### The Future is Now

#### AR/VR, AI and other Scary Acronyms

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#### **About CTA**

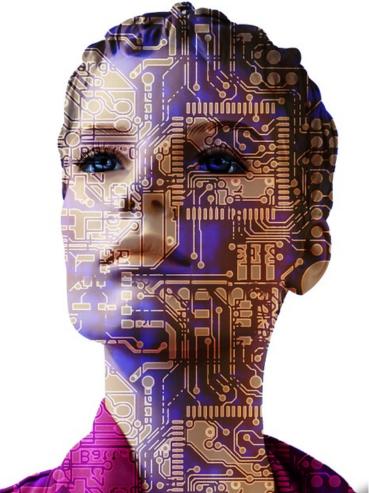
Consumer Technology Association (CTA)™ is the trade association representing the \$321 billion U.S. consumer technology industry, which supports more than 15 million U.S. jobs. More than 2,200 companies − 80 percent are small businesses and startups; others are among the world's best known brands − enjoy the benefits of CTA membership including policy advocacy, market research, technical education, industry promotion, standards development and the fostering of business and strategic relationships. CTA also owns and produces CES® − the world's gathering place for all who thrive on the business of consumer technologies. Profits from CES are reinvested into CTA's industry service.

Why CES®? It IS the future...



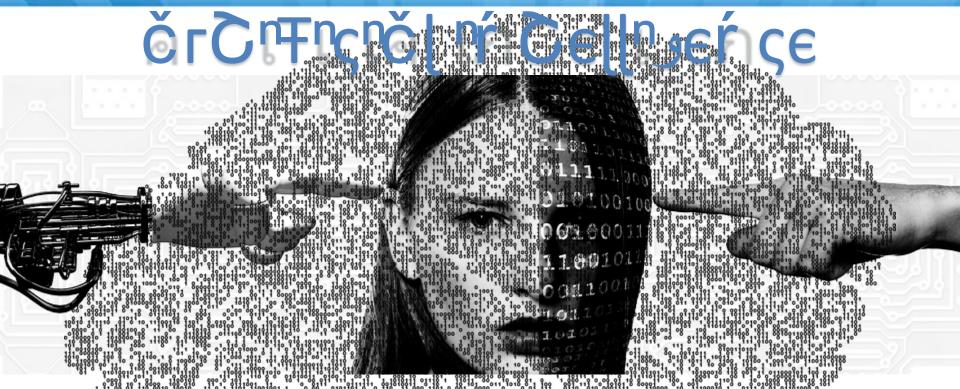


Self-driving, privacy, digital wireless,
AR, industry cyber,
reality, techonology, data, tech,
EV, security, 3-D, drones,
information GPS, AI, medical, modern,
V2V, communication, virtual
computing, big information VR, energy
artificial business, innovation,
vehicle, reality autonomous efficiency, vehicle, reality, autonomous efficiency, digital, UAS, IoT, 4.0, augmented autonomous, ransomware,















## **Emerging Technology: When to Standardize**

 Within CTA there are a number of ways in which emerging technology areas are identified and considered for standardization. These can come from CES segment growth, market penetration and hype supported by member interest, market segments fighting off innovation stifling legislation and regulation, or industry leadership bringing up common areas that need solutions.



# Balancing of Innovation & Standardization

- How and when to standardize as we move into new frontiers?
  - Standards process can be lengthy. Can you hang?
  - Hesitation in standardizing nascent tech areas. Is it really ready?
  - Developing standards early can provide first mover advantage. Do you have enough first movers to get moving?
  - Avoiding unnecessary regulations.

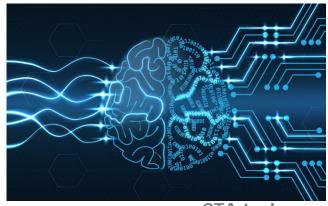




#### Artificial Intelligence

- Terms and Definitions -Taxonomy project
  - Getting underway
  - Transparency for stakeholders and consumers
  - Tech leaders thinking about next steps for AI

This is an example of the type of work often considered a first phase to standardization. The taxonomy document can be elevated to future standards work.



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#### Advanced Driver Assist Systems (ADAS)/Self-Driving Vehicles (SDV)



Example of an emerging technology area, but ripe for promoting consumer and government awareness

- ADAS/SDV is an area that is being covered by a number of different SDOs and is also a buzz topic on Capitol Hill.
- From a consumer technology perspective not ready for standardization effort yet.
- Other SDOs leading the way.



#### Small Unmanned Aerial Systems (sUAS)

- CTA created a standards effort associated with sUAS based on discussions with federal agencies and stakeholders.
- CTA published its first sUAS standard in April 2017, less than one year from the creation of the standards project.



This is an example of SDOs and regulatory bodies working together on emerging technology.



#### Augmented/Virtual Reality (AR/VR)

- In May of 2016, CTA formed its first standards WG on AR/VR technology.
  - Created in direct response to industry members noting that there was a need to create best practices around content creation.
  - Broad range of participants from Hollywoord content creators to hardware manufacturers.

The WG created three projects and identified the need to first focus on a glossary project to ensure that all stakeholders are using the same terminology when drafting best practices





#### Health, Fitness & Wellness Tech

- CTA's has 5 working groups focused on standardization and documentation around health, fitness, and wellness technology for the consumer:
  - Sleep Monitors
  - Physical Activity Monitoring
  - Consumer EEG
  - Consumer Stress Monitoring Technologies
  - Mobile Health Applications



Raising awareness of how consumer tech can help improve health, fitness and wellness.





