2016 U.S. CONSUMER TECHNOLOGY OUTLOOK

SMART PHONES
$55 billion

3D PRINTERS
$152 million

SMART WATCHES
$3.7 billion

DROnes
$953 million

SMART HOMES
$1.2 billion

LAPTOPS
$17.4 billion

VIRTUAL REALITY
$540 million

4K UHD
$10.7 billion

The U.S. Consumer Technology Sales and Forecasts report reflects U.S. factory sales-to-dealers and covers more than 300 tech products.
Technology is transforming the world. But it is innovation that lets us engage with each other in a fresh way. Curious and creative technologists are developing new apps, products and business models and forming partnerships that have the power to reshape lives around the globe.

The Consumer Technology Association (CTA)™, formerly Consumer Electronics Association (CEA)®, and our more than 2,200 members represent innovation in the $287 billion U.S. consumer technology industry. We changed our name last fall to better reflect our focus on consumers and our mandate to the services, products, software, apps and technologies that are improving lives, solving problems and making the world better. Eighty percent of our members are small businesses and startups, while others are among the world’s best known brands.

Our members include the entire technology ecosystem from Internet retailers, car companies, 3D printer makers, drone builders, wireless health companies, robotics companies, Internet of Things players, search engines, tablet and smartphone makers, app creators, sharing economy players all the way to content creators. They focus on a range of new issues from privacy to heath care, encryption to spectrum and have infused our world with energy, passion and modernity.

Just look at the sharing economy. Mobile connectivity is fueling social engagement which is uprooting existing business models and providing new services that consumers want. Because of our focus on innovation, we launched the Disruptive Innovation Council that includes companies like Airbnb, MC10, Nest and Uber that have global impact and have altered the usual business paradigm. These game changing companies are disrupting the status quo and energizing consumers everywhere. Consumers love our products!

But many of these companies have run into laws and policies government created in another era which restrict their ability to enter new markets. The Council will be the center point for advocacy and research designed to fight for the cause of disruptive innovation.

Making a Difference
CTA’s mission is to grow the industry. We do this in several ways. We provide exclusive market research with more than 20 consumer studies each year. We developed more than 12 industry standards last year. We work with legislators to fight for the cause of innovation.

We host CES and CES Asia connecting attendees with new relationships, revenue and ideas and other events during the year. And we promote innovation with unique consumer campaigns.

Improving the lives of seniors and people with disabilities through technology is the goal of the CTA Foundation. We see a future where the biggest challenges that humans face will be solved with ground-breaking technology.

In this election year, we will continue to work with both political parties to ensure they responsibly address our policy issues. But we also will push back on those who want government to dictate how we build our products and offer new services. We will support our members and promote growth in this changing economic environment. Please work with us to build a future where technology continues to advance the lives of global citizens.
As the world’s gathering place for all who thrive on the business of technology, CES® is the hub to showcase the latest innovation, strike a strategic partnership or experience the power of consumer technologies. Global industry leaders form cross-market relationships at the world’s most influential technology event. Owned and produced by the Consumer Technology Association (CTA), CES displays cutting-edge technology across diverse categories like vehicle technology, personalized health care solutions, unmanned vehicles (drones), connected smart home devices, 3D printers and gaming. CES has been the proving ground for innovators and breakthrough technologies for nearly 50 years.

CES 2016 was held in Las Vegas, January 6-9. The future of technology innovation stood center stage with 3,887 exhibitors on the largest show floor in history—more than 2.47 million net square feet. Top executives from major global brands took to the CES stage to provide insight into the future of innovation. CES 2016 included keynotes from CTA’s Gary Shapiro, GM’s Mary Barra, IBM’s Ginni Rometty, Intel’s Brian Krzanich, NBCUniversal’s Steve Burke, Netflix’s Reed Hastings, Samsung’s Dr. WP Hong, Volkswagen’s Dr. Herbert Diess and YouTube’s Robert Kyncl.

This year also included an all-star lineup of conference session panelists, including Bosch’s Dr. Volkmar Denner, Qualcomm’s Steve Mollenkopf and Mobileye’s Prof. Amnon Shashua who discussed the future of urban mobility. The CES 2016 conference program featured more than 300 sessions with more than 1,000 speakers representing every major industry including vehicle technology, retail, entertainment, engineering, software and digital health.

Before the Show Floor Opens
Companies use CES to introduce their products and services to the global market. Preshow press events in 2016 kicked off two days before CES opened. The official media event, CES Unveiled Las Vegas hosted 160 companies, including a record-breaking 52 startups from Eureka Park™ – the dedicated CES Marketplace for early-stage companies. Exhibitors offered a preview of new products to more than 2,000 media, covering the latest in sensors, 3D printing, the Internet of Things, wearables, virtual reality and robotics. And CES Press Day featured 28 exhibitor press conferences setting the tone for a week that saw some 20,000 products launched.
CES: THE GLOBAL STAGE FOR INNOVATION

Tech Policy in the Spotlight
CES also is a must-attend event for policymakers and regulators to engage with the technology companies driving the global economy. CES 2016 featured Gary Shapiro, president and CEO of the Consumer Technology Association, conducting one-on-one interviews with both Federal Communications Commission (FCC) Chairman Thomas Wheeler and Federal Trade Commission (FTC) Chairwoman Edith Ramirez. In total, 27 international, federal, state and local government officials spoke on panels, including Transportation Secretary Anthony Foxx, Federal Aviation Administration (FAA) Administrator Michael Huerta, every member of the FCC, four members of the FTC, U.S. Chief Technology Officer Megan Smith, Director of the U.S. Patent and Trademark Office Michelle Lee, Sens. Dean Heller (R-NV) and Mark Warner (D-VA), and Rep. Darrell Issa (R-CA). More than 200 top policymakers, regulators and staff attended CES 2016.

The annual Leaders in Technology Dinner honored the policymakers and technologists that are instrumental in furthering tech innovation. Guests and speakers included Nevada Governor Brian Sandoval and French Economy Minister Emmanuel Macron, who noted that France brought a delegation of 190 entrepreneurs and 127 startups to CES 2016, calling them “the face of France.” Fitbit CEO and Co-Founder James Park delivered the evening’s keynote address as a discussion with Gary Shapiro about the digital health and fitness category.

Emerging Entrepreneurs
Eureka Park is the place to go for the latest ideas and business models from fresh new companies. This Marketplace is the flagship startup destination at CES that provides a unique exhibiting opportunity to launch a new product, service or idea. Emerging innovation was at the heart of this year’s show with 500 startup companies in Eureka Park, up from 375 in 2015.

Eureka Park encompasses the essence of CES – an opportunity for entrepreneurs with an innovative product or technology to expose it to the world and receive media coverage that they can’t get anywhere else. Many of the startups in this area drew venture capitalists and investors looking for the next big thing in technology.

Content and Entertainment at CES
Entertainment Matters, presented by Variety, is a program to help the Hollywood community navigate the largest, most influential technology show in the world, through exhibits, keynotes and panels as well as events critical to the Hollywood community. The Entertainment Matters Ambassadors for CES 2016 were YouTube stars Justine Ezarik, known as iJustine, and Joey Graceffa. The two digital media personalities represent the cross section of the technology and content communities.

C Space at ARIA – an extension of the Brand Matters and Entertainment Matters programs at CES – returned for its second year at CES 2016. Tailored for marketing, advertising, content and creative professionals, C Space at ARIA features conferences, networking events, exhibits and meeting suites along with an array of headline speakers. Throughout the official CES venues, attendees discover how content, creativity, technology, brand marketing and influencers come together as part of the CES universe.

THE REACH OF CES
With more than 6,500 members of the media in attendance, CES 2016 garnered worldwide media coverage. Social media also got the word out on the latest products, services and technologies showing the wide reach of CES.

• 1,278,870 mentions of the #CES2016 hashtag
• 15.2 billion total potential social media impressions
• Facebook videos: 107,887 total views
• YouTube: 187,399 total views to date

Honoring Innovation
CES serves as a stage to honor the industry’s best. The CES Innovation Awards recognize outstanding design and engineering in consumer technology products across 27 product categories. And Engadget’s Best of CES Awards 2016 program honors products from 16 categories, spanning the entire consumer technology industry.

Gary’s Book Club showcases the works of prominent authors in the tech industry. Attendees can purchase books through Barnes & Noble and have copies signed by the authors. The ten authors at CES 2016 included Joris Merks-Benjaminsen, Nicklas Bergman, Deepak Chopra, Mick Ebeling, Larry Kilham, Gabe Klein, Joseph C. Kvedar, Ben Parr, Scott Stawski and Amy Wilkinson.

CES is a four day tech experience where the top leaders in the industry connect, do business and get a glimpse at the future of technology. CES 2017 will return to Las Vegas Thursday, January 5 through Sunday, January 8. For more information, visit CES.tech.
CES ASIA: EMBRACING NEW MARKETS

Owned and produced by the Consumer Technology Association (CTA)™ and co-produced by Intex Shanghai, CES Asia is the premier event for the consumer technology industry. CES Asia showcases the full breadth and depth of the innovation value-chain in the Asian marketplace for global brands and budding startups. It provides a platform for key global businesses to grow and reinforce their brands by showcasing the latest products and technologies to industry executives, foreign buyers, media and a limited number of consumers from China.

The inaugural CES Asia – held in May 2015 – exceeded all expectations, with 28,682 attendees and 212 exhibiting companies. The event had a strong global presence with roughly 40 percent of the show floor represented by innovative companies headquartered outside of mainland China. Moreover, the products introduced are intended to fuel the Asian marketplace and grow the global economy, creating new jobs and paving the way for future innovation.

Shanghai is the most dynamic city in China and is the center for innovation. It is also the pilot experiment free trade zone for new technologies. Shanghai embraces all kinds of innovative companies.
CES ASIA: EMBRACING NEW MARKETS

CES ASIA RETURNS
After a phenomenal first show, the space for 2016 has been expanded in the Shanghai New International Exhibition Centre (SNIEC). CTA expects more than 300 exhibiting companies and more than 30,000 attendees at this year’s show. CTA’s Startup Park is a new CES Asia exhibit area dedicated to showcase the latest startup innovation. Modeled after the Eureka Park™ Marketplace at CES, Startup Park will feature new products, services and ideas from startups seeking exposure in the rapidly growing Asian marketplace.


CES ASIA KEYNOTES
CES Asia also has a dynamic conference program led by experts across various technology industries to highlight innovative global tech. Programming includes more than 50 conference sessions and keynote addresses.

Featured Product Categories
- 3D Printing
- Audio
- Content and Online
- Green Technologies
- Health
- Home Entertainment
- Lifestyle
- Mobile
- Robotics
- Smart Home
- Sports and Fitness
- Vehicle Technology
- Video/4K Ultra HD
- Video Gaming
- Wearables

COUNTRIES REPRESENTED AT CES ASIA
- Belgium
- Canada
- China
- Denmark
- Finland
- France
- Germany
- Hong Kong
- Israel
- Japan
- Netherlands
- Norway
- Philippines
- Singapore
- South Korea
- Sweden
- Switzerland
- Taiwan
- United Arab Emirates
- United States

CES Asia media partners include SMG and ZOL. Special co-organizers for CES Asia include the Chinese Electronic Chamber of Commerce (CECC) and the China Chamber of Commerce for Import and Export of Machinery and Electronic Products (CCCME).

For the latest CES Asia news and information, visit CESAsia.com.
From CES, the world’s gathering place for all who thrive on the business of consumer technologies, to smaller events just for members, CTA programming gives industry professionals an opportunity to exchange ideas with top executives, as well as key policy makers, retailers and the media.

Innovate!
CTA’s annual member conference informs, connects and educates consumer technology professionals, analysts and media on the latest trends, technologies and legislation impacting the industry through keynotes, market research and breakout sessions with a strong focus on startup companies.

CT Hall of Fame Dinner
The annual Hall of Fame dinner honors the visionaries in the consumer technology industry whose contributions have made possible the products, services and technologies that are enhancing consumers’ lives.

CES Unveiled New York
The CES Unveiled series brings together innovative technology companies, top media, buyers and analysts with a focus on innovation. This event features CTA’s annual holiday sales forecast, the announcement of the honorees for the CES Innovations Awards, the CES press conference and a networking reception to let press view the latest product displays. The Unveiled franchise in 2016 will also include events in Prague and Paris.

CES Unveiled Las Vegas
This media event, held two days before CES officially opens, gives press and analysts a glimpse of the products and services that will be making news headlines at CES. Honorees in the CES Innovations Awards are also on display.

CES
Last January more than 170,000 industry professionals came to CES to network, conduct business and see advances in consumer technologies, products and services. In addition, more than 50,000 international attendees traveled to Las Vegas to experience the future of consumer technology. The show floor attracted 3,600 exhibitors and 5,000 media and an unmatched conference program with top keynotes and 850 conference sessions to keep attendees informed.

CES on the Hill
This springtime event in Washington, D.C. allows exhibitors to showcase their innovations for federal regulators, members of Congress and their staff, and the press. CES on the Hill lets policy makers experience how technology and pro-innovation policies benefit the U.S. economy.

Digital Patriots Dinner
Held in tandem with CES on the Hill, the Digital Patriots dinner honors industry and policy leaders that support consumer technology advances as well as the legal and regulatory framework that encourages the industry to grow.

Technology & Standards Forum
Technical experts and engineering leaders across a diverse group of CE product categories consider, develop and finalize the next generation of industry specifications and technical standards.

CES Asia
CES Asia™, held in Shanghai, China, is the premier platform to showcase the global innovation that defines the consumer technology industry in the Asian marketplace. From tech powerhouses to innovative start-ups, manufacturers, developers and suppliers showcase the latest products and create business relationships with new and existing industries in this market.

Consumer Technology CEO Summit
This invitation-only gathering of CEOs provides an opportunity for executives to network in a qualified environment, gather business insights and focus on crucial industry issues. This year the event will be held in Tel Aviv, Israel.
CTA EVENTS

For more information on CTA events, call 703-907-7600 or visit CTA.tech.
In Washington, D.C. and state capitals nationwide, legislation and regulations that impact the technology industry are being considered every day. CTA’s Government and Legal Affairs team, the legislative voice for consumer technology (CT), is committed to advising, lobbying and reporting on federal, state and international consumer technology policy on behalf of Consumer Technology Association members and industry.

**Patent Trolls**
CTA supports patent legislation reform that combats the recent explosion of lawsuits brought by non-practicing entities, better known as “patent trolls.” Every dollar companies spend fighting baseless lawsuits is a dollar not spent on creating jobs and developing new products, which makes it more difficult for the American CT industry to compete internationally.

**Disruptive Innovation**
Disruptive innovation is central to America’s entrepreneurial culture. “Creative destruction” drives the market through innovation, displaces older technology or ideas with the new, and improves our lives. CTA has supported disruptive technologies such as DISH Network’s “Hopper,” Airbnb’s unique home rental model and Uber’s popular Internet-based on-call car service. Disruptive innovation must be allowed to move forward in order to fuel the next generation of innovation and not be stopped by incumbent industries with legal or regulatory power.

**Spectrum**
The U.S. is facing a looming spectrum shortfall. CTA supports government efforts to free up spectrum for licensed and unlicensed use. In particular, TV broadcast spectrum repurposed through voluntary incentive auctions will promote innovation and job creation, reduce the national debt and amply compensate television broadcasters that choose to participate. Most important, incentive auctions will alleviate the spectrum crunch so Americans can enjoy robust wireless broadband capability to power our innovation-driven economy.
**Immigration Reform**
CTA supports strategic immigration reforms that encourage foreign-born entrepreneurs and U.S.-educated immigrants to remain in the U.S. to build businesses and create domestic jobs. CTA has backed reform legislation from the 114th Congress including the Immigration Innovation (I-Squared) Act. The changes to national immigration policy from this and similar pieces of legislation will help to attract the best and the brightest to come and stay in the U.S.

**Green Energy Efficiency**
Consumer technology companies and CTA are leading the way with a range of initiatives to leverage the power of innovation to reduce the environmental impacts of the CT industry. CTA works cooperatively with governments in the development of energy efficiency initiatives and opposes mandates that stifle innovation, reduce consumer choice, and limit product features and services.

**Guiding Principles on Privacy and Security**
Security is an evolving concept that has forced us to reevaluate our notions of privacy. Consumers are making decisions to balance among technological benefits and privacy outcomes. CTA's privacy guidelines can help companies earn consumer trust by encouraging consistent personal wellness data management.

**Access to Innovative Technologies**
CTA supports industry-driven solutions to ensure that innovative technologies and services are accessible to consumers with disabilities. CTA works with members of the accessibility community and the FCC as it implements the 21st Century Video and Communications Accessibility Act of 2010. CTA supports regulations that balance improved accessibility with the flexibility to innovate.

**Expanding Free Trade Agreements**
CTA strongly supports the expanded Information Technology Agreement (ITA) and has been closely advising the USTR on the technology industry’s position. A successful ITA expansion, which will eliminate tariffs on our products, will save billions of dollars for member companies. CTA has consulted in Geneva with the Secretary General of the WTO and ITA member nations. CTA also continues to coordinate with the U.S. government, providing testimony and counsel for ongoing negotiations.

**Safe In-Vehicle Technology/Driverless Cars**
CTA is committed to the principle that a driver’s highest priority must be the safe control of the vehicle. To this end, CTA supports state legislation that prohibits texting while driving as well as a ban on cell phone use by those with a graduated driver’s license. However, CTA believes that policymakers must recognize that many in-vehicle electronics contribute to safer driving and offer valuable benefits. But the best and ultimate solutions are the technology and path to the driverless car.

**Consumer Technology and Connectivity in Airplanes**
CTA was a leading supporter of the FAA’s decision to allow airlines to expand the use of personal electronics on airplanes. Following the FAA’s decision to allow passengers gate-to-gate access to their devices, the FCC opened a proceeding to remove technical barriers to expanded in-flight data and voice communication.

**Drone Rules**
CTA is working with various stakeholders, Congress and the FAA to advance the drone/UAV industry, addressing safety and privacy issues, and promoting the beneficial use of drones. CTA has partnered with the FAA on the “Know Before You Fly” campaign to educate consumers on the safe operation of drones. CTA also participated in the FAA’s Registration Task Force to represent consumer and commercial users, manufacturers and drone retailers.
Interoperability between devices is critical in addressing the trends of technological innovation, marketplace globalization and regulatory reform. Throughout the year, CTA’s Technology & Standards team helps to grow the technology industry by developing industry standards to enable interoperability between new and existing products on the market.

CTA functions as a vital connection between companies, retailers and consumers to establish a unified technology roadmap and tackles any impasses along the way. The CTA Technology & Standards program has more than 70 committees, subcommittees, and working groups, and roughly 1,100 participants. The program has an unmatched reputation as a credible and flexible standards-making body accredited by the American National Standards Institute (ANSI).

CTA conducts innovative PlugFests each year focusing on connectivity and interoperability. These events allow manufacturers to come together and test interfaces in a semi-private, round robin fashion. Designers can sort out connectivity issues between different manufacturers before products get in consumers’ hands.

Technology & Standards committee, subcommittee and working group meetings are open to the CT industry and free for CTA members. CTA works for the industry and, with help from the technology community, ensures our role as the national and global standards developing organization for consumer technology.
COMMITTEE SCOPES
• R3 Audio Systems
• R4 Video Systems Committee
• R4.3 Television Data Systems Subcommittee
• R4.8 DTV Interface Subcommittee
• R6 Portable Handheld and In-Vehicle Electronics Committee
• R6.4 Health & Fitness Technology Subcommittee
• R7 Consumer Electronics Networking Committee
• R7.8 Modular Communication Interface for Energy Management
• R10 Residential Systems

FEATURED STANDARDS AT CES
In 2015, CTA launched its "Featured Standards at CES" program to draw worldwide attention to important, new industry standards at CES. Featured Standards at CES are promoted through informative panels and educational presentations during the CES Conference Track program. At CES 2016, the panels provided detailed information on the following topics:

Completing the HDR Viewing Experience: High Dynamic Range (HDR) TV became a reality in 2015 with new standards describing how to deliver it to compatible TVs. Attendees learned how HDR and other enhancements get delivered to today's best TVs and how to future proof their video products.

Counting on Consistency in Fitness Wearables: As the popularity of wearables continues to grow, there is demand for increased accuracy. Attendees got an overview of how CTA is working with manufacturers to develop performance standards so consumers get consistent tracking of sleep, calories, steps, and heart rate across products.

Spectrum Musical Chairs and CE Devices: As LTE expands into unlicensed spectrum used by Wi-Fi and other services, there are increasing instances of licensed services eyeing unlicensed spectrum. Attendees learned about LTE-Unlicensed, LTE License Assisted Access and other industry activities to coordinate unlicensed from a licensed position.

Recently Published Standards
• CTA-861.2, Advanced Audio Extensions, August 2015
• ANSI/CTA-2042.1-B, Wireless Power Glossary Terms, August 2015
• CTA-2053, Receiver Specifications for ATSC 2.0 Security, August 2015
• CTA-TR-12, Securing Connected Devices for Consumers in the Home, November 2015

ACHIEVEMENTS
Sleep, Activity and EEG
The Health & Fitness Technology Subcommittee has three active working groups. The Sleep Monitors working group is addressing sleep monitor functions in wearable technology, and is working on definitions and characteristics for wearable sleep monitors. The Physical Activity Monitoring Standards working group is drafting definitions and performance metrics for physical activity monitors like step counters and calorie counters. The Consumer EEG Data working group is working on standards for consumer EEG data exchange and interoperability. See page 25.

Alliance Community Engagement
In 2015, T&S launched tools to better engage with industry alliances, including developing Web-based tools that provide resources for alliances, a newsletter that will keep the industry informed about alliance and CTA standards activities, a networking event at CES 2016 that brought alliances and CTA standards participants together, and an expanded Technology & Standards Forum in Spring 2016 that will include alliance activities.

Product Marks
Product marks are used by companies to visually convey that products meet certain performance levels. These product marks help to facilitate connectivity and enable consumer comparison shopping. Often the marks are based on CTA standards or definitions and they rely on verification by the licensee. Product marks are registered by CTA and licensed to participants with an associated administration fee.

• Amplifier Power for Mobile Electronics, CTA-2006-B
• Portable Digital Media Interface, CTA-2017
• Mobile Electronics Loudspeaker, CTA-2031
• DTV Product Marks
• Public Alert, CTA-2009-B
• Portable Electronic Devices on Aircraft
• Television Antenna Marks, CTA-2028, CTA-2032
• Audiobook Marks, CTA-2003-C

For more information on CTA’s standards activities, visit standards.CTA.tech
Informed decisions begin with Consumer Technology Association market research. Focused on every part of the $287 billion consumer technology (CT) industry, CTA’s comprehensive market research includes industry sales statistics, forecasts, economic analysis and consumer research. CTA market research is valued at more than $1 million annually. CTA’s industry knowledge is relied on by the technology community, financial markets, the media and economists. CTA member companies also have access to CTA’s research library staff, publications, webinars, presentations and research events year round.

Economic Analysis
If you’re interested in how current geo-political events could impact your businesses’ bottom line, CTA’s Chief Economist Dr. Shawn DuBravac can help you understand the big picture issues facing the industry and offer suggestions about how to develop your business plan around them. Dr. DuBravac also writes a column for CTA’s flagship magazine, It Is Innovation (i3).

CTA provides valuable insights into economic trends impacting CT businesses through presentations and webinars, as well as through the CTA Consumer Sentiment Index, a monthly report that measures consumer confidence in the economy and the outlook for technology spending, which CTA has been tracking since January 2007.

Recent CTA Research Studies:
- Consumer Technology Post-Purchase Behavior
- Brands Working With Startups
- The Future of 3D Printing in Manufacturing, Prototyping & Global Supply Chain Management
- Virtual Reality: Promise and Reality - What’s Ahead For Creative Storytelling
- 2015 Video Consumption Trends
- Consumers Journey to Purchase - Wireless
- In-Vehicle Technology Report
- 2015 Black Friday Report
- Consumers Journey to Purchase - Health and Fitness
- The Digital Imaging Ecosystem: Consumer Trends
- Consumers Journey to Purchase - Audio
- 22nd Annual CE Holiday Purchase Patterns

Upcoming Studies:
- Active Aging Study
- Wireless Device Life Cycle Study
- 14th Annual State of the Home Tech Builder
- 18th Annual CE Ownership and Market Potential

Research Library
CTA’s team of professional librarians is a valuable member resource, fielding the most challenging requests using CTA research as well as third-party sources. Contact the CTA Research Library at 703-907-7763, or via email: info@CTA.tech.

Webinars, Presentations and Events
Participate in Consumer Technology Association Market Research webinars and presentations led by industry experts for insights into the latest industry research and trends, including seasonal updates, political events and economic overviews. CTA’s webinars are free to members and can be accessed for a fee by non-members.
CONSUMER TECHNOLOGY ASSOCIATION PUBLICATIONS
Throughout the year, CTA provides members with the latest technology and industry news and information.

It Is Innovation (i3) – CTA’s flagship magazine focuses on innovation in technology, policy and business as well as the entrepreneurs and startups that grow the consumer technology industry. i3’s platform also includes its website, CTA.tech/i3 and a mobile app for iOS and Android tablets.

Digital America – An educational resource for the tech industry, this annual publication offers insights, trends, market research, data and analysis across 10 product categories as well as a timeline of significant industry milestones.

Five Technology Trends to Watch – Published annually, Five Techs uses the latest CTA market research and analysis as well as third-party research to predict which products and services will transform consumers’ lives.

Consumer Technology Association Blog – The CTA Blog covers CTA initiatives, relevant issues and research, as well as industry trends.

Consumer Technology Association SmartBrief – This free, daily e-newsletter provides a summary of the top tech news stories to keep insiders informed.

"CTA market research is valued at more than $1 million annually."

CONSUMER RESEARCH
CTA's deep understanding of the consumer technology industry, combined with innovative and proven market research methodologies and analysis techniques, enables CTA to provide members with actionable research. CTA members have access to more than two dozen research reports produced each year.

INDUSTRY SALES DATA
CTA delivers industry sales statistics in the following reports:

- CE MarketMetrics – tracks shipments of CE products from the factory to U.S. consumer sales channels. CE MarketMetrics’ weekly and monthly reports cover more than 50 product categories; and the program’s semi-annual forecasts provide a six year snapshot of unit sales, dollar sales and average wholesale unit price.

- U.S. Consumer Electronics Sales & Forecasts – featuring one-year and five-year sales forecasts, this report details the size and growth of a wide array of electronics products. Produced twice a year.

- CE Historical Data – a comprehensive database of factory unit and dollar sales, average wholesale price and household penetration rates across more than 50 categories of consumer technology products.
HELPING TO GROW THE INDUSTRY

**CTA** works to build and enhance connections among tech companies, the media and consumers to help grow the industry. By educating both the media and consumers about the latest technologies, advanced products and services, CTA aims to drive market interest for these innovations.

CTA tells consumer technology stories using promotional campaigns focused on media placement, webcasts, interviews, speaking opportunities, CTA publications and a national spokesperson tour. Member companies can participate in outreach programs that help to stimulate sales of CT products and services. Promotional campaigns by CTA support the latest tech trends such as 3D printing, wearables, smart home, and digital healthcare devices and services as well as broad product categories including accessories, drones, in-vehicle electronics, digital imaging, audio, wireless, video and the internet of Things.

**CTA PROMOTIONAL ACTIVITIES**

**The Innovation Movement**

@imovement

The Innovation Movement (Innovation-Movement.com) is CTA’s grassroots arm which organizes public policy campaigns to ensure the best that technology and innovation can offer to improve the human condition will not be delayed, restricted or slowed by incumbent businesses using government to impede progress. Media engagement and strategic communications tools are used to support CTA’s pro-innovation policy agenda at the national, local and international levels.

**Digital Answer Man Tour®**

@CTAanswerMan

Jim Barry, CTA’s Digital Answer Man, raises interest in CTA members’ products, helps drive consumers into local retailers and provides CTA members with national media coverage at no extra cost. The CTA National Media Tour, aka the "Digital Answer Man Tour," travels to more than 55 media markets each year, conducting nearly 200 media interviews to promote the latest consumer tech.

**CTA Broadcast Studio**

Located at the CTA headquarters in Arlington, VA, CTA’s studio for media interviews, satellite media tours and other promotional opportunities can be used by CTA members for their broadcast media needs.

**CE Cares**

CE Cares is a social responsibility campaign that provides consumers with information including proper television placement, safe listening guidelines, responsible use of in-vehicle electronics and electronics recycling to promote consumer safety.

**National TV Safety Day**

The third annual partnership with Safe Kids Worldwide for National TV Safety Day received strong media coverage driven in part by cooperative promotional efforts from Best Buy and Sam’s Club, and public sector support from the Consumer Product Safety Commission.

**eCycling Leadership Initiative**

CTA’s eCycling Leadership Initiative raises awareness of more than 7,500 CT collection sites, increases the amount of electronics recycled responsibly, highlights the available collection opportunities and provides transparent metrics on eCycling efforts. CTA also hosts GreenerGadgets.org, a campaign to inform consumers about electronics recycling locations, energy efficiency of electronic devices and eco-friendly uses of CT devices.

**International CES Press Services**

CTA promotes members’ products before, during and after CES. CTA can help members develop a successful CES strategy with pre-show promotions, on-site press conferences and media engagement opportunities as well as access to the pre-registered press list.

**RECOGNIZING ACHIEVEMENT**

**CT Hall of Fame**

The CT Hall of Fame honors visionaries who pave the way for the products and services that are changing consumer’s lives. Each year a new group of inventors, engineers, business leaders, retailers and journalists is honored at a dinner in New York.

**Innovation Entrepreneur Awards**

The IEA awards program, sponsored by It Is Innovation (i3) magazine and the CTA Small Business Council, recognizes inspiring
entrepreneurs, leading businesses and exceptional startups in the CT industry. The 2015 winners were Hong Lip Yow, AcousticSheep, and two startups: Paper Battery Company and Whistle Sports Network.

**Digital Patriots**
The Digital Patriots Awards dinner honors industry and government leaders for their positive impact on the CT industry. The 2016 recipients were U.S. Senator Cory Booker (D-NJ) and Congressman Blake Farenthold (R-TX). Senator Marco Rubio (R-FL) was also honored with CTA’s Innovation Policy Ninja Award.

**CES Innovations Awards**
The CES Innovation Awards is an annual competition honoring outstanding design and engineering in consumer technology products. Products are featured on-site at CES.

**Mark of Excellence Awards**
CTA’s Mark of Excellence Awards recognizes the best in custom integration and installed technology at CES.

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**CTA RESOURCES**
CTA’s websites and training programs educate retail salespeople, installers, technicians and consumers on the latest technology trends and products.

- **Mobile Electronics Certified Professionals (MECP)** – The only national program that tests and certifies mobile electronics installation technicians and sales people on the installation techniques and capabilities of automotive information technology, entertainment, navigation and safety/security systems. Thousands of professionals at retail locations hold MECP certifications.

- **Electronic System Professionals Alliance (ESPA)** – CTA, CEDIA & NSCA founded ESPA in 2006 to meet the demand for properly trained ESPA-Certified electronics system technicians.

- **TechHome Referral Database** – TechHome.com is a one-stop-shop for consumers to find a nearby home technology integrator and learn how to turn their home into a smart home.

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**CONNECT WITH US**

**CTA’S DIGITAL MEDIA PRESENCE**
To ensure that CTA and its member companies are an integral part of the everyday conversations about consumer technology online, CTA has enhanced its digital media presence to include the following Web and social media properties:

**On the Web:**
- CTA.tech, the official home of CTA
- CES.tech, representing CES
- DeclareInnovation.com, CTA’s public policy perspective
- It Is Innovation (CTA.tech/13), CTA’s flagship publication
- The CTA Blog (CTA.tech/blog), CTA’s official blog
- GreenerGadgets.org, which shows consumers how to sustainably use and recycle CT products.

- **Facebook:** Keeping our communities updated with the latest CT news.
  - Facebook.com/ConsumerTechnologyAssociation
  - Facebook.com/CES
  - Facebook.com/InnovationMovement

- **Twitter:** Breaking the latest news on CTA, CES and the industry.
  - @CTATech
  - @CES
  - @imovement

- **Periscope:** Watch live broadcasts from CTA and CES
  - Periscope.tv/CTATech
  - Periscope.tv/intlCES

- **Snapchat:** Follow CES at "cesofficial" for CES news and behind-the-scenes photos and videos.

- **Instagram:** Enjoy images from CTA events and other industry related programs.
  - @CTA
  - @CESofficial

- **YouTube:** Follow CTA and CES for videos covering the industry and CES.
  - YouTube.com/CESontheTube
  - YouTube.com/CEAontheTube

- **Google+:** Join our Circles for news and information about CTA, CES and the industry as well as our upcoming Google Hangouts with executives and industry leaders.
  - +CES
  - +CEA
The ever-growing and constantly changing landscape of technology has conditioned us to not settle for just a myriad of high-tech devices. Instead, we want all our devices to be able to talk to one another and be connected on a single network to make our interactions with technology, devices and life easier. Welcome to the Internet of Things, or simply put, IoT, where connectivity and interoperability are uniting all of our devices under one umbrella.

CTA stands at the forefront of IoT growth and usability, making sure the CT industry optimizes its devices and networks to seamlessly work together. According to CTA’s semi-annual U.S. Consumer Technology Sales and Forecasts report, IoT will help lead the U.S. consumer technology industry to a record-setting $287 billion in retail revenues ($224 billion wholesale) in 2016.

From a government and policy standpoint, CTA has addressed the concern over information privacy and security. The CTA Tech & Standards team works year-round to develop standards and bring manufacturers together to make sure devices connect. At CES 2016, IoT technology was featured all across the show floor by industry leading companies and innovative startups.

Information Privacy, Security and Spectrum
The significant increase in the market for smart, connected devices, combined with media coverage of major data breaches, has thrust the consumer technology industry into a national conversation about the privacy and security of its products. CTA works with its members to manage this complex policy environment using a comprehensive strategy of member education, outreach to regulators, thoughtful responses to legislative initiatives, and promotion of effective industry self-regulatory frameworks.
Recently, CTA supported a bill titled “Developing Innovation and Growing the Internet of Things” Act, also known as the DIGIT Act. This bipartisan bill will bring together interested stakeholders from the federal government and private sector to give Congress recommendations. With support across the aisle, the DIGIT Act is a step in the right direction to ensure the IoT industry has access to the spectrum it needs to continue to grow and enhance lives.

In August 2015, Gary Shapiro testified at a congressional hearing on the topic of IoT. He explained to Congress that industry-driven solutions best promote innovation and protect consumers from unfair use of their data. Shapiro told Congress about the growing number of connected devices in the market and that consumers are embracing the positive impacts of technology. As a result, Shapiro informed Congress that the industry needs additional licensed and unlicensed spectrum, the platform on which most of these new devices connect, and that there are not enough highly-skilled workers; H-1B visa caps should be expanded to allow for more innovative and technologically savvy immigrants.

PlugFests and Standards
CTA conducts PlugFests each year focusing on connectivity and interoperability. These events allow manufacturers to come together and test interfaces in a semi-private, round robin fashion. Designers can sort out connectivity issues between different manufacturers before products get in consumers hands. PlugFests held by CTA includes those dedicated to products with CTA-861 (HDMI/HDCP/DisplayPort/CEC) interfaces and for ATSC Mobile/Handheld-based Devices. PlugFest22 is scheduled for May 15-19, 2016, in Burlingame, CA. For more information contact PlugFest@CTA.tech.

The Tech & Standards Consumer Electronics Networking Committee recently developed the standard CTA-TR-12: Securing Connected Devices for Consumers in the Home, which addresses security concerns related to the connected devices for consumers in the home. Also, the Tech & Standards Home Networks Committee created an IPv6 Working Group to begin development of an IPv6 host and router profiles requirements standard. The scope of this standard is to identify the required features and capabilities for stand-alone routers and hosts with support for IPv6 and related necessary protocols. This standard addresses home/SOHO router and related host requirements.

IoT at CES
Some of the most cutting-edge companies showcased IoT products and networks at CES 2016. One of the areas that captured the essence of IoT was the Smart Home Marketplace, presented by Bosch and Coldwell Banker. Products from companies like Bosch, Ooma, Zmodo, GalaxyWind, EnOcean and Kwikset showed attendees the capabilities of a smart home and IoT. From basic security monitoring or more customized access to appliances, lighting, window coverings, irrigation, entertainment systems and more – homeowners were delighted to discover how to use IoT to enjoy more convenience and more comfort.

CES 2016 also featured conference programming that allowed attendees the opportunity to delve deeper into the topic of IoT. Principal Analyst for Ovum Mike Sapien led a supersession panel called “IoT Business Strategies: Partnerships for the Sharing Economy.” The Innovation Policy Conference Track at CES 2016 also featured an IoT panel called “Internet of Things: Myriad Benefits and New Challenges,” which was moderated by Alan Davidson, director of digital economy and senior advisor to the secretary, U.S. Department of Commerce.
GROWING DIGITAL HEALTH AND FITNESS

CTA is active in growing the ecosystem of digital health and wellness. Formed in 2013, CTA’s Health and Fitness Technology Division seeks to raise awareness of how consumer technologies and services can help improve overall health. By conducting research on products, apps and services; working to ensure a sound regulatory environment that balances innovation with safety and privacy; collaborating with the medical community to identify ways that health and fitness technologies can deliver better health outcomes and supporting Technology & Standards initiatives, the division seeks to grow the marketplace and enhance consumer awareness.

The companies that make up the CTA Board are diverse and represent a vast range of opportunities. Work being done by member companies using different business models ranges from mobilizing health care to reduce cost and complexity of care from hospital to home to makers of stylish and innovative health and fitness devices to a range of new mobile medical apps.
Connecting the Industry with Standards

The Health & Fitness Technology Standards Subcommittee was launched in 2015 and has three active working groups tackling specific areas of focus. Technology & Standards initiatives help to create performance benchmarks or other standards to advance consumer acceptance of the wearables industry.

- **The Sleep Monitors Working Group** addresses sleep monitor functions in wearable technology. Current standardization work is focused on common definitions and characteristics for wearable sleep monitors, which includes addressing the functionality necessary in consumer devices to measure such characteristics.

- **The Physical Activity Monitoring Standards Working Group** is drafting definitions and performance criteria for measuring attributes like step or calorie counting on consumer wearable or app-based physical activity monitors. This working group aims to address the challenge of different fitness trackers having different sensors, different use cases, and various algorithms by establishing common definitions for the simplest metrics. Work is focused on a standard addressing step counting. Further efforts could include a measurement standard that would allow consumers to compare fitness trackers.

- **The Consumer EEG Data Working Group** is working on standards for consumer EEG data exchange and interoperability, to include local transmission, event description, user state description, file storage and group level meta-data encapsulation. Consumer EEG can have future impact on neurogaming, adaptive teaching, self-regulation of brain function, self-quantification of meditation or focus, and connected health.

Promoting the Industry

By educating the media and consumers about the latest technologies, advanced products, apps and services, CTA aims to drive market interest for these innovations. CTA hosted a December satellite media tour (SMT) on health and fitness technology earning 29 TV and radio interviews in markets such as Indianapolis, Portland and Columbus. The SMT earned roughly 12 million media impressions, garnering consumer exposure for health and fitness technology. The SMT featured wearable activity trackers, smart sleeping devices, health-focused apps, smart sporting equipment and wireless headphones, while sharing the benefits of health and fitness technology.

**FITNESS, HEALTH AND WELLNESS AT CES 2016**

**The Fitness & Technology Marketplace** featured the latest developments across the digital fitness category. There were more than 80 exhibitors from Greencomm Co. Ltd. with its line of smart wearables to Vert that highlighted its wearable jump technology for athletes with real-time analytics. Attendees saw advanced products, services and solutions using technology to make workouts and outdoor activities fun, safe and effective.

**Health & Wellness Marketplace presented by Digital Health Summit**

Digital health continues to grow at an astonishing pace, with innovated solutions for diagnosing, monitoring and treating illnesses, to advancements in health care delivery and smarter lifestyles. More than 75 exhibitors showed how technology is keeping people healthier and improving the ability to diagnose and treat illness.

A full lineup of conference sessions at CES devoted to health, wellness and fitness addressed this growing marketplace showing how technology is keeping people healthier and enhancing workouts to help athletes achieve better outcomes.

Defining Opportunities with CTA Market Research

CTA Market Research helps CTA members make informed business decisions. CTA’s recent Consumers’ Journey to Purchase report shows manufacturers and retailers where, when and how to connect with consumers along their purchase journey in the consumer technology ecosystem. The research also found post-purchase satisfaction is high in the health and fitness category with 97 percent of purchasers exhibiting high satisfaction with their product. The report examines how consumers research, buy a device, use it and ultimately dispose of and/or replace it with a new one. But while each product purchase journey in the consumer technology industry generally follows the same trajectory, the steps taken along the path can vary greatly by product category, as seen in this CTA report.

More, the health and fitness category is influenced significantly by the seismic demographic shift occurring in the U.S. with seniors between 65 and 85 predicted to soar to 16.6 percent of the population by 2025. What’s more, these seniors want to live healthier, active independent lives.

CTA’s latest Market Report, Active Aging, with Parks Associates defines “Active Aging,” as a proactive way of living that balances growing older with the active pursuit of quality of life. According to Parks Associates, the active aging market now includes 85 million consumers consisting of both seniors and their family caregivers. This market represented a $24.4 billion market opportunity in 2015 and will grow to $42.7 billion in 2020, a 12 percent compound annual growth rate (CAGR) over the next five years.

Serving seniors is also the focus of the Consumer Technology Association Foundation. The Foundation serves a vital role in supporting nonprofit organizations using technology to enhance the lives of seniors and people with disabilities. The Foundation supports programs that impact these communities launching its first series of grants in 2012.
The world of entertainment has experienced dramatic change over the last half century, such as the transition from analog to digital high-definition television (HDTV) and onward to 4K Ultra High-Definition (UHD), or the shift from physical to digital audio mediums and the rise of MP3. On the horizon lies the potential of such groundbreaking innovations as 8K UHD and virtual reality. CTA serves as an avid devotee of the industry that produces the technologies, devices and services that provide consumers with these ever-evolving entertainment options.

The benchmark for entertainment has never been higher. Technologies like 4K UHD and high-resolution audio, coupled with new content distribution options, offer consumers the most immersive and accessible entertainment to date. To ensure that consumers experience the best of what the consumer technology (CT) industry has to offer, CTA works on many levels to foster future innovations and contribute to the growth of the CT industry through industry promotion, standards development and a number of unique member programs.
THE NEW FACE OF ENTERTAINMENT

Promoting Entertainment
Thanks to volunteers from a wide spectrum of the Consumer Technology Association’s 2,200 member companies, CTA’s divisions and working groups promote technologies vital to our entertainment. With divisions focused on technologies ranging from video and audio to accessories, digital imaging and wireless, it’s difficult – if not impossible – to find a CTA division, committee, council or working group that doesn’t touch entertainment in some way.

Take for example the Audio Division High-Resolution Promotion Working Group, formed by CTA’s Audio Division to focus on the promotion of high-resolution audio. Through consumer education and retailer training, this group of volunteers works to bring the best audio experience to consumers’ ears. Similarly, the 4K Ultra HDTV Communications Working Group was formed with the goal of helping consumers and retailers understand the benefits of UHD TV through sales and purchasing tips, 4K marketing strategies and promotional campaigns.

Entertainment at CES
There’s no better place to see what role entertainment plays in the CT industry than at CES. From announcements related to how content is created, to how it is distributed and the devices it is consumed on, CES 2016 brought a wide angle view of consumer entertainment to Las Vegas in January.

4K UHD TV took a step forward at CES 2016, when the UHD Alliance – made up of such companies as Amazon, Disney, DirecTV, Panasonic and Sony – announced the Ultra HD Premium criteria and certification. The label sets the specifications for devices, distribution and content that go beyond resolution to high dynamic range (HDR) and immersive audio.

Behind the breathtaking home theaters on display at CES lay the content delivery platforms. A frequently developing aspect of the entertainment landscape, CTA has guided consumers as they have gone from viewing their content on VHS, to DVD, to Blu-ray Discs and streaming. CES provides a platform for content provers like Netflix – who chose to announce at CES that their streaming services had launched in an additional 130 countries – to expand and give the world an idea of what the entertainment landscape of tomorrow looks like.

Like CES, the role entertainment plays in Las Vegas each January needs to be seen to be believed.

RESEARCHING ENTERTAINMENT
By providing the industry with comprehensive market data including industry sales statistics, economic analysis and consumer research, CTA provides member companies with forecasts measuring the influence of entertainment devices and services on the industry.

With reports like 2015 Video Consumption Trends and Consumers Journey to Purchase – Audio, CTA not only measures the overall impact of entertainment related technologies on the overall $287 billion consumer technology industry, but offers retailers and manufacturers a roadmap to consumer adoption.
CONSUMER TECHNOLOGY ASSOCIATION DIVISIONS

CTA relies on member volunteers for direction, goal-setting and governance. Whether you are looking to help develop CTA initiatives, create industry standards or influence legislation on behalf of the industry, there are many opportunities to volunteer on one of CTA’s Councils or Boards.

The Accessories Division encourages accessory product sales, consumer education and the development of industry standards that promote continued growth, innovation and compatibility for accessories.

Key Focus
- Educate consumers on how accessories can help extend the functionality, enhance the performance and add to the enjoyment of their products.
- Provide retailers with strategic guidance and thought leadership on the importance of selling accessories through a series of bylined articles in trade magazines.
- Conduct research to examine factors that influence accessory purchase decisions.

The Audio Division fosters growth and profitability for the manufacturers, distributors and retailers of consumer audio products.

Key Focus
- Educate consumers and raise their awareness of the virtues of a quality audio experience.
- Encourage channel partners to sell audio as a value-added solution and provide them with the necessary tools.
- Analyze the audio marketplace to provide members with the information they need to improve their sales and market share.

The Digital Imaging Division supports the growth and profitability of the digital imaging industry.

Key Focus
- Extend the CTA reputation into the digital imaging community.
- Educate retailers and consumers about the complete digital imaging experience, encompassing cross-category trends, integration opportunities, and the enjoyment afforded by innovative imaging products, services and uses.
- Provide insight on trends and opportunities in digital imaging through CTA-sponsored research.

The Health and Fitness Technology Division explores where health and fitness meets consumer technology. This group seeks to raise awareness of how consumer technologies and services can help improve health and fitness.

Key Focus
- Conduct consumer and industry market research around health and fitness technology products, apps and services.
- Ensure that health and fitness technology devices, apps and services can thrive in a sound regulatory environment that balances innovation with safety and privacy.
- Collaborate with the medical community to identify ways that health and fitness technologies can deliver better health outcomes.
CONSUMER TECHNOLOGY ASSOCIATION DIVISIONS

The TechHome Division represents the channel for home automation, entertainment and networking products, including installers, distributors and manufacturers.

Key Focus
- Develop resources to help CTA members foster business in the installed technology market.
- Increase awareness of energy-efficient systems and installations that professionals design and install.
- Help homeowners, builders, realtors, architects and installers evaluate the technological sophistication of a home and build value for installed technology using CTA’s TechHome Rating System.

The Wireless Division works to promote the growth of wireless products, applications and services by bringing wireless manufacturers, distributors, retailers and related businesses, technologies and services together.

Key Focus
- Develop programs that help to grow wireless products and services and advance convergent technologies for consumer markets.
- Nurture continued device convergence among wireless technologies.
- Enhance the awareness of wireless technologies among consumers and improve the customer experience at retail.

The Vehicle Technology Division expands the in-vehicle electronics industry through targeted programs and services.

Key Focus
- Raise consumer awareness about automotive technology products and solutions.
- Lead industry efforts to develop products that reduce driver distraction and increase driver focus and safety.
- Expand the Mobile Electronics Certified Professional (MECP) program among retailers, industry training schools and other educational institutions, and promote the importance of professional installation to consumers.

The Video Division fosters the growth and development of the video products sector of the consumer technology industry.

Key Focus
- Conduct market research on consumer sentiment of the latest home and personal video entertainment technologies and consumption trends.
- Drive awareness of 4K Ultra High-Definition and next generation television technologies among industry and consumers.
- Work with stakeholders to ensure that accessibility is properly balanced with the need to preserve innovation and flexibility for manufacturers.
CONSUMER TECHNOLOGY ASSOCIATION COUNCILS

The Small Business Council brings together small business members with programs that drive the growth and success of entrepreneurs through education, collaboration and mentoring.

Key Focus
- Act as an incubator for member businesses and support entrepreneurship.
- Harness CTA resources to provide programs that serve the business needs of small companies.
- Build bridges between large and small CTA companies through the exchange of ideas and mentoring roles.

The Retailer Council allows retailers to deal with challenges that span product categories and vertical business structures. Multi-category and single-category retailers as well as e-commerce, m-commerce and catalog businesses, are encouraged to participate.

Key Focus
- Create opportunities for networking and discussion: retailer to retailer and retailers to vendors.
- Promote opportunities for consumers to learn about technology products.
- Create programs where retailer members can discuss solutions to issues facing their businesses, and exchange ideas with other retailers and business experts.

The Content and Entertainment Council works to unite the entertainment and consumer technology industries to bring new and innovative technologies to market and help shape the future of the technology, content and entertainment industries.

Key Focus
- Create opportunities to collaborate with other CTA member divisions on the intersection of technology and content with consumers.
- Support and promote new content formats and interoperability.
- Conduct valuable market research around consumers’ content consumption behaviors, patterns and preferences.

The Disruptive Innovation Council supports the growth of innovative companies developing technologies and services that are disrupting traditional business models and creating new markets.

Key Focus
- Provide support and advocacy to help disruptive innovation companies navigate market and policy challenges.
- Conduct market research around disruptive innovation technologies, products and services.
- Provide members with educational and networking opportunities in the disruptive technology space.
Audio Division High-Resolution Promotion Working Group

This working group focuses on the promotion of high-resolution audio. The goal is to help avoid consumer confusion and aid retailers and manufacturers in selling high-resolution audio products.

3D Printing Working Group

3D printing has the potential to revolutionize manufacturing and design output, but faces significant hurdles. The 3D Printing Working Group focuses on policy (intellectual property, copyright, patents), environmental concerns, consumer education and marketplace trends.

4K Ultra HDTV Communications Working Group

The 4K Ultra High-Definition (4K UHD) Television Communications Working Group seeks to develop promotional and educational activities to assist in driving the consumer market for 4K UHD and next generation video technologies. The group focuses on reaching consumers, retailers and media with key messages as well as sales and purchasing tips, updates on product and content availability and how best to showcase this amazing technology to consumers.

Startup Working Group

The Startup Working Group is a forum for member companies to discuss business challenges faced by startups, providing input and feedback on initiatives and programs that benefit the startup community. Key areas of focus include identifying relevant educational content, devising networking opportunities and exploring channels to highlight the innovation of startup members.
The Foundation is a public, national foundation established with the mission to link seniors and people with disabilities with technologies that enhance their lives. The Foundation is focused on strategic support of programs to impact these communities and has provided nearly $2 million in support since launching in 2012. It also serves to engage industry, consumers, government, advocacy groups and other key stakeholders around these important issues.
MANY PROGRAMS ARE SUPPORTED BY THE FOUNDATION INCLUDING:

- **Selfhelp Community Services** — supports a virtual senior center that engages low-income homebound seniors and combats social isolation.
- **BridgingApps** — identifies mobile applications that can assist people with a range of disabilities.
- **Gallaudet University TAP** — identifies best practices for alerting people who are deaf or hard of hearing through smart home technologies.
- **Lighthouse Guild** — supports the Grunwald Technology Center, which allows people who are blind or low vision to try out consumer technologies and take classes to learn more about how these technologies can promote independence.
- **Older Adults Technology Services** — supports technology education program for older adults in both Manhattan and upstate New York. Programs teach technologies that promote independence, combat isolation and provide entrepreneurial employment opportunities.

The Foundation has also supported two organizations in Las Vegas, the site of CES:

- **Blind Center of Nevada** — provides education and activities for people who are blind or visually impaired in the Las Vegas community.
- **Easter Seals of Nevada** — provides services and education to people with disabilities throughout Nevada.

At CES 2016, the Foundation highlighted five startup companies in Eureka Park that won the first “Tech to Improve Lives” contest. The Foundation also hosted meetings, interviews and sessions highlighting the positive impact that consumer technologies have in promoting independence for older adults and people with disabilities.

For more information, visit CTAFoundation.tech.
The Consumer Technology Association member community spans more than 2,200 companies from every segment of the consumer technology industry. Large or small, established or a startup, CTA provides members with valuable information, benefits, representation and leadership to help grow your company in this vibrant industry.

CONSUMER TECHNOLOGY ASSOCIATION™

TOP BENEFITS FOR CTA MEMBERS

- **CES** – The Consumer Technology Association is the owner and producer of CES, which unites more than 170,000 retail buyers, distributors, manufacturers, market analysts and press from all over the world. Leverage discounts on CES exhibit space and receive other CES benefits.

- **Government Affairs** – Track state legislative activity and have a collective voice in the industry.

- **Promotional Opportunities** – Receive video, radio and print exposure from CTA spokespeople and publications.

- **Market Research** – Get access to consumer research, economic analysis and a staff of researchers for help.

- **Events and Webinars** – Network with peers and potential business partners at CTA member-only events and webinars.

- **Training and Certification** – Train and certify your employees with CTA programs.

- **Industry News** – Receive insightful publications like *It Is Innovation* (i3) magazine, CTA SmartBrief and Plugged In.

- **Industry Career Center** – Connect to employers with the largest audience of industry professionals.

- **Grow your Business** – The Small Business Council’s Mentor Program pairs entrepreneurs with industry veterans.

CTA’s unique member programs allow companies of all types to collaborate and contribute to the growth of the CT industry. CTA offers promotional programs, market research projects, industry training, savings on business services and events throughout the year including CES and CES Asia. Get involved today and help to shape the industry’s future.

For more information visit CTA.tech.
The Future is Now

SAVE THE DATE
Thursday, January 5 – Sunday, January 8, 2017

Las Vegas, NV | CES.tech | #CES2017
The Consumer Technology Association (CTA)™ Innovation Scorecard ranks each state by its willingness to welcome innovation—such as aerial drones and the sharing economy—through smart policy that supports our nation’s entrepreneurs, whether a small startup or global tech leader.

**Congratulations INNOVATION CHAMPIONS**

- Arizona
- Delaware
- District of Columbia
- Indiana
- Kansas
- Massachusetts
- Michigan
- Nebraska
- North Dakota
- Texas
- Utah
- Virginia
- Wisconsin

Does your state welcome innovation?

Visit CTA.tech/scorecard