Douglas A. Levin's Testimony before the

United States Senate's Committee on Small Business & Entrepreneurship

Wednesday, September 26, 2007

Good morning Chairman Kerry, Ranking Member Snow, and other Senators.

I'm pleased to be here to discuss "Improving Internet Access to Help Small Business Compete in a Global Economy."

There are many issues that are directly and indirectly connected to this subject. But I would like to focus on three issues related to Internet access for small businesses competing in the global economy:

1. The global software industry is moving toward a bandwidth-intensive Software-as a-Service model.

2. Startups, small and medium-sized software developers find that it is difficult and expensive to deliver the latest software and data updates via today's conventional Internet connections.

3. Poor Internet capabilities in many suburban and rural areas make it difficult for American companies like ours to support telecommuters.

But before I cover these three issues, let me give you some background about myself and my company.

A history of Black Duck Software

I am a 27-year veteran of the software industry. I started out my career working for a government economic development agency in New York City, and then I went to work on the Apple Macintosh development team. From 1987-1993 I worked at

Microsoft Corporation in various roles. In the mid 1990s I operated a consulting firm, doing projects mostly for Internet startups and telecommunications companies. I was the CEO for two Boston-area Internet startups before founding Black Duck Software, the company I am the CEO of today.

You should also know that I served on the Cable Monitoring Committee for the Town of Brookline, Massachusetts, helping to establish the town's cable Internet access and other services.

Black Duck Software was born when I realized that corporations could use the Internet as a collaboration medium for software development. In other words, I was convinced that companies could achieve greater productivity by building advanced software applications based on software components developed over the Internet in different locations. But these corporations had to track these code components, know their origins, and determine whether they were properly licensed.

I founded a company based on these ideas, and seven top-tier venture capitalists bought into my dream. Today Black Duck Software is headquartered in Waltham, Massachusetts, and we have offices in five cities across the country, as well as in Amsterdam and the United Kingdom. We employ 81 great people, and we have almost 400 customers worldwide.

How the Internet is driving economic development

The Internet is empowering new businesses, new business models, and global competition. Black Duck Software is at the leading edge of delivering new technology in new ways to customers in the technology and enterprise markets.

As I mentioned at the beginning of my testimony, there are three issues that Black Duck's customers face today that are directly impacted by the quality and availability of Internet access:

1. *The global software industry is moving toward a bandwidth-intensive Software-as a-Service model.* Software-as-a-Service promises to deliver the functionality of software applications over the Internet. This new model enables small businesses to take advantage of sophisticated software applications at a fraction of the cost of conventional applications. Unlike conventional software, this service-based software is copied onto a computer's hard drive only when a customer needs it.

   One big advantage of Software-as-a-Service is that small businesses can save money because they don't need their own IT infrastructure. The software takes care of all that. With this new Software-as-a-Service model, small businesses can compete with larger businesses, and more easily and less expensively engage International competition as well.

   The United States needs to be leading the way in Software-as-a-Service. But we can only do it if we have enough Internet capacity. If we don't, we will be followers, watching India and China pass us by.

   The problem we face in fully executing the Software-as-a-Service model is the stability of the Internet connection and speed of that connection. Both these issues affect the user experience and the software's performance. My company has a Software-as-a-Service offering, and our customers are impacted by these issues.

2. *It is difficult and expensive to deliver our software and knowledge updates via today's conventional Internet connections.* Black Duck now ships these updates via hard drives to most of our customers because the public Internet does not support this activity. Customers in Japan, Korean, European and several countries are able to download these updates without problems.

   Furthermore, today's advantage in software development is gained through taking pieces of software code located in various locations across the Internet and combining it into one software application. Everyone is doing

this. It lowers the cost of development and enables information and data to be shared across partners, vendors and suppliers. This drives responsiveness to customers. But we need your help to drive down the cost of the Internet infrastructure.

3. *Poor Internet capabilities in many suburban and rural areas make it difficult for American companies like ours to support telecommuters.*

   By contrast, it is easier for people to telecommute in the Netherlands, Denmark and other countries.

   It is difficult to locate businesses or workers outside of locations close to major metropolitan areas, such as Western Massachusetts. Lack of bandwidth makes collaboration much more challenging.

   Even in metropolitan areas, for example, the quality of human conversations (so-called Voice-over-IP) is quite low when made over an Internet connection. There are many gaps in the conversation due to data loss.

The Internet is fueling innovation around the world. It was developed here in the United States, and American companies like Google have become household names from Milan to Moscow and Bonn to Beijing.

But other nations are catching up fast. They understand that their future economic prosperity depends on harnessing the power of the Internet to create new jobs for their people. So while they invest millions in infrastructure, America is in danger of falling behind. My point is that the health of the American economy depends in no small measure on the health of our Internet infrastructure. The jobs of tomorrow depend on the technology decisions this august body makes today.

President John F. Kennedy once challenged Americans to "take longer strides" and lead the world by putting a man on the moon – and we did it. Today I'd like to challenge you to take some longer strides of your own. I urge you to create a

national broadband strategy that encourages the creation of a new information superhighway for a new millennium.

We have the talent to lead the world in the 21st century. We have the ideas and a vision of a better world for our children and grandchildren that technology will bring into being. We have the entrepreneurial wherewithal to continue to lead the world with new products, services and business.

The conduit to facilitate our vision is critical to our success.

Thank you again for your time.