

As Prepared for Delivery

Gary's Shapiro's 2012 International CES Keynote

10 Ways CES is Improving the World through Innovation

Welcome to the 2012 International CES – the glorious apex of innovation!

This event is more than a business event. It is a source for inspiration, hope and optimism that innovation will improve the human condition.

I am humbled, grateful and honored to be on this stage. In a real way I represent you in this room and those who support you creating the products and services that are changing our world.

I hope you share my excitement and belief in the cause of innovation.

The cause of innovation is closely linked to the most important issue of our day – the health of the global economy. We can't escape the news that many countries face tough economic times from government over-spending. These nations have three options for recovery: raise taxes, cut spending or grow the economy. Of these three, growth is the best path. Growth is the quest and it comes only from innovation.

Innovation fuels economic growth by adding new services, capabilities and efficiencies. And while innovation may take jobs in some areas – think of typesetters, travel agents and postal workers – innovation creates jobs in other areas – think of bloggers, electronics engineers and IT professionals. Consider the marketing agencies, retailers, restaurants and other businesses that support growing innovative companies. Think of all of the new jobs that are created right here at CES. Indeed, more than 724,000 Americans now rely on eBay as a primary or secondary source of income.

I have spent much of this past year traveling and speaking to groups around the world about innovation. Every group I met shared the belief that our industry's innovations are symbiotic catalysts that will improve their own efforts to advance. Every nation wants to be innovative and encourage entrepreneurs and innovators. Global leaders share a desire to grow their own economies, and to improve the lives of their citizens.

Let's consider how innovation has fostered change in the last year.

The Arab Spring was fueled by the natural human yearning for self-determination. But it was only realized because Twitter and Facebook were real tools that conveyed information on smart phones, tablets and computers. Broadband and mobile devices – the products and services we make and sell – enabled global support and encouragement for the spread of democracy in the Middle East.

And when U.S. troops entered Osama Bin Laden's hideaway, the world first learned about it because a neighbor was tweeting about the commotion.

Innovation also saves lives. When natural disasters struck around the world, including the devastating earthquake and tsunami in Japan and extreme floods in Thailand, mobile devices and social media enabled rescue efforts to be targeted and effective.

2011 also proved that innovation is risky and change can be quick and painful. Online content streaming companies experimented – sometimes unsuccessfully – with new service offerings and new pricing tiers.

Spotify and Pandora showed that, with the right business models, digital music could be monetized. The crowded tablet space gained some new players and lost some big companies that exited. Companies bought businesses only to shut them down months later.

In 2011 we lost the most famous and accomplished innovator of our era, Steve Jobs. Steve led Apple to design and sell the iPod, iPhone and iPad, three game changers. His premature passing and the long public pause to celebrate his innovations burnished the concept of innovator as hero. A generation of children can and should be inspired by Jobs, and other innovation heroes like Barrett, Bezos, Brin, Chambers, Dorsey, Ellison, Gates, Jacobs, Mullally, Page, Spielberg and Zuckerberg. Yes – our industry produces and catalyzes innovation heroes.

We will have more heroes. In ten years I expect a much longer list of well-known innovators enhancing our lives through consumer technology.

Indeed, our industry remains the economic growth engine of the economy. Last year I predicted sales growth of 3.5 percent. We estimate we actually grew 7.9 percent. Today we project strong growth for 2012 of 3.7 percent and we will cross \$200 billion in sales.

Why? Innovation. And it's not just the U.S. – it's not just about fun and entertainment. 2012 will be marked as a turning point in how innovation solves major problems. This CES, more than any other, we see innovative solutions to big societal problems.

Consider these big societal problems and the solutions you can see here this week at CES.

Our Reliance on Fossil Fuel

Electric cars are here and real and you can see them on the show floor in the Go Electric Drive TechZone. Think solar power has gone dark? Visit Innovations Award Winner SolarFocus and other green innovators in the Sustainable Planet TechZone. More, we have taken the lead in standardizing energy usage measures and conveying individual product usage to the public. Our products use less energy each year. And while new technologies use more energy at first, usage quickly drops with scale.

Our Need for a Clean Environment

The CES itself is a green show – the greenest show according to *Trade Show Executive* magazine. This year we've stepped it up even more. Look at your badge. It's made from recycled 2011 CES materials. And all around the show we have companies committed to a cleaner environment. Indeed, this year most major companies agreed to triple their recycling in five years and the industry is committed to a billion pounds in 2016. CEA is sponsoring a challenge to innovators around the world to find new uses for old CRT glass coming back for recycling. Segway inventor Dean Kamen will be talking about how his technology will solve the world's clean water shortage.

Our Need for Safer Transportation

Cars are becoming safer. Six of the ten big auto companies are exhibiting along with scores of aftermarket companies. Today it's navigation, driver alertness, sobriety, back-up and lane change warnings and location-based services. Soon it will be collision avoidance and eventually driverless cars. We hear about tragic accidents, caused by irresponsible drivers who type on their mobile devices while driving. Manual texting while driving should be illegal. But electronics in the vehicle can enhance our safety. Our Safe Driver TechZone on the show floor features some innovative companies showing technologies which ensure safer driving.

Our Need to be Healthy

Technology can also keep us healthy. Apps and products increasingly monitor our nutrition, activity and sleep. Our Sports and Fitness TechZone on the show floor, and CEA's new working group on Digital Health and Fitness, are helping our industry make and sell products that help us stay healthy, eat right, lose weight and improve our lives.

Our Need to Address the Growing Cost of Health Care

Here in the U.S. health care costs are increasing and the doctor pool is shrinking. This means we will have to do more for our nation's aging. Remote diagnostics and home health care products are a fast growing CES category. Devices can help patients without requiring a doctor visit. Diabetics can get blood analyzed, cardiac patients can have hearts remotely monitored and couples wanting children can determine the best time to get pregnant.

Our Responsibility to Our Children

The future of learning will be increasingly customized and reliant on capturing inspiring educators through technology. Apps, games and innovative services and software which enhance education will increasingly provide students with the skills needed to succeed in our innovation era. Our HigherEd TechZone and our conference sessions here at CES focused on digital education are great ways to learn about business opportunities in this important space.

Our Need to Protect Our Children and Keep Our Homes Safe

Technology increasingly will provide solutions enhancing safety. Today it is security cameras and smart phones to get help. Soon it will be social networks, telecom and near field communications, chips and visual ID to enhance child safety.

Our Responsibility to Lift up the Poorest

Our industry has a unique opportunity – and, I believe, a unique responsibility – to use our global reach to improve lives. We have a long history of success, as our innovative products and services have connected the world, spread freedom and democracy, and brought health care to remote areas of the planet. Wireless devices bring communications to places where wireline networks would never be built. New technologies on mobile platforms enable micro-banking and sales of goods from the developing world to consumers in industrialized nations thousands of miles away.

Our Need to find Meaningful Work

Entrepreneurs and new businesses create jobs. This is the hallmark of our innovation-driven industry. It is also the philosophy of the International CES. Since 1967, CES has been the single best platform for our industry's most innovative companies – and the next generation of innovators – to showcase their products. Reaching more than 140,000 executives and more than 5,000 global media in one place is a truly unique opportunity to launch new technology. Innovation creates jobs. This year, we're focusing on new entrepreneurs in our Eureka Park TechZone, co-sponsored by the National Science Foundation, Startup America and CNET. One hundred companies in the early stage of launching new technology products and services are exhibiting. Our mission at CES is to serve as a low cost launch pad for anyone with an idea. These ideas are innovation seeds, and if a few each year blossom and grow into companies improving the world and creating jobs, we are succeeding.

Our need to Protect and Promote Innovation and the Internet

We are fighting for more spectrum to ensure the continued success of wireless broadband innovation. We are also quickly running out of Internet addresses, and we must all plan for the transition from Internet Protocol, or IP, version 4 to IP version 6. CEA has a working group that is helping manufacturers of connected devices make the transition to ensure no one is left offline.

We also have to be vigilant about overbroad efforts to curb Internet piracy. Today, proposals are rapidly moving through the House and Senate that, in the guise of fighting piracy, would harm legitimate businesses and chill innovation. These bills are being pushed by politicians who are proudly unfamiliar with how the Internet works, but highly familiar with the favors of well-heeled copyright extremists. Fortunately, they face growing opposition from a populist movement of Internet architects, IT professionals, entrepreneurs, venture capitalists, progressives, tea partiers and netizens.

If you have not joined the 'nerd army' to fight these well-intended but terrible bills, please do so now at DeclareInnovation.com. You can sign the petition at Experience CEA in the Grand Lobby. Remember – it's your Internet, and it's your government.

More importantly, a group including Senator Ron Wyden and patent owner and former CES exhibitor and CEA Chairman, Congressman Darrell Issa, have put forward a reasonable alternative called the OPEN Act. This smart, targeted bill would shut down foreign rogue websites without harming the Internet.

We all want a cleaner world where economies soar and people do meaningful work. We can and will get there with innovation.

It is who we are. It is our destiny and our future. It is our stepping stone to a better life for the citizens of the world. It is an outgrowth of liberty. And we must recognize innovation is a laudable goal for any society.

It does require a few essential elements. A culture which encourages risk, allows mistakes and allows free thought and speech. Innovation also stems from free trade, educated workers, a flexible workforce and a predictable legal system.

By definition, innovation is a change in the status quo. Indeed our industry is about change: yet even a modest change in this show reflecting changing innovation is too often viewed negatively. In the movie Wall Street, Gordon Gekko said, "Greed is good." Well I believe, "Change is good."

I've already had the chance to see some of the show floor and I'm blown away by the level of innovation. I think you will be too.

Innovation is not a dalliance, but a strategy. It requires a mindset, hard work and vision. It is not for the faint hearted.

Innovation is CES. And it is the pulse of our show.