, coordinator, and writer. Along the way, she showed us that richness comes in the quality of life you live and in the people you meet along the way. And, oh, the people we met—Presidents, Congressmen, Congresswomen, Senators, Ambassadors, Governors, key figures in national and international politics, actors and actresses, writers and so many more. But all the while, she showed us that even these people were all the same, some with more power or wealth, but none better than the man next door.

Most of all, she wanted us to believe in ourselves—that God gave us talents, personality, wit and a mind to grow and share. She taught us laughter and wit with a twinkle in her eye and laughter in her heart.

Mary Elizabeth's story has not ended for she will remain in our hearts, our lives, and our souls forever. •

• Mr. GORTON. Mr. President, just a few short weeks ago, on the anniversary of the filing of the government's antitrust suit against Microsoft, I took to the floor of the U.S. Senate to detail the rapidly changing nature of the information technology industry over that twelve-month period of time. I noted that, just one year ago that day, AOL and Netscape were two large successful companies. A year later, they were a gigantic conglomerate, teamed with Sun and ready to compete in the next frontier of the information technology industry. MCI Communications and WorldCom were two separate com-

panies, as were Excite and @Home. Yahoo hadn't yet bought GeoCities and Broadcast.com. AT&T was a long distance company. A year later, AT&T could have influence over 60% of cable systems in the United States. The stock market had risen dramatically over that year, fueling our unprecedented economic boom.

What difference a year makes, I said at that time.

Now, last week, we were joined by some of the most brilliant and visionary minds in the world as they testified before the Joint Economic Committee High-Technology Summit. Two of the most brilliant, even among that gathering, Federal Reserve Chairman Alan Greenspan and Microsoft Chairman Bill Gates, reinforced the notion of an extraordinarily dynamic industry, and painted a future promising more dramatic change than we have already seen.

As the two men who arguably have had more to do with our extended economic expansion than any other in the world—one for his contributions in creating the high-tech boom that has driven the economy, the other for judiciously guiding that economy—we would do well to listen to Mr. Gates and Mr. Greenspan when they offer their thoughts about America's next century. I was struck by the similarity of their views this week as they testified on the future of the information-technology industry, the profound benefits it has bestowed on the U.S. and world economies, and the role government has and should continue to play in sustaining this dynamic and literally world-changing force.

To begin with, both Mr. Gates and Chairman Greenspan point to the momentous changes in the way the world operates as a result of this industry's influence. Its innovations are not confined merely to IT products, but to the repercussions of how those products are used. According to Chairman Greenspan, "innovations in information technology so-called IT have begun to alter the manner in which we do business and create value, often in ways that were not readily foreseeable even five years ago. As this century comes to an end, that defining characteristic of the current wave of technology is the role of information."

Mr. Gates underscored that sentiment and gave us a glimpse of an even more information-defined vision of the future in which, "there will be a proliferation of smart, connected devices, from palm-sized digital assistants and tablet personal computers to smart TVS and Web-enabled cell phones. All of your files," he told us, "schedule, address book and everything else you will need will automatically be available on each of these. When you're traveling you'll be able to call up your itinerary, book an appointment or view your stock portfolio using the device you have in hand. It will know the information you need, and when and where you need it. Wherever you are,

you'll be able to access your own digital dashboard—your personal portal to your own secure office desktop on any PC."

Where will this information revolution lead us? If the past five years are any indication of the future, it looks bright, indeed.

According to Mr. Gates, "The continuing rapid growth in the Internet will help power this information revolution, just as the proliferation of new devices will help make the Internet more useful and accessible to everyone. Five years ago, who would have imagined that people would now be shopping for automobiles, home loans, airline tickets or clothing on the Web? Electronic commerce has increased tenfold in the last few years, making it convenient for people to purchase almost anything, anytime, from anywhere. By 2002, nearly 50 million Americans will be shopping online, spending almost half a trillion dollars on the Web. There is endless speculation about which companies will be successful. The big winner will be consumers. They will see better prices, more choice, more opportunities to do the things they want to do."

Chairman Greenspan agreed with Mr. Gates' sentiment that consumers have been, and will continue to be, the main beneficiaries of the IT revolution. "Every new innovation," he told us, "has suggested further possibilities to profitably meet increasingly sophisticated consumer demands. Many ventures fail. But the few that prosper enhance consumer choice."

Both men pointed to the enormous economic benefit that has accrued from the IT industry's success.

"The unexpectedly strong economic growth this country is experiencing can, in large measure," noted Mr. Gates, "be traced to the vibrant, competitive and fast-growing computer technology industry. This sector has created more new jobs than any other part of the economy. In fact, we can predict today that by the year 2000, the software industry's contribution to the U.S. economy will be greater than the contribution of any other manufacturing industry in America, an extraordinary achievement for an industry that is less than 30 years old."

Chairman Greenspan underscored just how strong that contribution has been already by stating flatly that, "An economy that twenty years ago seemed to have seen its better days, is displaying a remarkable run of economic growth that appears to have its roots in ongoing advances in technology. Nor, have the benefits been limited to just our country. All else equal, the enhanced competition in tradable goods enables excess capacity previously bottled up in one country to augment worldwide supply and exert restraint on prices in all countries' markets."

Chairman Greenspan offered a note of caution, though, as it is his job to do, and as he has done so brilliantly to our

economic benefit in the last few years. "The rate of growth of productivity cannot increase indefinitely," he warned us, adding, "experience advises caution."

We would do well to heed the Chairman's admonition, Mr. President. The IT industry has indeed been a vibrant enterprise, but as Mr. Gates accurately noted, "the incredible success of this industry in the United States owes a lot to the light hand of government in the technology area, the fact that people can take incredible risks and if they're successful they can have incredible rewards."

Mr. President, Alan Greenspan and Bill Gates are precisely correct. We must not take for granted the unprecedented success of this industry and the bounty it has conferred upon our country and, indeed, upon the rest of the world.

The United States government must refrain from yielding to the temptation to pick winners and losers in the marketplace according to arcane and discredited economic theories that are rooted in "what if" wishes rather than "what is" actualities. The freedom to innovate and provide quality products that will continue to improve lives is only possible when government does not dictate how young, vibrant, entrepreneurial companies can compete.

Again, Chairman Greenspan stated the case lucidly: "at this stage," he told us, "one lesson seems reasonably clear. As we contemplate the appropriate public policies for an economy experiencing rapid technological advancement, we should strive to maintain the flexibility of our labor and capital markets that has spurred the continuous replacement of capital facilities embodying older technologies with facilities reflecting the newest innovations. Further reducing regulatory impediments to competition, will, of course, add to this process. The newer technologies have widened the potential for economic well-being. Governments should seek to foster that potential."

Mr. President, I could not agree more. We should be fostering the growth of the dynamic Information Technology industry, not engineering its deterioration into the bureaucratic morass that is government's specialty.

Unfortunately, there are some in the Clinton administration who do not share this view. They short-sightedly seek to impose the heavy hand of government on the IT industry to ensure that certain competitors, not consumers, are the ultimate beneficiaries of this economic revolution. Their current project is the break-up of the most dynamic and successful company of the last 25 years—perhaps in U.S. history—the Microsoft Corporation.

As I pointed out those few weeks ago, in the presence of a company exerting real monopoly power, competitors would be stifled, prices would rise, choices would be curtailed, consumers would be harmed. In fact, in the last

twelve months the real world for consumers has improved by all of these measures. Competition in the technology industry is alive and well and nipping at the heels of Microsoft. Prices are down, choices are up, innovation is rampant—all great news for consumers.

And, as these two luminaries of the current golden economic firmament told us this week, the free-market conditions that will allow this great news to continue must prevail: government must keep its hands off of this industry.

I would ask that copies of both Chairman Greenspan's and Mr. Gates' testimony be printed in their entirety in the CONGRESSIONAL RECORD. I would urge my colleagues to read and study their remarks, and then to join me in pursuing policies that will ensure that the Gates and Greenspan view of a future IT industry be allowed to unfold, unimpeded by government's misdirected and deleterious hectoring.

The material follows:

PREPARED TESTIMONY FROM ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE—JUNE 14, 1999

Something special has happened to the American economy in recent years.

An economy that twenty years ago seemed to have seen its better days, is displaying a remarkable run of economic growth that appears to have its roots in ongoing advances in technology.

I have hypothesized on a number of occasions that the synergies that have developed, especially among the microprocessor, the laser, fiber-optics, and satellite technologies, have dramatically raised the potential rates of return on all types of equipment that embody or utilize these newer technologies. But beyond that, innovations in information technology—so called IT—have begun to alter the manner in which we do business and create value, often in ways that were not readily foreseeable even five years ago. As this century comes to an end, the defining characteristic of the current wave of technology is the role of information. Prior to this IT revolution most of twentieth century business decisionmaking had been hampered by limited information. Owing to the paucity of timely knowledge of customers' needs and of the location of inventories and materials flows throughout complex production systems, businesses required substantial programmed redundancies to function effectively.

Doubling up on materials and people was essential as backup to the inevitable misjudgments of the real-time state of play in a company. Decisions were made from information that was hours, days, or even weeks old. Accordingly, production planning required costly inventory safety stocks and backup teams of people to maintain quality control and to respond to the unanticipated and the misjudged. Large remnants of information void, of course, still persist, and forecasts of future events on which all business decisions ultimately depend are still unavoidably uncertain. But the recent years' remarkable surge in the availability of real-time information has enabled business management to remove large swaths of inventory safety stocks and worker redundancies, and has armed firms with detailed data to fine-tune product specifications to most individual customer needs.

Moreover, information access in real-time—resulting, for example, from such

processes as checkout counter bar code scanning and satellite location of trucks—has fostered marked reductions in delivery lead-times on all sorts of goods, from books to capital equipment. This, in turn, has reduced the relative size of the overall capital structure required to turn out our goods and services.

Intermediate production and distribution processes, so essential when information and quality control were poor, are being bypassed and eventually eliminated. The increasing ubiquitousness of Internet web sites is promising to significantly alter the way large parts of our distribution system are managed.

The process of innovation goes beyond the factory floor or distribution channels. Design times have fallen dramatically as computer modeling has eliminated the need, for example, of the large staff of architectural specification drafters previously required for building projects. Medical diagnoses are more thorough, accurate, and far faster, with access to heretofore unavailable information. Treatment is accordingly hastened, and hours of procedures eliminated. In addition, the dramatic advances in biotechnology are significantly increasing a broad range of productivity-expanding efforts in areas from agriculture to medicine.

Economists endeavor to describe the influence of technological change on activity by matching economic output against measurable economic inputs: quality adjusted labor and all forms of capital. They attribute the fact that economic growth has persistently outpaced the contributions to growth from labor and capital inputs to such things as technological innovation and increased efficiencies of organizations that are made possible through newer technologies. For example, since 1995 output per labor workhour in the nonfarm business sector—our standard measure of productivity—has grown at an annual rate of about 2 percent. Approximately one-third of that expansion appears to be attributable to output growth in excess of the combined growth of inputs.

Of course, it often takes time before a specific innovation manifests itself as an increase in measured productivity. Although some new technologies can be implemented quickly and have an immediate payoff, others may take years or even decades before achieving their full influence on productivity as new capital is put in place that can take advantage of these creations and their spillovers. Hence, the productivity growth seen in recent years likely represents the benefits of the ongoing diffusion and implementation of a succession of technological advances; likewise, the innovative breakthroughs of today will continue to bear fruit in the future.

The evident acceleration of the process of “creative destruction,” which has accompanied these expanding innovations and which has been reflected in the shifting of capital from failing technologies into those technologies at the cutting edge, has been remarkable. Owing to advancing information capabilities and the resulting emergence of more accurate price signals and less costly price discovery, market participants have been able to detect and to respond to finely calibrated nuances in consumer demand. The process of capital reallocation has been assisted through a significant unbundling of risks made possible by the development of innovative financial products, not previously available. Every new innovation has suggested further possibilities to profitably meet increasingly sophisticated consumer demands. Many ventures fail. But the few that prosper enhance consumer choice.

The newer technologies, as I indicated earlier, have facilitated a dramatic

foreshortening of the lead-times on the delivery of capital equipment over the past decade. When lead times for capital equipment are long, firms must undertake capital spending that is adequate to deal with the plausible range of business needs likely to occur after these goods are delivered and installed. In essence, those capital investments must be sufficient to provide insurance against uncertain future demands. As lead times have declined, a consequence of newer technologies, firms' forecasts of future requirements have become somewhat less clouded, and the desired amount of lead-time insurance in the form of a reserve stock of capital has been reduced.

In addition to shortening lead-times, technology has increased the flexibility of capital goods and production processes to meet changes in the demand for product characteristics and the composition of output.

This flexibility allows firms to deal more effectively with evolving market conditions with less physical capital than had been necessary in the past.

Taken together, reductions in the amount of spare capital and increases in capital flexibility result in a saving of resources that, in the aggregate, is reflected in higher levels of productivity. The newer technologies and foreshortened lead-times have, thus, apparently made capital investment distinctly more profitable, enabling firms to substitute capital for labor and other inputs far more productively than they could have a decade or two ago. Capital, as economists like to say, has deepened significantly since 1995.

The surge in investment not only has restrained costs, it has also increased industrial capacity faster than the rise in factory output. The resulting slack in product markets has put greater competitive pressure on businesses to hold down prices.

Technology is also damping upward price pressures through its effect on international trade, where technological developments and a move to a less constrained world trading order have progressively broken down barriers to cross-border trade. All else equal, the enhanced competition in tradeable goods enables excess capacity previously bottled up in one country to augment worldwide supply and exert restraint on prices in all countries' markets.

Because neither business firms nor their competitors can currently count any longer on a general inflationary tendency to validate decisions to raise their own prices, each company feels compelled to concentrate on efforts to hold down costs. The availability of new technology to each company and its rivals affords both the opportunity and the competitive necessity of taking steps to boost productivity. This contrasts with our experiences through the 1970s and 1980s, when firms apparently found it easier and more profitable to seek relief from rising nominal labor costs through price increases than through cost-reducing capital investments.

The rate of growth of productivity cannot increase indefinitely. While there appears to be considerable expectation in the business community, and possibly Wall Street, that the productivity acceleration has not yet peaked, experience advises caution. As I have noted in previous testimony, history is strewn with projections of technology that have fallen wide of the mark. With the innumerable potential permutations and combinations of various synergies, forecasting technology has been a daunting exercise. There is little reason to believe that we are going to be any better at this in the future than in the past. Hence, despite the remarkable progress witnessed to date, we have to be quite modest about our ability to project the future of technology and its implications

for productivity growth and for the broader economy.

A key question that we need to answer in order to appropriately evaluate the connection between technological innovations and productivity growth is why have not the same available technologies allowed productivity in Europe and Japan to catch up to U.S. levels. While productivity in some foreign industrial countries appears to have accelerated in recent years, a significant gap between U.S. productivity and that abroad persists.

One hypothesis is that a necessary condition for information technology to increase output per hour is a willingness to discharge or retrain workers that the newer technologies have rendered redundant. Countries with less flexible labor markets than the United States enjoys may have been inhibited in this regard.

Another hypothesis is that regulations, systems of corporate governance, trade restrictions, and government subsidies have prevented competition from being sufficiently keen to induce firms in Europe and Japan to take full advantage of the efficiencies offered by the latest advances in information technology and other innovations.

Further investigation will be necessary to evaluate the importance of these possible influences. But at this stage, one lesson seems reasonably clear. As we contemplate the appropriate public policies for an economy experiencing rapid technology advancement, we should strive to maintain the flexibility of our labor and capital markets that has spurred the continuous replacement of capital facilities embodying older technologies with facilities reflecting the newest innovations. Further reducing regulatory impediments to competition, will, of course, add to this process. The newer technologies have widened the potential for economic well-being. Governments should seek to foster that potential.

PREPARED TESTIMONY FROM BILL GATES OF MICROSOFT

(Testimony from June 15, 1999)

Thank you Mr. Chairman and Members of Congress. It is an honor to be here. Mr. Chairman, I know that we are joined today by a number of students. I'd like to extend my greetings to them—and also to note how different things are today than when I was in school. Today, students have access to powerful personal computing devices and a sea of information through the Internet that I could only dream of when I was a teenager. We truly live in an amazing time. The information age is an era of new possibilities for us, for our children, and for the entire nation.

It is the greatest time of innovation and change in history. In less than 25 years we have seen the personal computer evolve from a hobbyists' toy to a tool many Americans can't imagine being without. We have seen its power double every 18 months, its price fall and its importance grow at home, at school and in every office. I know that many of you on this Committee are technology enthusiasts and appreciate this significance of this change.

As we learn more about how the information age is affecting us, the more we understand its central role in creating the remarkable new prosperity in this country today, and in accelerating economic development throughout the world. We are creating a new digital economy for this new information age.

Mr. Chairman, I know that yesterday Chairman Greenspan appeared before this Committee. Last month, he made a very important observation that I'd like to read

very briefly. He said: "The newest innovations, which we label information technologies, have begun to alter the manner in which we do business and create value, often in ways not readily foreseeable even five years ago . . . The breadth of technological advance and its application has engendered a major upward reevaluation of business assets, both real and intangible."

I'd like to reinforce Chairman Greenspan's points by telling you about the findings of a major new study of the digital economy carried out by the Business Software Alliance, an organization representing most of the nation's largest software developers. The study will be released tomorrow, and I will ask that, when it is released, its entire contents be entered into the record of this committee.

The results of the BSA study once again confirm that the unexpectedly strong economic growth this country is experiencing can, in large measure, be traced to the vibrant, competitive and fast-growing computer technology industry. This sector has created more new jobs than any other part of the economy. In fact, we can predict today that by the year 2000, the software industry's contribution to the U.S. economy will be greater than the contribution of any other manufacturing industry in America—an extraordinary achievement for an industry that is less than 30 years old.

Today, America not only sells more cars than Japan. We also lead the world—by a wide margin—in software development. Last year this sector grew more than 15%, and is growing at nearly four times the rate of the economy as a whole. The software industry contributed more than a \$13 billion surplus to the U.S. balance of trade, and this will rise to roughly \$20 billion next year. A strong technology sector has spurred the renewal of industries old and new across America.

Moreover, new technology companies are being created every day, and are generating incredible valuations overnight. The slew of recent mergers reminds us just how quickly the landscape of the high tech marketplace is changing. That change will continue. In this industry in particular, the free market is working, and working well.

Mr. Chairman, I believe that in Washington, DC., there is a term for people who are incredibly interested in public policy. They are known as policy wonks. Well, in my industry, these people are called computer geeks, and I'd have to say that I am one. If you will indulge me for a few moments longer, I'd like to share some of my enthusiasm for what technology will mean for us in the future. I am very optimistic about what computer technology will mean for all of us—and for the students who are joining us to day via satellite.

As technologies change, so does our mission at Microsoft. For the past 20 years our vision was of a PC on every desktop and in every home—a toll that anyone could use to get things done. And today, a majority of American businesses and more than half of U.S. households have a PC. Now we are moving into a new era. The merging of telecommunications, computer technologies and consumer electronics with the world of the Internet will create a new universe of intelligent PCs and complimentary devices that will deliver the power of the information age to anyone, anywhere, and anytime.

What this means is that there will be a proliferation of smart, connected devices, from palm-sized digital assistants and "tablet" personal computers to smart TVs and Web-enabled cellphones. All of your files, schedule, address book and everything else you need will automatically be available on each of these. When you're traveling you'll be able to call up your itinerary, book an ap-

pointment or view your stock portfolio using the device you have in hand. It will know the information you need, and when and where you need it. Wherever you are, you'll be able to access your own "digital dashboard"—your personal portal to your own secure office desktop—on any PC.

We are working hard to develop software that makes computers even easier to use—next year we aim to spend some \$3 billion on research and development. And one day in the not too distant future, computers will be able to see, listen and speak. At home or in the office, you'll be able to control your PC by talking to it. It will automatically back up your information, update its own software and synchronize itself with your devices on your home network. You'll even have a notepad on your refrigerator that will be up to date and allow you to coordinate with other information at home, at your office or at your children's school.

When Congress is in session, a wireless network will keep you in touch with your office. I don't need to tell the members of this committee how important mobility is as you move between your state or district and the nation's capital. As technology becomes more flexible and more powerful, it can be a tremendous tool in terms of creating efficiency and instant communication.

The PC also holds the potential to make government more efficient and more responsive. We already see the beginning of this with government web sites that offer people a wealth of information and resources. As government increasingly incorporates technology into its operations it will make information flow even more open and efficient. At Microsoft, our use of technology has all but eliminated paper flow, and I can tell you from first-hand experience that's a wonderful thing. Technology also offers an opportunity to get the public more involved and, some day, perhaps, to engage people in a two-way dialogue on the important issues and challenges we face. The continuing rapid growth in the Internet will help power this information revolution, just as the proliferation of new devices will help make the Internet more useful and accessible to everyone.

Five years ago, who would have imagined that people would now be shopping for automobiles, home loans, airline tickets or clothing on the Web? Electronic commerce has increased tenfold in the last few years, making it convenient for people to purchase almost anything, anytime, from anywhere. By 2002, nearly 50 million Americans will be shopping online, spending almost half a trillion dollars on the Web. There is endless speculation about which companies will be successful. The big winner will be consumers.

They will see better prices, more choices, more opportunities to do the things they want to do. As Chairman Greenspan made clear, companies have already seen enormous benefits from computer technology—benefits that are now being multiplied by online commerce. But there is much more to be done. Like helping companies integrate their computing systems and create digital processes to perceive and react to competitive challenges and consumer needs. By doing this, they will be able to extend the gains in productivity that are helping fuel our economic strength today.

But turning this vision of the future into a reality will take another important investment in America investment in education. We cannot fill all of the jobs being created if we don't make technology a key part of every child's education.

Education in the digital age will offer tremendous promise. Learning will be more student-centered. Teachers, parents and students will work collaboratively, and students will be prepared for a technology workplace

with the opportunity to engage in lifelong learning. At Microsoft we call this approach the Connected Learning Community. Taking education into the digital age is a challenge for all of us. Government at all levels, public-private partnerships and philanthropic institutions will play critical roles in preparing today's students for tomorrow's workplace.

Only 14% of teachers currently use the Internet as part of their instruction. We need to make much more progress here. At first, people believed that the Internet was suitable only for quizzes or just learning about technology itself. Today, the educational community knows that the Internet can be a resource for allowing curious minds to learn in new ways—about math, physics, philosophy, in fact about anything. A New York school superintendent attending one of educational conferences we hold at Microsoft recently explained that the PC and the Internet are encouraging students to do more writing, more reading and less TV watching. As a result, "I don't know" is fast becoming "I don't know yet."

Exciting projects are underway to give students the latest tools for learning. At Microsoft, we are working on a pilot project at 500 schools to provide laptops to each student. The results to date have been amazing in terms of increased learning. Many other companies and organizations are involved in similar efforts, whether providing the latest technology for learning or providing scholarships for math and science excellence.

I've had an opportunity to learn a little about how Birmingham Seaholm High School and Pittsburgh Super Computing Center College are using PC technology. Juniors at Birmingham Seaholm are using computers in a very entrepreneurial fashion—they have built a cookie factory and next year plan to develop a micro robot that will take cookies off the cooling rack. Students in Pittsburgh are doing great work on improving high speed networking performance and capabilities. These schools are to be commended for the work they've done to use technology as an important tool in improving education. I look forward to talking with some of the students who have been working with PCs. Unlike their parents, most of whom learned about computers in adulthood, the information age is the only age these students have known. Their success will depend on how well we teach them.

When you look at the phenomenal economic growth produced by technology, and the huge increase in demand for highly skilled knowledge workers, it is clear that our ability to continue benefiting from technology will largely depend on how well we educate the next generation to take advantage of this new era.

In closing, let sum up why I'm excited to be here today and to be part of this hi-tech summit. At Microsoft we make software. We make software for a simple reason—we want to provide tools to make people's lives better. At Microsoft we're excited about the future—we're excited about the tremendous economic benefits of our industry, but we're more excited about helping every individual—in business, in schools and in the home—lead more productive lives. Thank you.●

KATHERINE DUNHAM CELEBRATES HER NINETIETH BIRTHDAY

● Mr. DURBIN. Mr. President, I rise today to share with my colleagues a story about a most remarkable woman who is celebrating her ninetieth birthday. Her heroic existence embodies every element of a true American.