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SMALL BUSINESS ACCESS TO TECHNOLOGY

HEARING

BEFORE THE

SUBCOMMITTEE ON RURAL ENTERPRISES, AGRICULTURE, AND TECHNOLOGY

OF THE

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HEARING ON SMALL BUSINESS ACCESS TO TECHNOLOGY

THURSDAY, FEBRUARY 7, 2002

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SMALL BUSINESS,
SUBCOMMITTEE ON RURAL ENTERPRISES,
AGRICULTURE AND TECHNOLOGY,
Washington, DC.

The subcommittee met, pursuant to call, at 10:15 a.m. in room 2360, Rayburn House Office Building, Hon. John Thune (chairman of the subcommittee) presiding.

Chairman THUNE. This hearing will come to order. Good morning, and welcome to this hearing of the Subcommittee on Rural Enterprises, Agriculture and Technology. I would especially like to thank those of you who have traveled a long distance to participate this morning.

Today we are going to be examining the issue of small business access to technology. Small business owners are aware of all the benefits technology has to offer, but are not always in the best position to utilize technology to its fullest extent. As much as they might like, small business owners often times do not have the resources to devote to investing in new technologies.

On Tuesday, the Commerce Department released data indicating that more than half of all American households are now connected to the Internet and that 90 percent of children between the ages of 5 and 17 now use the Internet at home. While these figures are promising indicators of the technological skill level of future employees, small businesses still lag their larger counterparts in the use of technology.

We have with us today the Undersecretary for Economic Affairs at the Commerce Department, Ms. Kathleen Cooper. Undersecretary Cooper will be providing us with an in-depth look at a recent study by the Commerce Department entitled Main Street in the Digital Age: How Small and Medium-sized Businesses Are Using the Tools of the New Economy.

It is the Subcommittee's hope the results of this study will help small business owners and Congress gain a better understanding of how technology is used by the small business community and provide some direction as we look at ways to improve access to necessary technology.

In rural areas such as South Dakota, small business owners realize that to continue to serve their communities and remain competitive in an increasingly consolidated marketplace they need reliable and affordable access to technology. That technology might be

used to help a business manage its inventory or help it purchase and sell on line or help consolidate the massive amounts of paperwork small business workers are faced with daily.

Last year, the Subcommittee held two hearings on the issue of access to broadband Internet in rural areas. While we heard about some promising new technologies, it is clear that most people in rural areas do not yet have broadband capacity. This lack of access to broadband is indicative of the larger problem of access to technology in general for small business owners in rural areas.

Job creation is vital to the small communities and rural areas of our country, and access to technology will help stem population loss in rural areas. Residents will no longer feel compelled to leave their towns and communities in search of higher paying jobs and challenging careers. Farmers and ranchers, healthcare workers and retail store owners realize that if they want to keep and attract quality employees they need to have access to technology.

I look forward to hearing from our witnesses this morning, and I want to thank them for participating in today's hearing.

I would at this moment yield to the gentleman from New Mexico, Mr. Udall.

[Chairman Thune's statement may be found in the appendix.]

Mr. UDALL. Thank you, Chairman Thune. Thank you for doing this hearing. I know this is an important subject that you care a lot about and have focused a lot in on this Subcommittee. We know the benefits of high-technology properly applied. It boosts productivity, reduces cost, increases profits and wages and prepares workers for a lifetime of technological change.

One primary hurdle behind high-tech investment for small business is cost. Small companies see high startup prices and ongoing costs for support and personnel with unknown or uncertain benefits. But the use of information technology as a tool of commerce also relies on making another leap forward in communications infrastructure.

High-speed Internet connections are the next wave to propel the awesome potential of e-commerce and telecommunications. If one thing rings clearly from this report, it is that e-commerce is not even out of its infancy. The potential for growth is enormous. Twelve percent of manufacturing sales are now on line. The sales rate of wholesale merchants is up to 5.3 percent. Retail sales are lagging at only .5 percent of sales, but, if anything, the manufacturing and the B(2)(b) sales rates show where this rate could go. Clearly, the potential is there.

So what is the holdup? That seems to be clear, too. The growth of the Internet is restricted by bandwidth and the number of people with access to it. We need to do everything we can to make the Internet what it can be, an information conduit as wide and flush as the Rio Grande.

We also need to make sure that river reaches more people all across this country and that they have the tools to harness its power. Currently, high-speed Internet connections are really only available in urban areas. There companies and some homes can pay a reasonable sum for DSL, which uses existing telephone lines, but DSL requires the end user to be located only a few miles from

a major telecommunications switch available for now in densely populated communities.

As a consequence, DSL is not available in rural, isolated areas like my district, including Native American reservations that need this kind of service to make the Internet work for them. Fewer people living in this country's open, in between places have high-speed Internet access than people anywhere else, and they often have less money to pay for it. In areas like these, small businesses are critical to the communities they serve for employment opportunities and economic growth. Unfortunately, the big river of information runs a lot thinner and drier out there.

The Internet and its technology and tools for communication are here to say. The Internet still has a great potential to transform business by boosting productivity, employment, innovation and sales, but we will only reach that full potential if technology can expand its reach and capacity. We can widen and deepen this river of information and technology and make it available for more and more Americans.

Thank you, Mr. Chairman. I look forward to hearing the testimony of the panels.

Chairman THUNE. Thank you.

The Chair would now recognize the gentleman from Maryland, Mr. Bartlett, who would like to acknowledge one of our witnesses who comes from his district and to make his opening statement.

Mr. BARTLETT. Thank you. It is a real pleasure to be able to welcome a friend and constituent. We are a little late this morning, and it is ironic that I am late because I was at the National Prayer Breakfast with another trucker. Mr. Richmond is a trucker, and I was there with Don and Joanie Bowman. Don Bowman is the very recent past president of the American Trucking Association.

Mr. Richmond began his company, USA Cartage, in 1986 with one driver, himself, which is just the way Don Bowman started his company a bit before that. Mr. Richmond's company may have been one of those small business companies. I do not know how big his company was in the early 1990s when we were coming out of the last recession, but I was shocked by the statistics of where the new jobs appeared as we came out of the last recession.

If you divide businesses up into groups depending, you know, by their size, the largest, 5,000 or more, down to the very small businesses, zero to four employees, and that is a small business. When Mr. Richmond started he had zero employees, unless he paid himself with a paycheck. That was a zero employee company; just one person.

More than 90 percent, well more than 90 percent, of all the new jobs that brought us out of the last recession were created in businesses of zero to four employees, so small business is the engine which runs our economy. We are in a recession now. It will not surprise me that the same thing happens in this recession that most of the new jobs will come from small businesses. So it is very appropriate for this hearing this morning that we recognize some of the problems that small business has in accessing the technologies that can help them grow and very rapidly become large businesses.

I note that Bill Gates started not very many years ago as a small business, did he not. So it is still possible—increasingly more dif-

ficult with all of our regulations and high taxes—but it is still possible in this country to achieve the American dream. Mr. Ralph Richmond is one of those who has done this, so it is really a pleasure to welcome him here as a witness today.

I must again apologize because I need to leave. One of the problems we have here is that you cannot be in two places at once, and I need to go chair the Science Committee. The Chair of that must go to the Floor to manage a bill, his bill on the Floor, so he asked me if I would come and chair the Science Committee for him.

Thank you very much. I have read some of your testimony. I will read it all. I am one of maybe 35 people who came to the Congress as a member of NFIB, so I was a small business person in another life and understand your concerns and your problems and your challenges.

Thank you very much for coming today to contribute your knowledge in our desire to make technology more readily available so that small businesses can graduate from being small businesses and become big businesses and make room for others to come in as small businesses, which truly is the engine which drives our economy in this country.

Thank you very much, and thank you, Mr. Chairman, for yielding.

Chairman THUNE. Thank you. I would note as well and apologize for the late start. There were a number of us who were at the National Prayer Breakfast this morning and just got back up on the Hill.

I now yield to the gentleman from Illinois, Mr. Phelps, if you have an opening statement.

Mr. PHELPS. I have no opening statement.

Chairman THUNE. No statement. Okay.

We will turn to our witnesses. Before we begin receiving testimony from the witnesses, I do want to remind everyone and ask that each witness keep their oral testimony to five minutes. In front of you on the table you will see a little box that will let you know when the time is up. When it lights up yellow you have one minute remaining, and when five minutes has expired you will have a red light that will appear.

Once that red light is on, we would appreciate it if you could begin to wrap up or hopefully wrap up your testimony as soon as you are comfortable. We will obviously grant some discretion on that. There is no trapdoor there when the light goes off if you are not through.

What I first want to do, too, is recognize Kathleen Cooper, who is the Undersecretary for Economic Affairs at the Department of Commerce. She has to leave early, and so after we hear her testimony Members will have an opportunity to question her. After we are finished questioning, we will proceed with the rest of our witnesses.

Having said that, the bells are going off. Ms. Cooper, if you would like to go ahead? I do not know if we have time for questions. Your deadline is 11:00?

Ms. COOPER. Yes, but I can stay. I can stay if need be.

Chairman THUNE. If you could make your statement at least, and then maybe we can get a few questions asked before we head

over to vote. It is a 15 minute vote. If you would like to go ahead and proceed, we would welcome your testimony.

STATEMENT OF KATHLEEN B. COOPER, UNDERSECRETARY FOR ECONOMIC AFFAIRS, DEPARTMENT OF COMMERCE, ECONOMICS AND STATISTICS ADMINISTRATION

Ms. COOPER. Thank you very much, Mr. Congressman.

Chairman Thune, Congressman Udall and Members of the Committee, Member of the Committee, good morning. I am pleased to be here. My name, as mentioned, is Kathy Cooper, and I serve as the Commerce Department's Undersecretary for Economic Affairs.

My complete testimony has been submitted for the record, but I am pleased to be able to be here to provide a short summary of the highlights of the Commerce Department's report, Main Street in the Digital Age.

This report does provide some good news. First, small businesses are investing in and using the tools of today's economy. In fact, they invest about a quarter of their total capital expenditures on computers and communications equipment, approximately the same as large businesses.

Second, 70 percent of small businesses use computers. The data indicate that the majority of small and medium-sized businesses are also subscribing to the Internet.

Third, around 16 percent of employees of small and medium-sized firms who do not use a computer at work use it at home. This, combined with the share of small business employees who already use a computer on the job, suggests that there is a basic level of computer literacy in the current small business workforce.

However, our research also shows that the smaller firm, the less it invests in absolute terms in IT equipment on a per employee basis. Companies with more than 500 employees, as was referred to earlier, invested more, invested in fact twice as much per employee in computers and communications equipment as enterprises with 500 or fewer employees.

Employees at smaller firms are less likely to use a computer at work than their counterparts at larger companies, and the best available evidence suggests that small and medium-sized businesses are less likely than larger firms to undertake certain e-commerce activities like buying and selling on line.

Our report thus paints a picture of the diffusion, although the uneven diffusion, of information technologies to small and medium-sized firms. Our research presents a look first at entrepreneurs' information technology investment patterns and suggests a variety of questions about the role of small business in the digital economy.

Why, for instance, do large firms invest more than small and medium-sized firms in information technology equipment, and what role does the Internet and e-commerce play in helping businesses to succeed? Two factors help to account for lower levels of IT investment per employee.

First, although small and medium-sized firms devote roughly the same percentage of their capital spending to IT as do larger businesses, the total amount they invest in capital equipment is simply less than that expended by large firms. Second, smaller firms are

more prevalent in industries that tend to be less capital-intensive such as retail, services and construction.

Our data are revealing, but they do raise new questions that will require new data to answer. All of these are areas for further research. Improvements in the data collection programs at Commerce should aid in addressing these important research questions, and I would be happy to discuss these initiatives at a later point in more detail. They include the Census Bureau's American Community Survey, the Economic Census, which is the statistical benchmark of business economic activity and also the new economic indicators that are being considered reflecting the services in high-tech sectors of the U.S. economy.

The emergence of the Internet and the combination of increasing quality and falling prices of computer equipment during the last decade should not be overlooked in this context. Less expensive computers and easy to use computer networks have given small and medium-sized firms entree into the information economy. Small business may not be engaging in some of the more sophisticated online activities like buying and selling on line to the same extent as large firms, but most firms are at relatively early stages of incorporating the Internet into their business processes.

Furthermore, as you know, small businesses are an incredibly diverse collection of firms. Some of the most technologically advanced firms are small web-design firms, for example, independent software designers and so on. We cannot expect a single technological approach to be appropriate for every firm. Business owners must evaluate each technology and each online business activity in light of their business goals. This research is just one part of the Commerce Department's efforts to improve our understanding of small businesses in the new economy and to make sure that these firms are able to grasp the potential of new technology.

Secretary Evans' e-business facilitation initiative encouraged the OECD, the Organization for Economic Cooperation and Development, to examine the obstacles facing small businesses in conducting cross border transactions over the Internet. The Secretary wants to look for positive ways to help businesses use information technology and electronic commerce to expand internationally.

In my own agency, the Economics and Statistics Administration, we are making it easier for smaller exporters to complete their trade paperwork and submit it to us on line. This will reduce the administrative burden on small business and enable the Census Bureau to produce trade statistics more quickly.

The Administration's proposals are detailed. As I mentioned in my written testimony, the President's tax bill enacted last year has already helped small business, and his commitment to enhance trade policy and improve education will reap benefits down the road.

Mr. Chairman, Members of the Subcommittee, I appreciate your leadership. This is a critical time for the economy as a whole. As the Members of the Subcommittee well know, small business has been hit hard. I hope and expect that we will see a rebound in the near term. A solid recovery depends on a variety of factors, of course, including the strength of small business and the high-tech industry, both individually and together.

I thank you, and I would be happy to take questions at the appropriate time.

[Ms. Cooper's statement may be found in the appendix]

Chairman THUNE. Thanks, Ms. Cooper. Since we have some folks that are over voting and who will be returning here, I would rather, if we can, hold up on questions until they get back.

What I would like to do is move to our second witness, who is a gentleman from the great State of South Dakota, Tim Aughenbaugh. Tim grew up on a family farm near Iroquois, South Dakota. After graduating from South Dakota State University with a degree in Agricultural Engineering, he started his own business in 1991.

Tim's business, IdentityPreserved.com, produces Internet software that enables food companies and their supply chains to monitor production protocols and product safety and quality issues and does business in several countries throughout the world. Tim, his wife and three children live in De Smet, South Dakota, where he currently serves on the board of the De Smet Development Corporation.

It is a great privilege for me to be able to welcome someone from my own state, someone who has been a leader in this field and has some great insights and ideas about how to apply technology in the rural sector of our economy.

Tim, it is good to have you here today. Welcome. Please proceed.

STATEMENT OF TIM AUGHENBAUGH, PRESIDENT AND CEO, IDENTITYPRESERVED.COM

Mr. AUGHENBAUGH. Mr. Chairman and Members of the Subcommittee, it is an honor and a pleasure to come before you today and testify on the opportunities and challenges that technology represents to small businesses. The subject of technology, particularly as it relates to agricultural and other rural enterprises, has been at the center of my 11-year career as an entrepreneur.

The company I founded has strived to help production agriculture in the better use of technology. As you likely know, technology use has not grown as fast in this sector as it has in others. An ongoing difficulty in obtaining a strong penetration here is the challenge of making the technology easy to use. This is difficult because of the harsh work environment, the speed and long hours in which people work and the wide range of technical expertise that is found in the workforce.

Advances in the capabilities of technology, as well as the increase in technology infrastructure in rural areas, such as the addition of wireless and higher speed access, certainly make the job of providing these appropriate technologies an easier task. The need for technology in agriculture is on the rise. In order to meet the increasing need for food safety and security, as well as those of a more demanding domestic and international customer, today's farmer needs to communicate, coordinate, document and verify his efforts to the supply chain.

It is my opinion that in the near term most of the requirements for this type of production can be met with the addition of technology applied to our existing infrastructure. The farmer who is better able to meet the needs of this production environment will

find himself in a much more secure and valuable position. Therefore, if agriculture is to continue to deliver, I believe that investment in the development, access and training of new technologies will be crucial.

I would like to address technology as it relates to small rural businesses in a slightly broader manner. I concur with the Commerce Department's study that small businesses need to embrace technology in order that they can compete with their larger counterparts in several basic areas. I further believe that technology investment in technology industries themselves in rural areas can offer assistance on a very important subject, the stemming of outflow of young, talented people from these areas.

The reality of this outflow strikes pretty close to home. I currently sit on the board of directors of the Development Corporation of De Smet, South Dakota, a town of 1,100 people and the childhood home of Laura Ingalls Wilder, the childhood author whose books were made popular by the TV series Little House on the Prairie.

De Smet has been the beneficiary of a strong economic development effort and currently boasts 143 small businesses, including a strong industrial park. But the looming problem for De Smet, as it is for many other rural communities, is coming to terms with declining rural population. The concern is magnified by the fact that our young people and the potential babies that they take with them represent the majority of this population outflow.

In my home county, for instance, only 11 percent of the population is now made up of 20- to 34-year-olds. In recognition of the importance of this age group, one must look seriously at ways to retain them. In order to do that, one must look seriously at the reasons that they leave. From my own perspective, I believe that the driving force is not so much a desire to leave, but rather a desire to seek opportunity. In today's world, opportunity is pronounced 'technology,' and that opportunity is currently elsewhere.

A study recently conducted in South Dakota maintains that if any stability is to be attained, it will demand a holding power, which will allow young adults to stay and even return to a community. I believe that technology is one such holding power.

Challenges certainly abound in running a technology business from a rural location. In my own case, we utilize ten of the 11 copper phone lines coming from the town in my area. Our corporate office operates with an Internet connection speed that is often only a fraction of that of our offsite employees, the connection speed that they enjoy in their home offices. We were forced to open a satellite development office in Minneapolis in order to just hire some of our own homegrown talent that has chosen to live there.

All of these difficulties aside, it should be noted that technology itself allows us to run a technology business from a rural location. When people do go to the trouble of physically visiting our remote offices, they unfailingly mention that they cannot believe it is possible to do what we are doing from out in the boonies. Those comments are not only a testament to the fact that the technology is in place, but also a statement on its ability to deliver positive results.

The point may be that the technology pipe is technically built to flow both ways. Just as it allowed rural businesses to access services of the broader world, so, too, should that vast, broad world outside our rural boundaries be afforded the opportunity to access the talent, work ethic and solid values that personify the people of our rural neighborhoods.

I thank you for the opportunity to share my experience and perspective on these topics. I am hopeful that the Subcommittee's efforts can positively impact the opportunities and challenges we face in adopting technology in rural areas.

[Mr. Aughenbaugh's statement may be found in the appendix.]

Chairman THUNE. Thanks, Tim.

Since Mr. Udall has not returned, I am going to have to run. We have about two minutes left on the vote, so I am going to temporarily recess. As soon as he returns, we will continue with the testimony.

The hearing is temporarily recessed.

[Recess.]

Mr. UDALL [presiding]. The hearing will come back to order. We are doing a little shuffle here to try to keep it rolling for all of you.

I ran into John in the hallway. He wants to continue with the witnesses, so we will hear now from Ralph Richmond, who was previously introduced by Roscoe Bartlett. Mr. Richmond, please go ahead.

STATEMENT OF RALPH RICHMOND, PRESIDENT, USA CARTAGE, INC.

Mr. RICHMOND. Good morning, Mr. Chairman and Members of the Subcommittee. I would also like to thank Mr. Bartlett for that very kind introduction.

My name is Ralph Richmond. I am the president of USA Cartage, Inc., a trucking company based out of Williamsport, Maryland, and I am here representing the American Trucking Association. First, I want to thank you for the opportunity to share my thoughts and ideas on technology use in trucking and small business.

The trucking industry as a whole is large, moving 350 billion tons of goods every year. In fact, 82 percent of all freight in the U.S. is moved by truck. The industry employs more than ten million hardworking men and women. Seventy-four percent of all trucking companies have six or fewer trucks, so today I am speaking on behalf of more than 400,000 small to medium-sized trucking companies across the U.S. Challenges facing our industry today include shortage of skilled drivers, skyrocketing insurance rates, unstable fuel cost, increasing regulatory burden.

There are three factors that influence our company to look at and invest in technology. Number one is productivity. We look at how can we increase our miles per gallon? How can we extend oil changes? How can we handle data more efficiently? How can we make our trucks safer? How can we make our trucks last longer? How can we file our taxes faster?

Second, we are influenced by the marketplace. Changing customer requirements include many customers now and, because of technology by larger and larger companies that over the years have become more and more commonplace, customers now require that

you have electronic billing, that you have GPS tracking, and that you have Internet tracking for their shipments.

Third, we are influenced by government regulations and mandates. We need to invest in systems to keep up with and meet compliance issues with federal regulations and technologies mandated on our industry and equipment.

There are four thoughts I would like to advance to this Committee to help small businesses in dealing with technology issues. Number one, faster depreciation. Currently, systems are required to be depreciated over five years. With the speed of technology today, we are sometimes still depreciating systems after they are functionally obsolete.

Number two, tax credits. I encourage you to look at tax credits to small business for technology investments.

Number three, proprietary policies. Now, I am a firm believer in the American free market system, so this idea is just a little bit hard for me to articulate, so I would like to express it with an example and then give some other examples that I am involved with.

I want you to think for a moment that the technology is cable TV. You had that technology, and for some reason you were required to move to another city. In that city you had a different vendor for that cable service, and that service was not compatible or did not read the systems that you had. In order to hook up to that service, you would have to buy all new TVs in your house. The same thing if you for some reason had to move into another or get another service.

Fortunately, that is not the case in cable TV or in the cable industry, but our industry is faced with some emerging technologies such as satellite communications and GPS tracking that requires huge investments for the hardware and software, but are only proprietary to the specific vendors. These systems do not speak to each other, even though the technologies are fundamentally the same. These huge investments make it very difficult, if not impossible, for a small business to change to another vendor or better service.

Another example is that our industry is headed for requiring data transponders on our trucks to transmit data for several different government agencies. Once again, the technology is fundamentally the same, yet different states or agencies may have different systems or vendors, and we will be required to buy and maintain multiple transponders on each truck just to operate. I can only ask you where warranted for you to encourage standardization and freer access for companies to build on some of these emerging technologies.

Fourth, data privacy protection. One thing for sure is that today's technology can gather and store and make available data at unprecedented efficiency. I see that trend only getting more and more efficient as we move along. Data and information are valuable to every company, large or small. I urge you to bear that in mind as you set policies. Data privacy is very important to us.

I want to thank you for the opportunity to share my opinions with you, and I would be happy to answer any questions you may have. Thank you.

[Mr. Richmond's statement may be found in the appendix.]

Mr. UDALL. Thank you very much, Mr. Richmond.

Next, the Subcommittee will hear from Mr. Per Hugh-Jensen, owner of Bowhe & Peare Retail headquartered in Old Town Alexandria. Please proceed.

STATEMENT OF PER HUGH-JENSEN, OWNER, BOWHE & PEARE

Mr. HUGH-JENSEN. Thank you, Mr. Chairman and Members of the Subcommittee. First and foremost, I would like to thank you all for inviting me to testify here today on behalf of the National Retail Federation.

The National Retail Federation is the world's largest retail trade association with membership that comprises all retail formats and channels of distribution, including department, specialty, discount, catalog, Internet and independent stores. NRF members represent an industry that encompasses more than 1.4 million U.S. retail establishments, employs more than 20 million people, about one in five American workers, and registered 2001 sales of $3.5 trillion.

N.R.F.'s international members operate stores in more than 50 nations. In its role as the retail industry's umbrella group, NRF also represents 32 national and 50 state associations in the U.S., as well as 36 international associations representing retailers abroad.

As an owner of a small retail chain, Bowhe & Peare, here in Old Town Alexandria, we are presently facing many of the challenges which I will briefly outline today. As we look to grow and expand our business over the next 12 to 18 months, it is imperative that we integrate a system into our business which allows us to track sales, inventory, inventory turnover, customer purchases, et cetera, along with a customer database.

While most business owners would agree that this is imperative, there are many obstacles that small and medium-sized business owners, in particular retail, face in making these decisions. They are as follows:

Cost. This is probably the area most evident in making these decisions. Because of today's economic climate, making the decision to invest thousands of dollars into the business is somewhat risky, thereby creating a fear factor. On the other hand, if you are going to become a leader in your state, you must have the ability to evaluate your business to make strategic decisions to grow the business intelligently.

There are great products on the market that allow you to do this today. Recently, both Microsoft and Oracle have announced initiatives to launch products and services for small and medium-sized businesses, but I suspect that we are not at the top of their priority list based on what I just stated.

Education. When a company has made a decision to incorporate certain technologies into their organization, they must also be able to train their staff on the use of these technologies. Since in the gift industry in our geographic area we have a lot of part-time help making $9 to $15 an hour, this presents a great challenge in incorporating these new systems into our business model.

There is an up-to-speed issue that business owners must understand. In retail, almost all employees are in touch with the systems we decide to incorporate into our business. I would venture to say that the retail industry, in particular in the small to medium size

range, is not technologically savvy. This is why we are not perceived as a great market by many of the large supplier companies that are out there in the market today.

It is hard for the retailer to understand why to incorporate something into their business when "everything is working fine for me today." It is equally hard for the technology suppliers to SMEs to find business owners who understand and appreciate the value of what some of these products can do to enhance their business. Because many of these small retailers over the past six to nine months have had to streamline their resources, they have had less time to focus on the "what is next" portion of their business.

I believe there should be local community initiatives that allow the owners of small and medium-sized businesses to discuss these issues and become more educated on what is available to them. Some of us here in this room might argue that the local chamber of commerce units throughout the United States and other nonprofits provide this service, but I feel that there is a great disparity between the SMEs and the larger businesses out there today.

Change. There is a saying that people are afraid of change. This fear escalates in times of economic uncertainty. I believe this is true in what we are discussing here today. Unless people can truly see a direct benefit to their business, as opposed to someone trying to "sell" them something, they are reluctant to make these changes to their organization. It takes a lot of time, money and patience; thus, the reluctance to make the change.

Obsolescence. This is also an important area to discuss. In my company, we are looking to spend in excess of $150,000 on new technologies for a four-store operation over the next ten to 12 months. Because of the size of our organization, we cannot afford to make a decision on some technology that becomes obsolete in two years, nor do we want to be forced to upgrade to some new version of software in order to stay compatible and receive the proper maintenance and support. This is a very, very common issue that we see out there today.

A great example of where this has happened before and where this is prevalent is in the healthcare industry where in the early 1990s a lot of the healthcare companies or I should say the hospital groups made major expenditures where they only found two to three years later a lot of these systems were proprietary and could not integrate or speak to other systems within the organization.

If the technology that we decide to purchase cannot scale with our business moving forward, we risk not being able to grow or even the potential of going out of business. Both my brother and I have experience in IT so I would say that we are the fortunate ones, but this is by no means the norm.

In closing, I believe most retail SME business owners will likely never have enough technical knowledge to be able to stay abreast of technological change. This is probably just as well because that knowledge is not a core competency of retailers. I believe that there will one day need to be a model where retail SMEs can pay a monthly fee for a shared service and ASP model that provides all necessary retail applications at a lower cost. This should allow them to incorporate technology, be cost-effective and have an online

help service that is user friendly. Most importantly, it will allow them to focus better on their core business.

I also think we should look at having some form of a stamp of approval provided by a third party, a nonprofit, that would give the retail SMEs some level of assurance that these products conform to industry best practice.

Thank you very much for giving me the opportunity to speak with you here today. I welcome any questions you may have.

[Hugh-Jensen's statement may be found in the appendix.]

Chairman THUNE [presiding]. Thank you, Mr. Jensen.

We are going to move to our last witness this morning, who is a small business owner from Crofton, Maryland, Steve Pequigney. Steve is president of Integrated Imaging, Inc., better known as I-Cube. Please proceed.

STATEMENT OF STEVE PEQUIGNEY, PRESIDENT, I–CUBE

Mr. PEQUIGNEY. Good morning, Chairman Thune and Members of the Committee. I thank you for the invitation and the opportunity to present testimony on behalf of the National Federation of Independent Business, NFIB, regarding small business and technology investment. NFIB is the nation's largest small business advocacy organization, representing more than 600,000 small business owners in all 50 states and the District of Columbia.

My name is Steve Pequigney, and I am a small business owner from Millersville, Maryland. I sit before you today with a unique perspective; not only am I a small business owner, but I am also a technology professional.

In the late 1980s, I was in charge of a sales office for a high-tech corporation when all outside sales offices were closed. I found myself facing two choices: securing another corporate job or striking out on my own as an entrepreneur. I chose the latter, and my company, Integrated Imaging, Inc., known as I-Cube, was born.

I-Cube is a four-person digital imaging company that sells equipment and services such as high-tech digital cameras, computer interface boards and scientific imaging software to government labs, universities and corporate research and development clients.

In my opinion, the personal computer is one tool that can make an immediate improvement in efficiency for small business owners. For example, an accounting program such as Quickbooks can be utilized on a PC in order to eliminate heaps of paperwork associated with entering orders, generating invoices and financial statements, paying bills and processing payroll.

Utilizing accounting software has allowed me to save time and money, for example, by simply maintaining records electronically which can be copied to a removable disk and sent to my accountant for tax preparation. Other software, such as customer contact database programs, can be used to eliminate manual tasks of organizing and maintaining customer addresses, phone numbers and e-mail addresses.

A second area of technology investment that has become increasingly important to small business owners is the Internet. E-commerce is here to stay, and small business owners must compete in this marketplace. Additionally, the Internet offers small business

owners a unique opportunity to overcome the economies of scale that often bar them from competing effectively against larger firms.

I-Cube has maintained a web presence since the mid 1990s, and the presence of product and technical information and lead generation stemming from our website, i-cubeinc.com, is invaluable. In years past, I purchased print advertising in trade publications in order to market I-Cube. Today, that is unnecessary. In fact, my only advertising is accomplished via the web. In addition to simply advertising, I-Cube utilizes the website to showcase products, to expedite customer service and to actually sell products on line.

As you can see, I believe technology investment, even a minimal amount, is a great thing for small business. However, as the recent Commerce Department study highlights, not all small business owners have jumped on the technology bandwagon.

So what are the barriers? One major barrier is the unfamiliarity with or even fear of technology itself. For many small business owners, especially those who have spent years running their businesses the old-fashioned way, technology can be daunting. Large corporations have entire IS or IT departments to analyze e-commerce and technology needs, purchase and maintain equipment and to train users. For those with no technology background, consultants, often with high price tags, must be hired to handle technology needs.

A second barrier that I have personally experienced is the difficulty in finding and hiring qualified workers. Even if a new employee has technological aptitude, he or she must still often be trained on specific programs and software.

In November 2000, NFIB asked its members if small business owners should be allowed a tax credit for technology credit. Seventy-six percent of members responding answered yes. This poll provides strong indication that technology training for small business owners and their employees is a need for many on Main Street.

So there are opportunities and challenges to technology investment for small business owners. What are the solutions? I think the overwhelming objective must be to provide education and resources that allow small business owners to see the value of technology to their bottom line and to assist them in analyzing, purchasing, training and utilizing technology.

A second objective, in my opinion, would be to make technology accessible and affordable for Main Street. Small business is the engine that drives this nation's economy, and it is important that small business be in a position to take advantage of opportunities in a fast-moving, technology-based marketplace.

In conclusion, I commend the Chairman and the Committee for examining the topic of small business and technology investment, and I thank you for the opportunity to speak here today. I would be happy to answer any questions related to my testimony.

[Mr. Pequigney's statement may be found in the appendix.]

Chairman THUNE. Thank you, Mr. Pequigney, and I apologize for butchering your name.

Mr. PEQUIGNEY. No problem.

Chairman THUNE. I do have a few questions, and then I will yield to my colleagues here for some questions.

I should introduce Mr. Carson from Oklahoma, who has joined us. Any statement that you would like to make?

Mr. CARSON. If we could go straight to the questions, Mr. Thune, I think that would be most appropriate.

Chairman THUNE. Very good. Thank you.

I would like to address a couple questions to Undersecretary Cooper. To what degree has the recession and the sharp downturn in technology and the technology sector, how that has affected small businesses? I mean, do you see evidence of that fact? Can you elaborate on that?

Ms. COOPER. I think there is no question that that is the case. Certainly there has been a very sharp downturn in the last year and a half in IT spending overall, and it has affected small businesses, just as it has the larger ones.

Small businesses do not tend to have as much of a backstop as do large businesses for some of the same reasons that have been mentioned by my fellow panelists, so it has made it tougher. But I would say it is encouraging at this moment because we are seeing a leveling off in the declines in IT spending nationwide.

I would expect that before too many more months we will see some upward movement, not just a leveling off. That would be in spending by small businesses and larger businesses as well. All of that is a plus for the U.S. economy and a plus for small businesses.

Chairman THUNE. The data that you compiled in the report primarily uses 1998. I would be curious to know, are there things that you are doing to improve your data collection and make it more current, particularly in rural areas? That is one thing I guess I would like to see more of an emphasis on. Any thoughts about how you might accomplish that?

Ms. COOPER. Well, I mentioned a couple things where we are trying to improve the data collection.

Chairman THUNE. Right.

Ms. COOPER. This is an unusual and special project that we did. Some of the data that we used for this particular project will not be available and will not be collected again until next year. But because of the amount of interest that we think there is out there in following the trends that we have seen or this baseline that we have seen from this report, I am sure that we will do that again. We will update this report and get the new data next year.

As far as the question of rural versus urban, I guess we do not really have that in this particular report. I did want to mention in response to what Congressman Udall mentioned earlier that we are encouraged by the fact that we are seeing essential parity in urban and rural populations in terms of their use of the Internet.

That is not broadband, no question, but it is a first step and I think good movement in that direction, so we ought to see this evolutionary process of people and then small businesses starting to use more and more of the technology and being able, therefore, to prosper and contribute even more to their development and development of their companies, sell overseas and so on.

Chairman THUNE. Thank you.

Mr. Aughenbaugh, one of the things in the Commerce study findings indicated that there were a low number of agricultural workers that would use a computer at home or at work. I am just curi-

ous to know, in your experience, is this a real problem? Is that something that you see?

Mr. AUGHENBAUGH. Well, from my experience, and working with people in that industry really across the country, I would say that there is a general lack of training for many of the people who are in the business-making decisions.

Many of the younger people who are coming back into that industry and are afforded the opportunity to do that have gone and gotten some training and are much more familiar with it, but in many cases in people 40 years old and up that are often managing these businesses or have the assets underneath them to be able to participate today in the agricultural community, there are some barriers related to just almost a fear factor related to using technology.

I have seen some people be fairly comfortable with it even, but just their inability to type has stopped them from participating at the level that they could.

To some extent as technology is increasing as we get more higher speed access and more different technologies out into the countryside, I think we will be able to develop technologies that more easily interface with these people so some of the hurdles will not be there, but those days are yet to come.

Chairman THUNE. What types of technology do you see most benefiting the agricultural economy?

Mr. AUGHENBAUGH. I think the dominant one has to be access to the Internet. It brings an awareness that goes beyond the local community that has not been there in the past and instant access to information that can be used for marketing reasons of crops, that can be used for better access and better and more efficiently producing crops, those types of things.

Secondarily to that are better methods that farmers can use to collect data on their farms, which then can be used by consultants to advise them if they do not have the knowledge to use that information, or that information can be better shared with the supply chain that they are involved in, which should strengthen their role in that supply chain.

Chairman THUNE. How do we make farmers more aware of the benefits of technology?

Mr. AUGHENBAUGH. I think awareness is out there in general. It is more the ability to then act on that awareness that is the issue, and that certainly involves training and investment in technologies that can speed that process up for them, such as higher access to the Internet.

Chairman THUNE. I have some questions for some of the other witnesses, but I yield to Mr. Udall.

Mr. UDALL. Thank you, Mr. Chairman.

Dr. Cooper, some information I received in preparation for this hearing states, "The Administration would like to see widespread availability of broadband communications."

My question for you is what proposal does the Administration recommend to ensure that all small businesses throughout the country have affordable, high-speed Internet access?

Ms. COOPER. Well, I can say that we have not yet formulated any specific proposal on broadband policy. We, as you might well imag-

ine, are very interested, as you are, in having widespread access for small businesses and for the population at large, but what we know is that it is much better—everyone will be able to afford it much better, small business will be able to afford it much better—if we are in an environment where the economy that is a stronger economy.

That is one of the reasons we have pushed as hard as we have over the course of this last year with regard to getting tax rates changed and allowing small businesses to be able to have somewhat improved incomes in order to make the investments that we know are needed over the course of the next year and pushed as well in terms of trade and education to allow small businesses to do that when the time comes.

Mr. UDALL. I assume the Administration sees this as a high priority from your perspective in your Department in terms of broadband into all areas, including rural areas?

Ms. COOPER. We do see it as a high priority, but, as you can well appreciate, it is a very difficult issue and one that we want to be very careful in terms of coming up with the right set of proposals so we have not been specific yet in that regard, but we are working on it. We take it very seriously.

Mr. UDALL. If you look at your statistics in this report and you are comparing urban and rural, is it fair to say that there is a huge disparity there between urban and rural on broadband?

Ms. COOPER. I think there is a large disparity. It has to do with costs in rural areas. It is a lot more cost effective in urban areas, concentrated areas, for installing the technology and providing it to a wide range of people. When we get to the rural areas, those that would have to make the investment would have to make a lot more significant investment for a smaller number of people, who then would pay the bill.

I think we understand why that is the case. We just have to figure out the most effective way to move in the direction of getting closer to parity over a period of time. We do not know exactly what the right amount of time is. Here I am as an economist. I think of everything in terms of a tradeoff. People have to look at prices and cost-effectiveness.

We have heard from the people on the panel—I think they said it much better than I could say it—that there is still some fear of technology. All of that takes time to work its way out, and it has to work its way out in terms of price as well, but I think we are very much moving in the right direction.

Mr. UDALL. The whole idea of moving this into rural areas, I think part of it is that the employment base there and the growth that we want to see, and I know the Chairman has a district very much like mine where I think there is a skilled workforce out there in rural areas.

If you just have the ability to have broadband and have everybody hooked up, I think there would be a workforce that business could plug into. You, I am sure, agree with that. It is just how we get that done. We may have to think outside of the box, it seems to me, in terms of the economics and everything else.

Have you looked at the different ways? I know you say the policy is not set yet, but have you looked at the combinations that might

be there? I mean, is this something government should do, or should it be in the private sector, or should it be a combination of both?

Ms. COOPER. Congressman Udall, I understand your interest in this. I would simply say that this is not an area that I am spending a great deal of my time on.

We are providing the information, and I know the Commerce Department itself, with the rest of the Administration, is developing such a policy. What we are trying to do with this report and with this information is to help people understand what indeed the changes that are out there might be and what the goals should be when we do develop that policy.

I would remind you again that all of this would be more affordable with a strong economy. We certainly want to do that. I think the news from this report is quite good in the sense that small businesses, whether urban or rural, are devoting a quarter of their investment into high-tech expenditures.

That in and of itself says that they are ready and willing and their employees are a lot of them using computers already either at home or at work, so I think it is a good story. It is just a question of exactly what the right way to go is. We are moving towards a policy, but it has not been finalized yet.

Mr. UDALL. Thank you very much for your testimony.

Ms. COOPER. Yes.

Chairman THUNE. MR. CARSON.

Mr. CARSON. Thank you very much, Mr. Chairman. I apologize for missing the opening testimony of Dr. Cooper and Mr. Aughenbaugh, if I am pronouncing that correctly. I read your testimony with interest, and I want to thank you and the rest of the panel for your testimony today.

I also read the report from the Department of Commerce with great interest as well. I wonder if I could just ask a couple of questions about that and then a couple of questions perhaps to Mr. Aughenbaugh as well about some of the problems that he outlines in his testimony about the difficulty getting his business on line and hooked up with the kind of connection that he needs as well.

I know that in the report, Dr. Cooper, you discuss some estimates from various trade groups and private organizations about the percentage of businesses that have access to broadband. Is there any sense of the percent of the population in this country that has access to broadband services?

Ms. COOPER. The number that I hear for the U.S. is right around 10 percent, 10 or 11 percent.

Mr. CARSON. That is the number I usually see reported as taking up broadband services. My question is the percent of people who have access to it if they so desire to have it.

Ms. COOPER. I am not familiar with how to come up with a different way to look at it than that. The only one I am familiar with is the 10 percent.

Mr. CARSON. Do you have any sense of that 10-percent number and how it breaks down between urban and rural or for the business community alone perhaps, if not the entire household——

Ms. COOPER. I do not. Earlier Chairman Thune mentioned a report that we released earlier, A Unique Nation On Line. I do not

have the numbers in my head. I do not have them with me, but we certainly can get them to you.

Mr. CARSON. Very good.

Ms. COOPER. There is some breakdown in that.

Mr. CARSON. Do you know if there is a breakdown as well of that 10 percent of businesses that have access to broadband, some form of broadband—DSL, cable, wireless, satellite?

Ms. COOPER. I have heard estimates along those lines. We will get you what we can find. Certainly we would be happy to do that.

Mr. CARSON. Very good.

Mr. Aughenbaugh, let me ask you a couple of questions. You discussed the fact, as I recall, your business went to a satellite hookup. Is that correct?

Mr. AUGHENBAUGH. Yes.

Mr. CARSON. Tell me why you went to a satellite hookup. Does your community have DSL? Does it not have wireless? Tell me what led you to go to a satellite.

Mr. AUGHENBAUGH. Because our business is directed to the agricultural market, we decided to build our offices. Once the business became successful seven or eight years ago, we decided to build our offices in a rural location just outside of town to have closer access to the customers we serve.

Mr. CARSON. And how big is the community that you are close to?

Mr. AUGHENBAUGH. The one that I live in is ten miles away. It is 1,100. The one that our office is closest to is a town by the name of Iroquois, which is around 350 people.

Mr. CARSON. Okay. So very small.

Mr. AUGHENBAUGH. Yes.

Mr. CARSON. Okay.

Mr. AUGHENBAUGH. During the growth of our business, we grew to expand to need ten of the 11 phone lines that came out of that area, as I testified to. Our need was actually much greater than that, and it kind of caused the need for a bunch of switches and combination boxes and the like.

In fact, at one point one of my partners there, I overheard him talking to our business development office in Minneapolis and referred to our office as Planet Iroquois due to the inadequacies of the communication there. DSL is not an option in our company just because of length from the central office.

Mr. CARSON. Who is your local exchange carrier there in your area?

Mr. AUGHENBAUGH. Bell.

Mr. CARSON. Is it one of the regional Bell companies?

Mr. AUGHENBAUGH. One of the regional Bells. U.S. West or whatever name they call themselves today.

Mr. CARSON. I understand.

Mr. AUGHENBAUGH. We made a decision after talking to the phone company in which they were going to require a several thousand dollar investment for us to pay them to bury more fiber into our area off the main trunkline to go instead with an investment in digital satellite capabilities.

Our first step into that was paying several thousand dollars for our own computer server station that would really receive downlink

from a satellite, but at that point in time all we were able to have was uplink through a local dial-up connector. Any problems we had at that point was dealt with between two suppliers.

Mr. CARSON. Right.

Mr. AUGHENBAUGH. Later on we were able to go to a satellite connection, which we now use, that goes up and down.

Mr. CARSON. Very good. One of the major debates in this whole controversy over broadband is how we stimulate demand for it. The application is out there. Now that Napster has gone, the font which attributed so much of the demand for broadband in the consumer market at least, that there is not a demand out there because the application does not exist.

Tell me how your business is using it. Why broadband? Why do you need it in a way that a 56K dial-up connection is not sufficient for your work?

Mr. AUGHENBAUGH. Increasingly, our business has grown to do commerce with several countries around the world as it relates to food production and food tracking and food safety. Increasingly, as we demonstrate these new capabilities to other people we try to do that via demonstrations over the web.

That is where our technology is based, and that is also a very efficient tool, as opposed to traveling and scheduling other activities for us to do so. Currently, it is very limited, the type of technology we can use to do that.

To expand on that just a touch, Congressman Udall mentioned access to the capabilities of rural people. I think that the work ethic and the raw capability of people in rural areas is in demand by companies. They express a desire to move certain types of activities there.

Increasing capabilities and infrastructure of broadband technology is a pipe that can work the other way to these companies so that a community can serve a broader industry and enterprise that is out there.

Mr. CARSON. Can you tell us how much you pay for that two-way satellite hookup?

Mr. AUGHENBAUGH. My wife can. I believe it is several hundred dollars a month, $300 a month or so that we pay for access charges beyond the equipment.

Mr. CARSON. Just in your own experience, are other businesses in South Dakota in rural areas like the one in which you live and work, are they taking advantage of the satellite technology for Internet access, or are consumers in households?

Mr. AUGHENBAUGH. Most have not made that leap. It takes quite a bit of internal technical support at our company just to keep it up and running, and so most of them may do with a dial-up connection, which is what they have today.

Mr. CARSON. Very good. One last question to Dr. Cooper, and this may not be data you have at your immediate disposal or perhaps you haven't even collected.

In some of the surveys that have been done on small businesses do we know, and I know you have some hypotheses about why small businesses are not investing as much in IT as our large businesses that all sound quite plausible. Any survey data or similar ideas about businesses that are offered various broadband tech-

nologies, various advanced services, their decision to take them up or not?

That is, we have broadband offered a lot of places across the country. People do not want it. It is expensive, more expensive here than in most countries around the globe attributed to the lower take-up rate of it.

Any reason why small businesses—maybe they do not think they need it, for example, for their day-to-day work. Maybe there is not that application out there. Any sense of numbers why people are not taking more advantage of the high-speed advanced services?

Ms. COOPER. I have not seen specifically any research on that, but I would say to you that I think everybody, and I think we have heard vivid examples of this in the testimony that we have heard this morning. Every small business person is looking at the tradeoff between benefit versus cost.

If they think that it will help them make money, the speed and so forth that they get from it will help them add to their business, then I think they will go ahead and be willing to pay the cost. I think it is that tradeoff between price and benefit. Clearly what I think small businesses will increasingly do is more and more begin to use it.

We heard good examples I think as well of what large businesses' role is in all of this. They tend to spend money, learn some of the mistakes, get some of the providers of these services to change to make them more user friendly, and then ultimately small businesses will get a better product. I think that is what they are waiting for. They are waiting for to some degree a better product.

But all of this, of course, this Administration is very, very interested in, in fostering small businesses' access to capital and to people who know how to use the Internet and are learning how to use the Internet. We know that small businesses have to take on risk, and we want to make sure that they are rewarded for those risks.

I think this is just one more set of policies that we are allowing them. We certainly know they have to make these choices themselves, and they will.

Mr. CARSON. Thank you, Dr. Cooper, and thank you, all members of the panel, for being here today. Thank you, Mr. Chairman.

Chairman THUNE. Thank you. I understand, Dr. Cooper, if you need to excuse yourself. We appreciate your testimony and response to questions this morning.

A couple of questions for the entire panel if I might. Again, this has sort of been hit upon or touched upon in some of your testimony already, but I am just curious to know how much of a barrier lack of broadband access is to the effective use of e-commerce for small businesses.

Mr. Aughenbaugh has testified that in his particular set of circumstances broadband was a necessity in order to be able to demonstrate his services on a website, but how many of the others of you have experienced, in terms of is that something that really prevents businesses from using e- commerce as a tool, not having broadband access?

Mr. PEQUIGNEY. Somewhat from a communications perspective. I mean, for information traveling from one point to another broadband is a great benefit. If you think of files and things that

need to be transferred from one location to another or if you are accessing and searching for information on the Internet, broadband saves you time. It allows you to be more efficient.

Chairman THUNE. Does anybody else care to tell me?

Mr. HUGH-JENSEN. I was just going to say that I think also in developing some of your applications that you are using on line, I think there are some applications that can be developed using a lower bandwidth so really, I mean, you are sort of limited depending upon your location.

I think, once again not living in a rural area, I would have to say that in my opinion I think that bandwidth today is adequate. I think there are many, many other issues that sort of complement the broadband argument that need to be thought of as well.

Chairman THUNE. Could you elaborate on that a little bit?

Mr. HUGH-JENSEN. Well, I mean, in part of my testimony I just think that if you are talking from a small retail perspective I think you have seen a lot of people streamline their internal resources. You know, we hear all the time that everything in our lives today is based on we are too busy. There are all these services out there. Anything that we can do quickly is something we are interested in.

There is a time issue to be able to train part-time employees on how to use these technologies that you are going to incorporate into your business. You know, obviously the cost, which we brought up today, is also prevalent.

When I was referring to cost, I was referring more to the hardware and software aspects, as opposed to the actual connectivity costs from my perspective. I was really referring more to hardware, software——

Chairman THUNE. Right.

Mr. HUGH-JENSEN [continuing]. Understanding of the costs to be able to—there are a lot of software companies out there now that you can purchase and you are forced almost to continuously make these upgrades on a periodic basis. If you do not make these upgrades, you basically will not receive the same service level as someone who does; once again, also an issue when you think about making these huge capital expenditures.

Chairman THUNE. Can any of you sort of quantify the benefit of technology to your bottom line? Can you measure? Is there a way of saying, you know, that we are this much more profitable because we use technology?

Mr. HUGH-JENSEN. Speaking from a retailer perspective, we just had a meeting up in New York with a bunch of larger retailers as well. We actually have a database. We have a small store, but what we do is we ask people to provide us with their e-mail address once they are in the store.

In two years, we have an e-mail database of about 8,000 people, so from a perspective of doing regular print advertising, print advertising, newspaper advertising, whatever your normal marketing avenues are, we are able to really see a tremendous bottom-line cost savings from a standpoint of really being able to market new promotions, new products, items that are basically going to be discontinued, et cetera.

We do offer an opt-out to all of the people. They have actually given us their name, address, e-mail address. Sometimes they for-

get that they did that, so in doing that we offer them an opt-out to say please do not send me. We do not really overburden. We send out probably about six to eight a year spaced out based on promotions, new lines, et cetera.

I cannot tell you a dollar amount other than we have lowered our marketing costs probably from 2000 to 2001. We have probably cut our costs in half from what we expected for marketing from 2000 to 2001. We have probably cut that in half, which is nice because now we can go and invest the monies that we need to upgrade to the latest version for our POS system that we are using.

Chairman THUNE. Does anybody else care to——

Mr. PEQUIGNEY. Yes. I would say that without the available technology our company has taken advantage of, we would be hard-pressed to have done—we would probably be about 40 percent down from a revenue perspective.

Chairman THUNE. Let me ask you one other question just for the panel, too. Have any of you lost customers because your access to technology is not at the level of a larger competitor? Does it put you at a disadvantage if the technology is deficient relative to those larger businesses in the market that might have access to that sort of technology?

Mr. RICHMOND. I cannot say that we ourselves have lost, but I do know smaller companies that have. In our industry, it is starting to come more and more where customers are going to maybe a third-party logistics.

One of the things that is required when they take over and they might be writing a bid package is do you have GPS tracking? In a DOT contract, do you have GPS tracking? If you have not been keeping up with that or been handling that freight when that data comes out, you are off the contract.

I know people that have lost for that very reason, or a customer will go to an EDI-type billing system or an Internet- based shipment status billing. If you do not have that capability, you cannot get that business.

Chairman THUNE. Anybody else?

Mr. PEQUIGNEY. I would say in our company, since we are a technology company, our size actually benefits us in many cases because we are able to take advantage of things that larger companies do not tap into as quickly.

Chairman THUNE. Do you have any other questions?

Mr. UDALL. I do not have any additional questions, but I would like to thank each member of the panel for the insight and energy you bring to this issue. Thank you very much for your testimony today.

Chairman THUNE. Let me just close again also by echoing what the distinguished gentleman from New Mexico said. Thank you for your testimony. This is very insightful and helpful.

Like Tom, I have a keen interest in how we bridge this digital divide that exists in this country. We are always seeking suggestions on policy that we can implement here, things that we might be able to do to provide incentives.

There are some things out there that have been proposed. So, to the degree that those solutions will help to sort of close that, I mean, I think increasingly what we see in my part of the world,

which is very rural and sparsely populated, is that we just do not have some of the same access to those technologies that those in more populated areas have. It makes it difficult.

I think that Mr. Aughenbaugh touched on it exactly. It is a way of keeping people in rural areas if we can figure out a way to not only provide access to technology, but how to apply it. Part of that comes back to making sure you have people that understand and are trained in using it.

But there are a whole range of issues here which I think strike very profoundly at our ability to survive and prosper in rural areas of this country, and so it is an issue of great importance to me, as I know it is to Mr. Udall and others who represent rural areas.

We appreciate the insights that you have provided on this, and we welcome your input in the future as we consider things that we might do here in terms of public policy changes that would make Internet access, broadband access technology more readily available in rural areas.

I thank you again for your testimony. With that, we will conclude the hearing.

[Whereupon, at 11:30 a.m. the Subcommittee was adjourned.]

JOHN THUNE, South Dakota
Chairman

TOM UDALL, New Mexico
Ranking Minority Member

Congress of the United States
House of Representatives
107th Congress
Committee on Small Business
Subcommittee on Rural Enterprises, Agriculture and Technology
2361 Rayburn House Office Building
Washington, DC 20515–6315

Opening Statement
Chairman John Thune
Subcommittee on Rural Enterprises,
Agriculture and Technology
February 7, 2002

Good morning and welcome to this hearing of the Subcommittee on Rural Enterprises, Agriculture and Technology. I would especially like to thank those of you who have traveled over a long distance to participate this morning.

Today we will be examining the issue of small business access to technology. Small business owners are aware of all the benefits technology has to offer, but are not always in a position to utilize technology to its fullest extent. As much as they might like, small business owners often times do not have the resources to devote to investing in new technologies.

On Tuesday, the Commerce Department released data indicating that more than half of all American households are now connected to the Internet, and that 90% of children between the ages of 5 and 17 now use the Internet at home. While these figures are promising indicators of the technological skill level of future employees, small businesses still lag their larger counterparts in the use of technology.

We have with us today the Undersecretary for Economic Affairs at the Commerce Department, Ms. Kathleen Cooper. Undersecretary Cooper will be providing us with an in-depth look at a recent study by the Commerce Department, entitled "Main Street in the Digital Age: How Small and Medium-Sized Businesses are Using the Tools of the New Economy." It is the Subcommittee's hope that the results of this study will help small business owners and Congress gain a better understanding of how technology is used by the small business community, and provide some direction as we look at ways to improve access to necessary technology.

In rural areas such as South Dakota, small business owners realize that to continue to serve their communities and remain competitive in an increasingly consolidated

marketplace, they need reliable and affordable access to technology. That technology might be used to help a business manage its inventory, or help it purchase and sell online, or help consolidate the massive amounts of paperwork small business owners are faced with daily.

Last year, the Subcommittee held two hearings on the issue of access to Broadband Internet in rural areas. While we heard about some promising new technologies, it is clear that most people in rural areas do not yet have Broadband capacity. This lack of access to Broadband is indicative of the larger problem of access to technology in general for small business owners in rural areas.

Job creation is vital to the small communities and rural areas of our country and access to technology will help stem population loss in rural areas. Residents will no longer feel compelled to leave their towns and communities in search of higher-paying jobs and challenging careers. Farmers and ranchers, health care workers and retail store owners realize that if they want to keep and attract quality employees, they need to have access to technology.

I look forward to hearing from the witnesses, and I thank you all for participating in today's hearing.

DEPARTMENT OF
COMMERCE
Washington, D.C. 20230

ECONOMICS
AND
STATISTICS
ADMINISTRATION
Office of the
Under Secretary

Testimony of
Under Secretary for Economic Affairs Kathleen B. Cooper
Before the Sub-Committee on
Rural Enterprises, Agriculture, and Technology
February 7, 2002

Chairman Thune, Congressman Udall, members of the subcommittee. My name is Kathy Cooper. I am the Commerce Department's Under Secretary for Economic Affairs, which means I manage the U.S. statistical bureaus that produce much of the nation's economic, social, and demographic data.

I am pleased to be here this morning to share with you a Commerce Department report describing the important and developing relationship between American small business and "the new economy."

The term "new economy" was coined to describe an economy with surging productivity due largely to investment and use of information technologies (IT) like computers, software, and networks. And despite the recent economic slowdown and recession, higher trend growth in productivity appears to be continuing. U.S. businesses continue to add to the nation's IT capital stock, although at a slower pace, reflecting the downturn in business investment during the current recession.

Our report, "Main Street in the Digital Age," examines the degree to which small- and medium-sized businesses are participating in this high-tech revolution. If we are indeed in a "new economy," we would expect to see diffusion of these critical IT tools to businesses of all sizes throughout the economy.

Indeed, we *are* seeing the diffusion of these technologies. Small- and medium-sized businesses in every industry are investing in information technologies and exploring the potential of these technologies.

- Small- and medium-sized firms invest approximately one quarter of their total capital expenditures on computers and communications equipment. This is the same share as larger firms.
- Over 70 percent of small and medium-sized firms use computers in their businesses, and our best evidence from a combination of Census and private sector data suggests that a majority of small businesses are also Internet subscribers.
- Around sixteen percent of employees of small-and medium-sized firms who do not use a computer at work regularly use a computer at home or some other location. This combined with the share of small- and medium-sized enterprises (SMEs) employees who

already use a computer on the job suggests that there is a basic level of computer literacy in the current SME workforce.

However, our research *also* shows that:

- The smaller the firm, the less it invests in IT equipment on a per-employee basis. Companies with more than 500 workers invested twice as much per employee in computers and communications equipment as enterprises with 500 or fewer workers.
- Employees at smaller firms are less likely to use a computer at work than their counterparts at larger companies.
- And, the best available evidence suggests that small- and medium-sized businesses are less likely than larger firms to undertake certain e-commerce activities like buying and selling online.

Our report thus paints a picture of the diffusion—albeit the uneven diffusion—of information technologies to small- and medium-sized firms.

This is a first look at entrepreneurs' information technology investment patterns and suggests a variety of questions about the role of small- and medium-size enterprises in the digital economy. Why, for instance, do large firms invest more than small- and medium-sized firms in information technology equipment? And, what role does the Internet and e-commerce play in helping businesses to succeed?

Two factors help account for lower levels of IT investment per employee:

- First, although small and medium-sized businesses devote roughly the same percentage of their capital spending to IT as larger businesses, the total amount they invest in capital equipment is less than that expended by larger firms.
- Second, smaller firms are more prevalent in industries that tend to be less capital-intensive, such as retail, services, and construction.

Our data are revealing, but raise new questions that will require new data to answer. Are small- and medium-sized firms underinvesting in computer and communications equipment? Are there reasons beyond "no business need" that cause some of the size-related differentials to appear? All of these are areas for further research.

Improvements in the data collection programs at Commerce should aid in addressing these important research questions. For example:

- The Census Bureau's American Community Survey will yield better and more timely demographic and geographic information right down to local levels.
- The Economic Census is the statistical benchmark of businesses economic activity and is being conducted this year. As we have seen, many small businesses are involved in delivering services or producing and servicing IT.

- The Census Bureau and the Bureau of Economic Analysis (BEA) can and -- with funding in this year's budget -- will do a more accurate accounting of the evolving services and high tech sectors.
- An enhanced Gross State Product from BEA will help businesses serving local communities establish business models and budgets based on information about their locality.
- And, the institution of a first-time ever supply chain survey will help document shifts in economic activity by documenting how e-business processes are shifting functions and economic activity among manufacturers, wholesalers, retailers, transportation services, and logistics providers.

The emergence of the Internet and the combination of increasing quality and falling prices of computer equipment during the last decade should not be overlooked in this context. The less expensive computers and ubiquitous, relatively easy to use computer networks have given small- and medium-sized firms entrée into the information economy. Small business may not be engaging in some of the more sophisticated online activities—like buying and selling online—to the same extent as large firms. But, most firms are at relatively early stages of incorporating the Internet into their business processes.

Furthermore, as you know, small- and medium-sized enterprises are an incredibly diverse collection of firms. Some of the most technologically advanced firms in existence are small. We cannot expect a single technological approach to be appropriate for every firm. Business owners must evaluate each technology and each online business activity in light of their business goals. This research is just one part of the Commerce Department's efforts to improve our understanding of the place small- and medium-sized businesses in the new economy and to make sure that these firms are able to grasp the potential of new technologies.

- Commerce Secretary Donald L. Evans' E-Business Facilitation Initiative encouraged the Organization for Economic Cooperation and Development to examine the obstacles facing businesses, particularly small businesses, in conducting cross border transactions over the Internet and to look for positive ways to help businesses use information technology and electronic commerce to expand internationally.
- In my own agency, the Economics and Statistics Administration, we are making it easier for smaller exporters to complete their export paperwork and submit it to us online. This will reduce the paperwork burden on small business and enable the Census Bureau to produce trade statistics faster.

More broadly across the Administration:

- The President's economic security plan, particularly a provision for partial expensing of capital expenditures, will give incentives to small business to upgrade and modernize equipment. And, of course, the President's commitment to expanding trade will open markets to businesses large and small.
- The Office of Management and Budget is coordinating the E-government plan that will make accessing the Federal Government's online offerings easier to understand and more efficient. One-third of online adults visited a Federal Government site. And part of the

President's Management Agenda uses Internet-related technologies to accelerate and streamline service delivery to citizens. In fact, the Small Business Administration has partnered with OMB and the e-gov initiative to launch BusinessLaw.gov -- a new Web site to help guide small business through the maze of laws and regulations.

We want to foster small businesses' access to people and capital, reward risk, and foster a pro-entrepreneurial economic climate.

- An educated, trained workforce can bring to small business the expertise to try different high-tech approaches to business needs. Some of our future network experts may be the beneficiaries of the President's education plan, which dedicated resources to science and math education.
- The Small Business Administration (SBA) guarantees loans and provides access to capital to start or expand a business, and President Bush recently added $320 million in loan capacity to the more than $200 million the SBA has loaned to small businesses impacted by the September 11 attacks.

The potential for small business and IT is vast and growing. Broadband could provide high-speed, high-capacity connections needed to realize that potential. The Administration is educating businesses of all sizes about the value of high-speed service and the innovation and productivity it will provide.

Mr. Chairman, members of the subcommittee, I appreciate your leadership on this important front. This is a critical time for the economy as a whole and for the small business community's relationship with the high-tech sector.

An end to the decline in business investment would remove a major source of weakness for the economy. In fact, production data released in January show that the large declines in the output of high-tech products are ending. Small business and the high-tech sector have been hit hard. I hope we will see a rebound in the near term.

A solid recovery depends on a variety of factors, of course, including the strength of small business and the high-tech industry -- both individually and together.

Congress of the United States
House of Representatives
107th Congress
Committee on Small Business
Subcommittee on Rural Enterprises, Agriculture and Technology
2361 Rayburn House Office Building
Washington, DC 20515-6319

Hearing on Small Business Access to Technology

Written Testimony of:

Timothy Alan Aughenbaugh
President and CEO
Agricultural Information Technologies, LLC
21024 421st Avenue
Iroquois, SD 57231
(605) 546-2299

February 7, 2002

Mr. Chairman and Members of the Subcommittee,

My name is Tim Aughenbaugh and I am president of Agricultural Information Technologies of Iroquois, South Dakota. Our company, doing business as IdentityPreserved.com, is an eleven-year-old leader in providing technology and consultation on technology's use to the food production supply chain, specializing in communicating, documenting, and coordinating implementation of protocols for food safety, security, and quality.

As such, it is an honor and a pleasure to come before you today and testify on the opportunity and challenges that technology represents to small businesses. The subject of technology, particularly as it relates to agricultural and other rural enterprises, has been at the center of my eleven-year career as an entrepreneur.

I would like to present testimony today on two fronts, the first focused on agricultural issues directly and the latter directed at rural businesses in general.

SMALL BUSINESSES IN AGRICULTURE

For eleven years, the company I founded has strived to help production agriculture in the better use of technology. As you likely know, technology use has not grown as fast in this sector as it has in others.

An ongoing difficulty in obtaining a strong penetration of technology in agricultural markets is the challenge surrounding making it easy to use. The creation and availability of more capable general technology certainly increases our ability to develop usable agricultural technologies. Greater access to these improving general technologies increases our ability to deliver what we call 'appropriate' technology – that is, technology that is adapted to uniquely meet the specific needs of agriculture and that is able to be used by the simplest means.

Those involved in the agricultural supply chain are faced with a combination of challenges that are usually not found in their entirety in other industries, and therefore necessitate a special breed of technology solution. For instance, when work is to be accomplished, it is to be accomplished in a relatively short period of time; therefore appropriate technology for agriculture must not get in the way of the work to be done. Also, our nation's food production system necessitates the participation of a diverse workforce, so appropriate technology for agriculture must perform well within a wide range of educational backgrounds. Furthermore, since the work of agriculture still largely occurs in environments that are considered harsh, appropriate technology for agriculture must be more durable than its office-bound cousins. And finally, if we are to continue to take technology to where the work is done in agriculture, we will have to continue to invest in technologies that bring connectivity to remote locations.

Advances in the capabilities of technology, such as more capable operating systems and smaller form factor electronics, certainly make the job of creating and providing these appropriate technologies an easier task. Increasing technology infrastructure in rural areas, such as the addition of wireless and higher speed access, will further help these advancements.

The need for appropriate technology in agriculture is on the rise. As has been his heritage, today's American farmer produces more for less than did his predecessor. In the past, this capability has been made possible through advancements in mechanization and plant genetics. More recently, access and ability to use technology has played an increasing role in further enabling what is being asked of this industry. Therefore, if agriculture in its many current forms is going to continue to deliver, investment in the development, access, and training of new technologies will be crucial.

In a similar fashion to other small businesses, agricultural small businesses can benefit by using technology to be better informed and to better buy and sell merchandise and products. But beyond betterment in these basic business areas, a new era of technology's use in agriculture is developing – the ability for these businesses to be a stronger participant in the food supply chain. It is in this area that my company's efforts are focused.

Recent events are necessitating stronger regard for food safety and security issues. Parallel to this are more demanding domestic and international customers and an increasing need for food companies to differentiate their products from others in the marketplace. The farmer who is better able to meet the needs of this production environment will find himself in a much more secure and valuable position.

While these increased responsibilities may at first blush seem onerous or without adequate reward, in practice they usually involve merely understanding what the customer needs, complying with good management practices, and providing information so that the production process can be managed for the betterment of the industry.

Our company breaks this process down into four basic areas of focus:

- Communication, which involves interfacing with downstream customers in order to understand responsibilities and eventual product needs.
- Coordination, which is necessary to increase efficiency of product delivery and synchronize the efforts of otherwise unconnected entities.
- Documentation, which provides crucial information for communication and coordination, and also forms the backbone of traceability should problems arise.
- Verification, which is necessary to provide confidence to customers and improve the process itself.

Many say that in order for food production systems to perform to more exacting standards as it relates to either food safety regulation or consumer desires, massive levels of reinvestment in infrastructure will be required. This logic is extended to state that this is an investment that is not warranted based on the consumer's current willingness to pay. However, most of these claims are based upon scenarios built around total rebuilding our physical storage, processing, and delivery infrastructure in order to provide the segregation and meet the specific production protocols that these products would require.

It is my opinion that, in the near term, most of the requirements for this type of production can be met with the addition of technology applied to existing infrastructure. Technology holds the strong promise of enabling agribusinesses to better perform all the aforementioned functions. When applied to on-farm storage and container-based shipping, for example, it could go a long way to meeting today's demand for these more tightly produced products, and could do so at relatively low levels of investment.

Agribusinesses, empowered with a stronger relationship to the supply chain, will be better positioned to garner the economic reward and influence within the food chain that they deserve. And technology will likely be strong component of a system that helps them arrive at that future.

SMALL BUSINESSES IN RURAL COMMUNITIES

I would like to address technology as it relates to small businesses located in rural communities in a more general manner.

As the new Commerce Department Study *Main Street and The Digital Age* states, small businesses typically invest less in technology and technology training on a per employee basis; and small businesses need to embrace technologies like the Internet in order that they can compete with their larger counterparts in several basic business capabilities. With these points I concur. However, I would like to emphasize an area in which I believe technology investment offers a great potential in rural areas: the stemming of outflow of young talented people from these areas.

The reality of this outflow strikes pretty close to home. I currently sit on the board of directors of the DeSmet Development Corporation, the non-profit organization charged with leading economic development efforts in our small town. DeSmet is a community of 1,100 people located in east central South Dakota. It is the childhood home of author Laura Ingalls Wilder, whose books were made popular by the TV series, *Little House on the Prairie*. Given its history as the backdrop for many of Laura's childhood memories, DeSmet can be considered, in effect, the quintessential Little Town on the Prairie.

A lot has happened in the Little Town of DeSmet since the days of Laura. It has had the benefit of being a county seat town and in many ways has developed in much the same fashion as countless other towns its size. A generation ago, however, it was the beneficiary of the effort of a forward thinking group of citizens. These citizens purchased land, formed an industrial park, and convinced a Minneapolis-based highway sign business to place their manufacturing facilities there. That company has prospered alongside the strong work ethic and dedication of DeSmet citizens. And the industrial park has continued to develop over the years, now hosting manufacturing companies that build commercial doors, thermal-break windows, and hypodermic needles for diabetics.

The current generation of business leaders is continuing this charge and is quite successful by several measures. The Little Town of 1,100 is the proud host of 143 small businesses. Through extensive effort, this Little Town has been able to maintain its population base in a geography where that is viewed as accomplishment, not mediocrity.

The looming problem for this small success story is that DeSmet, like most rural communities, will eventually have to come to terms with the slow-burning fuse of declining rural population. At its current size, our Little Town is able to sustain a reasonably wide range of services for its citizens. But it is teetering dangerously close to dropping below the critical mass that is necessary for its main street businesses to be able to continue this offering.

The concern is magnified by the fact that our young people represent the majority of population outflow. This is painfully obvious to me personally, as only a handful of my fellow high school graduates remain in the area. As more direct evidence, a recent study[1] completed by Dr. Jim Satterlee and Dr. Marcey Moss of South Dakota State University illustrates the point graphically through the use of population pyramids.

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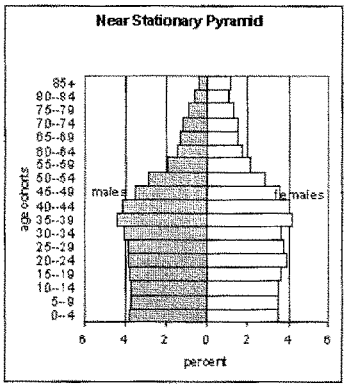
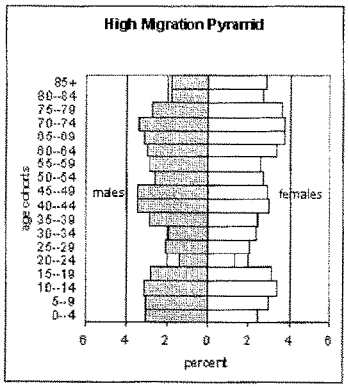
[1] *New Community Project*, Department of Rural Sociology, South Dakota State University, January 2000, Dr. James L. Satterlee, Dr. Marcey Moss

These pyramids show largely stable or stationary population profiles in the few urban areas of our state, as shown below.



This is in contrast with the high migration pyramid pattern (shown below) that is indicative of many of the state's farm-dependent counties. The study indicates that there is a very "age selective" migration going on, whereby 20 – 34 year olds are leaving these areas in dramatically larger numbers. In my home county, for instance, only 11% of the population is now made up of this age group.



The study goes on to indicate that the restructuring of agriculture coupled with the lack of alternative employment opportunities has already led to major changes in community infrastructures, citing a declining population base necessary to maintain school enrollment, church support, government, and the local economy. Worse yet is the eventuality that the babies and potential babies that this exiting age group take with them

will leave dramatic holes in the population structure of these communities, perhaps dooming their ability to sustain themselves.

In recognition of the import of this age group, one must look seriously at ways to retain them. In order to do that, one must understand why they leave. From my own perspective I believe that the driving force is not so much a desire to leave, as has been suggested, but rather a desire to seek opportunity. And in today's world, opportunity is pronounced 'technology' - and that opportunity is currently elsewhere.

It is undeniably true that technology holds important near-term benefits for small businesses. Existing rural businesses should have access to it, be trained in its use, and embrace it. But equally important may be the need to foster new industries in rural locations that are based on technology itself. This may have an even stronger and longer lasting effect in helping rural communities retain their young people. Technology breeds opportunity, and opportunity promotes enthusiasm which is a magnet for youthful energy.

In this way, technology may play a key role in slowing or perhaps reversing the youthful energy drain from our rural communities. The study cited above maintains that if any stability is to be attained it will demand a 'holding power' which will allow young adults to stay and even return to a community. I believe technology is one such holding power.

In reference to running a technology business from a rural location, my own experience has certainly revealed some challenges.

For instance, after some initial marketplace success, our company chose to build offices on a rural location, outside of town, in order to stay closer to our farming customer. Today our premises are utilizing 10 of the 11 copper phone lines leaving the phone company's CO in one direction from town. As our need is actually greater than this capacity, it has necessitated all sorts of switchers and combination boxes to accommodate extra equipment.

Today our corporate office operates with an Internet connection that is often only a fraction of the speed of the service our offsite employees have access to in their home offices in urban areas. And this is after moving to a two-way satellite-based system, which was necessitated following our decision not to pay the phone company thousands of dollars for burying two miles of fiber to upgrade our rural phone service.

Access to strong technology employees themselves is to some degree limited by our location. When we decided to increase our product development staff, for instance, we decided that it was of strategic importance to hire a manager with a strong agricultural background as well as technical expertise. Finding no one in our local market and no one meeting the qualifications that was willing to move, we opted for hiring a young man who had grown up on a farm and had left our community for technical work in an urban area. We ended up creating a satellite development office in the Minneapolis area in order to more easily attract our own, homegrown development talent.

All these difficulties aside, it should be noted that it is technology itself that allows us to run a technology business from a rural location. When people do go to the trouble of physically visiting our remote offices, they unfailing mention that they can't believe it is possible to do what we are doing from 'out in the boonies'. Those comments are not only a testament to the fact that the technology is in place, but also a statement on its ability to deliver positive results.

Technology is what enables small business to conduct its business more competitively and efficiently. It is what enables small business to collaborate with fellow associates and communicate with customers worldwide. It is what enables small business to access a vast myriad of services beyond their local boundaries.

The point may be that the pipe is technically built to flow both ways - meaning that the vast world outside our rural boundaries should similarly be afforded the opportunity to access to the talent, work ethic, and solid values that personify the people of our rural neighborhoods.

I thank you for the opportunity to share my experience and perspective on these topics. I am hopeful that the subcommittee's efforts can positively impact the opportunities and challenges we face in advancing the use of technology in rural areas.

Before the

United States House of Representatives

Committee on Small Business
Subcommittee on Rural Enterprises, Agriculture, and Technology

February 7, 2002

STATEMENT OF THE
AMERICAN TRUCKING ASSOCIATIONS, INC.

Ralph Richmond
U S A Cartage, Inc.
9921 Governor Lane Boulevard
Williamsport, MD 21795

Good morning Mr. Chairman and members of the Subcommittee. My name is Ralph Richmond. I am the President of USA Cartage, a trucking company based out of Williamsport, Maryland and am here representing the American Trucking Associations.

First I want to thank you for the opportunity to share my thoughts and ideas on technology use in trucking and small business.

The Trucking industry as a whole is large, moving 350 billion tons of goods every year. In fact 82% of all freight in the US is moved by truck. The industry employs more than 10 million hard working men and women. 74% of all trucking companies have 6 or fewer trucks, so today I am speaking on behalf of more than 400,000 small to medium sized trucking companies across the U.S.

Challenges facing our industry today include:

* Shortage of skilled drivers
* Skyrocketing insurance rates
* Unstable fuel cost
* Increasing regulatory burden

Three factors influence our company to look at and invest in technology.

1. PRODUCTIVITY

How can we increase our mpg, extend an oil change 10000 miles, handle more data without added to staff, make our trucks safer, make our trucks last longer.

2. MARKET PLACE

Changing customer requirements, you must have electronic billing, you must have gps tracking, you must have internet tracking.

3. GOVERNMENT REGULATIONS AND MANDATES

Systems to keep up with and meet compliance issues with federal regulations
Technologies mandated on our industry and equipment.

I have four thoughts I would like to advance with this committee to help small businesses in dealing with technology issues:

1. **FASTER DEPRECIATION**, currently systems are required to be depreciated over 5 years. With the speed of technology today we are sometimes still depreciating systems after they are functionally obsolete.

2. **TAX CREDITS**, I encourage you to look at tax credits to small business for technology purchases.

3. **PROPRIETARY POLICIES**, I am a firm believer in the free market system, so this idea is a little hard for me to articulate so I would like to express it in an example then give some real examples we have been involved with.

Think for a moment that the technology you use is Cable TV. If you were required to move to a new city and that city had a different vendor for cable service and their service was not compatible to the old service you had and in order to get the new service you had to buy all new TV's. And the same thing each time you had to change services. I use this for an example to show how expensive systems can get without some guidance for standardization.
Fortunately in the TV cable industry we have that and can move hardware from system to system.

But our industry is faced with some emerging technologies such as Satellite communications and gps tracking that require huge investments for the hardware and software but are only proprietary to the specific vendors and will not "speak to other systems" even though the technology is fundamentally the same. This huge investment makes it very difficult if not impossible for a small business to change to another vendor or a better service.

Another example is that our industry is headed for requiring transponders on our trucks to transmit data for several different government agencies. Once again the technology is the same yet the different states or agencies may have different systems and we would be required to buy and maintain multiple transponders on each truck we operate.

I can only ask you, where warranted, for you to encourage standardization and freer access for companies to build on these emerging technologies.

4. **DATA PRIVACY PROTECTION**, one thing for sure is that today's technologies can gather and store and make available data at unprecedented efficiencies and I see that trend only getting more and more efficient as we move along. Data and information are valuable to every company large or small. I urge you to bear that in mind as you set policies. Data privacy is very important to us.

I want to thank you for the opportunity to share my opinions with you and I would be happy to answer any questions you may have.

WRITTEN STATEMENT OF PER HUGH-JENSEN OWNER OF BOWHE AND PEARE ON BEHALF OF THE NATIONAL RETAIL FEDERATION

To the U.S. House of Representatives

Committee on Small Business

Rural Enterprises, Agriculture and Technology Subcommittee

Hearing on Small Business Access to Technology.

February 7, 2002

WRITTEN STATEMENT OF
PER HUGH-JENSEN
OWNER OF BOWHE AND PEARE
ON BEHALF OF THE NATIONAL RETAIL FEDERATION
TO THE U.S HOUSE OF REPRESENTATIVES COMMITTEE ON SMALL BUSINESS
RURAL ENTERPRISES, AGRICULTURE AND TECHNOLOGY SUBCOMMITTEE
HEARING ON SMALL BUSINESS ACCESS TO TECHNOLOGY.

February 7, 2002

To the members of the committee:

First and foremost, I would like to thank all of you for inviting me to testify here today on behalf of the National Retail Federation. The **National Retail Federation (NRF)** is the world's largest retail trade association with membership that comprises all retail formats and channels of distribution including department, specialty, discount, catalog, Internet and independent stores. NRF members represent an industry that encompasses more than 1.4 million U.S. retail establishments, employs more than 20 million people -- about 1 in 5 American workers -- and registered 2001 sales of $3.5 trillion. NRF's international members operate stores in more than 50 nations. In its role as the retail industry's umbrella group, NRF also represents 32 national and 50 state associations in the U.S. as well as 36 international associations representing retailers abroad

As an owner of a small retail chain, Bowhe and Peare here in Old Town Alexandria, we are presently facing many of the challenges which I will briefly outline today.

As we look to grow and expand our business over the next 12-18 months, it is imperative that we integrate a system into our business which allows us to track sales, inventory, inventory turnover, customer purchases, etc. While most business owners would agree that this is imperative, there are many obstacles that small- and medium-sized business owners face in making these decisions and they are as follows:

Cost

This is probably the area most evident in making these decisions. Because of today's economic climate, making the decision to invest thousands of dollars into the business is somewhat risky thereby creating a "fear factor." On the other hand, if you are going to become a leader in your space, you must have the ability to evaluate your business to make strategic decisions to grow the business intelligently. There are great products on the market that allow you to do this today. Recently, both Microsoft and Oracle have announced "initiatives" to launch products and services for small and medium enterprise's (SME's), but I suspect that we are not at the top of their priority list, based on what I just stated.

Education

Now when a company has made a decision to incorporate certain technologies into their organization, they must also train their staff on the use of these technologies. Since in the gift industry -- in our geographic area -- we have a lot of part-time help making $9.00-$15.00/hour, this presents a great challenge in incorporating new systems into our business model.

There is an "up-to-speed" issue that business owners must understand. In retail, almost all employees are in touch with the systems we decide to incorporate into our business. I would venture to say that the retail industry, in particular in the small - medium-size range, is not technologically savvy. This is why we are not perceived as a great market by many of the large supplier companies in the market today.

It is hard for the retailer to understand why to incorporate something into their business when "everything is working fine for me today." It is equally hard for the technology suppliers to SME's to find business owners who understand and appreciate the value of what some of these products can do to enhance their business. And because many of these small retailers, over the past 6-9 months, have had to streamline their resources, they have had less time to focus on the "what's next" of their business. I believe there should be

local community initiatives that allow the owners of small and medium- sized businesses to discuss these issues and become more educated on what is available to them. Some might argue that the local Chamber of Commerce units throughout the US and other non-profits provide this service but I feel that there is a great disparity between the SME's and the larger businesses out there today.

Change

There is the saying that people are "afraid of change." This fear escalates in times of economic uncertainty. I believe this is true in what we are discussing here today. Unless people can truly see a direct benefit to their business as opposed to someone trying to "sell" them something, they are reluctant to make changes to their organization....it takes a lot of time, money and patience...thus the reluctance to make this change.

Obsolescence

This is an important area to discuss. In my company, we are looking to spend in excess of $150,000 on new technologies for a 4-store operation. Because of the size of our organization, we CANNOT afford to make a decision on some technology that becomes obsolete in 2 years. Nor do we want to be forced to "upgrade" to some new version of software in order to stay compatible and also receive the proper maintenance and support. This is a

common practice of many supplier companies selling in our space today. A great example of where this is prevalent is in the healthcare industry, where in the early 90's major expenditures were made only to find that 2-3 years later, a lot of these systems were proprietary and could not integrate or "speak" to other systems within the organization. If the technology that we decide to purchase cannot scale with our business moving forward, we risk not being able to grow, or even the potential of going out of business. Both my brother and I have IT training, so I would say that we are the fortunate ones. This is by no means the norm.

In closing, I believe most retail SME business owners will likely never have enough technical knowledge to be able to stay abreast of technological change. This is probably just as well because that knowledge is not a core competency of retailers. I believe that there will one day need to be a model where retail SME's can pay a monthly fee for shared services that provide all necessary retail applications at a lower cost. This should allow them to incorporate technology, be cost-effective, and have an online help service that is user friendly. Most importantly it will allow them to better focus on their core business.

I also think there should be a "stamp of approval" provided by a third party business that would give the retail SME's some level of assurance that these products conform to industry Best Practice.

Thank you very much for giving me the opportunity to speak with you here today.

Testimony of

Steve Pequigney

President
I-Cube (Integrated Imaging Inc.)

before the

U.S. House of Representatives
Committee on Small Business
Subcommittee on Rural Enterprises, Agriculture, and Technology

Small Business Access to Technology

February 7, 2002

Good morning Chairman Thune and Members of the Committee. I thank you for the invitation and the opportunity to present testimony on behalf of the National Federation of Independent Business (NFIB) regarding small business and technology investment. NFIB is the nation's largest small business advocacy organization, representing more than 600,000 small business owners in all 50 states and the District of Columbia. The typical NFIB member has five or fewer employees and has been in business more than 10 years.

My name is Steve Pequigney and I am a small business owner from Millersville, Maryland. I sit before you today with a unique perspective; not only am I a small business owner, but I am also a technology professional. In the late '80s, I was in charge of a sales office for a high-tech corporation when all outside sales offices were closed. I found myself facing two choices: securing another corporate job or striking out on my own as an entrepreneur. I chose the latter, and my company, Integrated Imaging Inc., known as I-Cube, was born. I-Cube is a four-person digital imaging company that sells equipment and services such as high-tech digital cameras, computer interface boards, and scientific imaging software to government labs, universities, and corporate research & development clients.

Even though I work in the tech industry, I face the same challenges of small business owners in every industry and location. I'm fairly certain nearly every small business owner would tell you that his or her number one business goal is to become more efficient. Small business owners are forced to wear many hats. We're the bookkeeper, the human resources manager, the advertiser and the janitor all rolled into

one. We're always on the lookout – or should be – for products and practices that allow us to accomplish more in a faster manner so that we can be more successful. Technology offers us many possibilities to achieve this goal.

In considering how small business owners might invest in and utilize technology, I started with the premise that there is a wide spectrum of "tech savvy" in the small business community. To some, owning a fax machine might seem high-tech. I would categorize myself as someone on the opposite end of the spectrum as I'm very comfortable and knowledgeable in using technology. However, regardless of industry, size, or where we may fall on this "tech continuum," I believe there are general technologies that can benefit almost any small business owner.

In my opinion, the personal computer is one tool that can make an immediate improvement in efficiency for small business owners. For example, an accounting program, such as Quickbooks, can be utilized on a PC in order to eliminate heaps of paperwork associated with entering orders, generating invoices and financial statements, paying bills, and processing payroll. Utilizing accounting software has allowed me to save time and money, for example, by simply maintaining records electronically which can be copied to a removable disk and sent to my accountant for tax preparation. Other software, such as a customer contact database, can be used to eliminate manual tasks of organizing and maintaining customer addresses, phone numbers, and email addresses, and can also be used to schedule activities like calls, meetings, and to-dos. For example, the ACT! program, my preference in customer contact database software, has allowed me to streamline the process of making customer calls and following up sales leads, leading

to more sales. I also use it to generate letters for direct mail advertising and price quotes. For example, if I want to announce a new product or technological advance, I can simply use the ACT! program to generate individually addressed letters and mailing labels, include a data sheet, and mail to existing and potential customers. These are just some examples of how a PC can be very beneficial to many small business owners.

A second area of technology investment that has become increasingly important to small business owners is the Internet. E-commerce is here to stay, and small business owners must compete in this marketplace. Additionally, the Internet offers small business owners a unique opportunity to overcome the economies of scale that often bar them from competing effectively against larger firms. As with other technologies, small business owners' use of the Internet can range from basic to very complex. As a first step, a website that simply announces who you are and what products or services you provide is essential. I-Cube has maintained a web presence since the mid-90s, and the presence of product and technical information and lead generation stemming from our website, i-cubeinc.com, is invaluable. In years past I purchased print advertising in trade publications in order to market I-Cube. Today, that's unnecessary. In fact, my only advertising is accomplished via the Web. Obviously, the nature of my customer base contributes to this fact but I'm fairly confident that a Web presence is valuable to many types of businesses. In addition to simply advertising, I-Cube utilizes the website to showcase products, to expedite customer service and to actually sell products online. Whether selling digital imaging products, automobiles, books or baked goods, many entrepreneurs can take advantage of the efficiencies the Internet offers.

As you can see, I believe technology investment – even a minimal amount – is a great thing for small business. However, as the recent Commerce Department study highlights, not all small business owners have jumped on the technology bandwagon. So what are the barriers? In my opinion, one major barrier is the unfamiliarity with – or even fear of – technology itself. I'm lucky; I'm a tech person by nature and profession. However, for many small business owners, especially those who have spent years running their businesses "the old fashioned way," technology can be daunting. Large corporations have entire IS or IT departments to analyze e-commerce and technology needs, to purchase and maintain equipment and to train users. As I said earlier, small business owners are forced to be "jacks of all trades." For those with no technology background, consultants – often with high price tags – must be hired to handle technology needs. A second barrier that I have personally experienced, and one which I know is a common hurdle for small business owners, is the difficulty in finding and hiring qualified workers. Even if a new employee has technological aptitude, he or she must often still be trained on specific programs and software. In November 2000 NFIB asked its members if small business owners should be allowed a tax credit for technology training. Seventy-six percent of members responding answered yes. This poll provides strong indication that technology training for small business owners and for their employees is a need for many on Main Street.

So there are opportunities and challenges to technology investment for small business owners. What are the solutions? I'm sure the Members of this Committee are and will be discussing and debating legislative solutions at length. Since I'm not a policy

expert or a lawmaker, I'll simply offer my suggestions on some objectives that I believe could help small businesses become more technologically current. I think the overwhelming objective must be to provide education and resources that allow small business owners to see the value of technology to their bottom lines, and to assist them in analyzing, purchasing, training and utilizing technology. A second objective, in my opinion, would be to make necessary technology accessible and affordable for Main Street. Small business is the engine that drives this nation's economy, and it's important that small business be in a position to take advantage of opportunities in fast-moving, technology-based marketplaces.

In conclusion, I commend the Chairman and the Committee for examining the topic of small business and technology investment, and I thank you for the opportunity to speak here today. I would be happy to answer any questions related to my testimony.