

**The Media Institute Luncheon Remarks
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**Gary Shapiro
President and CEO, Consumer Electronics Association
“Digital Ninjas – What We Need to Ensure American Leadership”**

[As prepared for delivery]

Thank you, Patrick Maines and team at The Media Institute, for inviting me to speak today.

Many of you know me, and you know CEA. But you may not know that I celebrated my 30th anniversary with CEA this year ... then again, my 30 years in this industry would explain why most of you know me!

In those years, I have seen the growth of the most phenomenal, dynamic industry in the world. With many of you, I have literally have seen the world enter the digital age. But it is most striking to have borne witness to 30 years of unsurpassed innovation that has changed the human condition.

In the 30 years I've spent in the consumer electronics industry, I've seen my fair share of companies that have tried and failed, and other savvy ones that have succeeded. During that time, I took mental notes on what characteristics, strategies, and personality traits the most successful entrepreneurs shared. Eventually I coined a term to describe the strength, cunning, intensity and adaptability they have in common – “Ninja Innovation.” And earlier this year, CEA published a book called *Ninja Innovation: The Ten Killer Strategies of the World's Most Successful Businesses*, outlining some key characteristics of the ninja innovator.

To me, a ninja is defined by planning, risk, flexibility, teamwork and the ability to change course and embrace change. Ninja innovators never settle and are never satisfied. They think about what can be, rather than what is. They challenge themselves. They create their own successes. They fail and try again. They set big goals. They plan. And when those plans don't work, they adjust.

The consumer electronics industry is a ninja industry. It is always adjusting, innovating, trying new things. Companies that don't change – they die. Eastman Kodak, Circuit City, Recoton ... great names and companies that were once on top ... all in bankruptcy as they could not adapt.

But while companies may come and go, our industry itself is defined by change. Our industry will die if it stops innovating. The products last a long time and people would have no need to buy keep buying them. We don't have planned obsolescence, but we have a relentless shift to bigger, better, faster with more services and features. And once new products are introduced, design and price become the differentiators. Consumers benefit. But breakthrough new products often hurt other businesses. Almost every business and way of business have been affected by technology innovation, from publishing to retailing, from the Post Office to the Box Office.

And the pace of change is accelerating as in a few years consumers shift from television, telephones and computers being home and office products to a multitude of wireless and portable devices. Today, we are releasing our *15th Annual Household CE Ownership and Market Potential Study*.

- For the first time in our 15 years conducting this survey, the top four products in terms of increased household penetration rates are mobile devices.
- Tablet computers were the leading CE growth driver this past year with a 17 percent increase in household penetration rates over 2012, followed by increased penetration rates for smartphones (12 percent), e-readers (10 percent) and wireless mobile hotspot devices (10 percent).
- The growth of smartphone ownership continues to flourish with the overall penetration rate for smartphones among U.S. households at 58 percent – that's 69 million U.S. households that now own a smartphone.
- Tablet penetration rate is now 39 percent – more than one-third of U.S. households.

And this growth in mobile will continue. We project that nearly 132 million smartphones will be sold in the U.S. this year alone, and an estimated 181 million by the end of 2016.

Americans may disagree on their politics. But they agree these products are what they want. Almost every American will soon have at least one wireless product.

The challenge we face is ensuring they work. The average smartphone uses 25 times the data stream compared to a wireless phone ten years ago. The tablet uses 120 times the data stream of the same older wireless phone. Data usage is growing quickly, too, as both apps and consumer reliance on smartphones and tablets grow. Average smartphone usage grew 81 percent in 2012. The average amount of traffic per smartphone in 2012 was 342 MB per month, up from 189 MB per month in 2011. CTIA reports that across all wireless devices, wireless network data traffic topped 1.16 trillion megabytes from July 2011 to June 2012 – a 104 percent increase over June 2011's 568 billion megabytes.

These figures reflect the success of the mobile marketplace and a challenge our nation shares. We need spectrum for these devices. And it must come from both repurposed spectrum now barely being used by government agencies, and more immediately, from the spectrum loaned to the broadcasters but now allowed by law to be auctioned by them with shared proceeds going to the broadcasters and the government.

The FCC must resist efforts to maim the auctions by those seeking to slow them down, restrict participation, or impose unreasonable requirements. Delayed or failed auctions will mean that our policymakers will be responsible for future dropped calls, service interruptions, blackouts, or all the service unpredictability one would expect in a third world country.

We need our citizens connected, and as a great country we can and should have great service. Our citizens want and expect it, and our innovators, entrepreneurs, and businesses depend upon it. Think about those in Boston last week and how they relied on wireless products and social media to stay connected.

Americans expect their wireless products will work. CEA hopes and believes the FCC with new leadership can continue the example set by outgoing FCC Chairman and 2011 CEA Digital Patriot Julius Genachowski. I called him the “Spectrum Chairman” as he was focused relentlessly on pushing for spectrum auctions so our nation could be on top in wireless innovation and penetration. He – along with Commissioner McDowell and the other commissioners – never hesitated in his purposeful action promoting both licensed and unlicensed spectrum. Along with President Obama and a bi-partisan Congress, they recognize that American competitiveness and innovation requires that our spectrum policy reflect the rapid change in technology and how consumers receive education, entertainment and information.

CEA began the push for the law allowing spectrum auctions. We worked hard for its passage. And we want the auctions to work. That’s why we are now suggesting the auctions maximize potential bidders, have clear and simple rules, balance various interests, and promote innovation by allowing flexibility in usage.

We are concerned that broadcasters seem less enthused about the auctions. In fact, while we were pushing for the law allowing auctions, broadcasters worked tirelessly to thwart its passage, first claiming against all credible evidence that there is no spectrum crisis, and then insisting that a complete spectrum inventory be performed prior to passage of any auction legislation. The legislation passed anyway.

Now, broadcasters appear to be employing every possible strategy to slow walk the auctions. Broadcaster executives publicly claim that the auctions will almost certainly fail if they are held in 2014, which appears to some as a message to broadcasters not to participate. More directly, they are trying to thwart the FCC from even conducting the necessary engineering tests to allow the repacking process that will occur as part of the incentive auctions. The most recent roadblock includes opposition to an FCC Public Notice regarding implementation of new *TVStudy* software to implement OET Bulletin No. 69, the *Longley-Rice Methodology for Evaluating TV Coverage and Interference*. I do not profess to be an engineer, but I understand that the new software is easier to use, more accurate, and more thorough than prior software. The new software will also assist the Commission in meeting the requirement that the FCC make “all reasonable efforts” to repack broadcast stations. Before the Commission can preserve coverage and population served, as required by statute, it must first develop an accurate assessment of the area currently covered and the population currently served. The *TVStudy* software, with its increased accuracy and updated data, makes such an assessment possible. Even as a non-engineer, this makes perfect sense to me.

Notably, the prior OET-69 software relies on U.S. Census data from 1990. So, why is NAB pushing to use software that relies on 20-year old population data and 20th century technology? I don't know, but this effort to shift the FCC's focus to “defense” rather than keeping its attention on moving the auctions forward is the latest broadcaster stalling tactic.

I am not here to criticize broadcasting or broadcasters. I love and even miss the shared and binding national experience that we had two generations ago, when we had just a handful of channels to choose from.

And today, I am comforted in knowing that broadcasters will be helpful in a local crisis or emergency. Just last week, broadcasters excelled in accurate and compelling coverage of the Boston tragedy.

But as an industry, broadcasters have not been fully ninja-esque in embracing innovation, although they have done some great things. Despite our business model differences and polar opposite views on regulatory intervention, CEA and broadcasters do find common ground. We worked together to test and teach about HDTV. CEA and NAB are two of the founding members of ATSC, the committee that maintains our DTV broadcasting standards and is beginning to investigate the next generation broadcast TV standard. We worked cooperatively to test systems, and educate the public on HDTV. We both would agree that Chairman Dick Wiley did phenomenal work in his leadership of the DTV transition (which I describe in my book, *Ninja Innovation*). We stand together in defending the freedom of speech protected by our First Amendment. CEA and NAB both helped fund a company called Syncbak that is innovatively solving the problem of delivering local “broadcast” content to consumers on their smartphones and tablets. Our two organizations co-host the National Radio Systems Committee responsible for broadcast radio standards and the creator of the digital FM “on-channel” standard you know as HD Radio. We also produce two of the best-run trade shows in the U.S., the NAB show and the International CES.

But sadly, too often, broadcasters have tried to distort and restrict other industries’ business models in a vain, and futile, and certainly costly effort to preserve their own. I understand why. It is natural to try to preserve the status quo – especially when it is slipping away. I can only imagine how difficult it is to go from 100 percent market share to under 10 percent market share for free, over-the-air television. With cable, satellite, VCRs, video games,

streaming, DVDs, the Internet and now wireless devices, broadcasters until just two weeks ago declared that free over-the-air is special and supreme and must be protected from government. From HDTV to satellite TV, from cable must carry to retransmission, the broadcast industry has lost market share but kept spectrum and survived by having the government do its bidding. Every other industry must do something for broadcasters. Even television set makers are compelled by law to put in a tuner that receives over-the-air signals, despite the decreasing single digit percentage of homes that rely on free over-the-air.

But two weeks ago, at the NAB show, the networks who always insist that free over-the-air is critically important revealed their true colors. Fox's Chase Carey said Fox may go subscription-only, if Aereo, a product allowing computer users to get over-the-air broadcast television through the Internet, remains legal. That week, executives from NBC and Univision reportedly agreed. The Aereo product has survived two court challenges, and on Thursday the broadcasters asked for a full court of appeals review, a request unlikely to be granted. Of course, this is America; anyone has the right to challenge the legality of anything. But to also threaten shifting from free over-the-air to subscription? The Aereo service actually expands the viewing base of commercials.

With this threat, the ruse is revealed. Over-the-air just isn't that important. What broadcasters value is not the audience for free over-the-air commercials, it is the government mandate that cable and satellite must carry or pay for their service. This is fine. It may be better for everyone if many broadcasters relinquish their spectrum so it can have bigger and wider uses than the tiny percent now getting their signal over the air.

It's not just this challenge to Aereo, it's also the challenge to the legality of another product, the Dish Hopper. Today, nearly every home has a much-loved digital video recorder or DVR. This little genius of a device was introduced at the 1999 CES. Not surprisingly, the broadcast industry sued to stop the technology; however, it was never resolved because the company filed for bankruptcy and ironically the networks were big investors. In 2012, the broadcasters sued DISH Network for its AutoHop, a follow-on device to the ReplayTV DVR. This innovative device allows users to skip commercials.

Last Wednesday night, we honored DISH Network President and CEO Joe Clayton – and former CEA Chairman – as a CEA Digital Patriot. In his remarks Clayton said,

“Over the years, I’ve adopted a radical business strategy that has often been challenged by many incumbent corporations: give the consumer what he or she wants

“Broadcasters would have you believe that it’s illegal to skip TV commercials. But that’s something we’ve all done since the introduction of the remote control. If it’s illegal, then we’re just a nation of outlaws.

“So why would incumbent broadcasting, cable, and content companies oppose rather than embrace innovation? It’s because innovation upsets the status quo and is very difficult. There is a tremendous amount of innovation, risk, and worry that comes from actually having to deliver better products. It’s really hard work! It’s much easier to call the other guy’s stuff ‘illegal’ and then knock off early.”

And that's why I'm proud to represent Joe Clayton, DISH Network, and many other companies engaged in developing cutting-edge, disruptive innovations.

I can give many instances where the broadcasters tried to or actually thwarted or stalled technological innovation. They push mandates, like a FM chip in cell phones, or tuners in TVs, or must carry on cable, or banning of devices or new payments on others and no payments by them to copyright owners. Their message is clear: as long as existing broadcasters have their piece of the pie, there's no need to care about everyone else. To which I respond, Innovate or Die.

I believe that as long as broadcasters are using public spectrum for their eight-year terms, policy makers should resist broadcaster calls for burdening others. The broadcast industry must innovate rather than their government ties burden others. Relying on more government regulation to maintain a government-mandated advantage against other industries is not a ninja strategy.

Ninja Innovation

In *Ninja Innovation*, I outlined three key strategies for innovation, which I offer to NAB and the broadcast community today:

1. Compete in the marketplace.

The industry should take advantage of its lower-cost structure as a strategic strength and “own” the local geographic area. Owning the local area means going beyond broadcast. CBS is cleverly heading in this direction with push e-mails offering special local deals, like Groupon, through its local affiliates. For their local affiliates, networks should create business models through which they set up the local station and share revenue both ways. Daily push e-mails with deals can also tease the schedule and expand both viewership and revenue. The unique selling strength of a local broadcaster is not just selling advertising. It is also engaging the local

community. Some businesses may want to just buy ads. But some individuals may want deeper public exposure and will pay to present the local news and thereby become well-known local personalities.

2. Think beyond 30 minutes.

No law says everything must be on the half hour. All the research that led to the uniformity of the half-hour schedule occurred before the Internet gave us Twitter, Facebook, e-mails, text alerts, and other forms of competition for your shows. Broadcasters shouldn't be afraid to experiment and shake things up.

3. Stop relying on Washington.

Finally, the industry as a whole must stop relying on Washington to protect it. Instead, it should work to free itself from the government strings that hinder its ability to compete with cable, satellite and the Internet. Remove all the content restrictions, programming requirements, retransmission mandates, and costly requirements imposed by bureaucracy. Above all, it's time for the broadcasting industry to accept the fact that it's not 1955 anymore, and it's time to enter the twenty-first century. If they cut their ties with the government, they might finally learn the truth behind the phrase "innovate or die."

Innovation Policies

CEA and its Innovation Movement have a polar opposite view than the broadcaster lobby. It is that innovation is good. It is our nation's competitive strength. It is that what we excel at as a nation is creativity and innovation. From our domination on the Internet to our technology companies. From bio tech to our universities. And, yes, from our motion picture industry to our cable and broadcast networks. We innovate. We ask questions. We do it better. Our kids may not be great at rote memory, but they ask "why not?" With our diversity as a strength, our willingness to take risks and fail, and our bias toward always doing it better, we are the most innovative nation on earth. And while I recognize that copyright needs clear protection, we also need clear laws and bias toward allowing new forms of innovation and technology that cannot be choked by spurious litigation or unnecessary government restrictions. From the Internet of things to robotics. From 3D printing to Ultra HDTV. From driverless cars to customized medicine – we are still infants heading toward a wonderful future. If we can honor the spirit of the First Amendment, encourage new forms of communication and let innovation bloom, our children will have a great future.

Thank you.

(Q&A)