In recent years, technologies such as video chat, voice control, text-to-voice and voice-to-text have rapidly grown in popularity and have made their way into the realm of consumer electronics (CE), forever changing the ways in which we interact with our devices. In today’s high tech and mobile society, devices with such capabilities are beginning to appear everywhere. From our mobile phones, to our cars, to our televisions, to our computers and even into our living rooms, these technologies are shaping up to be the face of how we interact with technology in our day to day lives. What trends are we seeing with these technologies and how are consumers utilizing them? In what ways can these technologies be improved upon as they continue to develop and evolve?

While American adults ages 50 and over are quite similar to younger adults regarding their CE and technology usage behaviors, there are a number of distinct differences. Therefore, it is important for CE device manufacturers and retailers, along with technology developers, to consider the unique needs and desires of adults ages 50 and over because this age segment is sizable in both their numbers and spending power.

CEA recently conducted its Eye on Emerging Technology study covering four technologies: video chat, voice control, text-to-voice and voice-to-text. This AARP sponsored analysis brief examines the results from that study to provide insight into how the 50+ segment of the U.S. population differs from their 18-49 year old counterparts when it comes to the four technologies, with a specific focus on video chat.

**Awareness and Interest in Emerging Technology**

- Awareness of video chat, voice control, text-to-voice and voice-to-text technologies often available as features on consumer electronics devices is moderate among those ages 50+ and is consistently lower than awareness among those ages 18-49.
  - Specifically looking at those ages 50+, video chat capability awareness is the highest of the four technologies with around half (57%) of older Americans aware, compared to a significantly higher 69% of Americans ages 18-49.
  - Awareness of voice control of devices closely trails with 56% of those ages 50+ aware of the capability (65% 18-49).
  - Following, four in ten (39%) older Americans are aware of text-to-voice capabilities of devices (50% 18-49).
  - Of the four technologies, awareness of voice-to-text capabilities is the lowest among the 50+ population with 38% aware, again considerably lower than that for younger Americans (53%).

**Market Size**

- Over 100 million people ages 50 and over currently reside in the United States. This segment represents nearly one third of the overall U.S. population.
- This age segment is projected to increase to about 135 million people by 2030 and constitute approximately 37% of the overall U.S. population (a 5% increase).
- The highest expenditures for this age segment compared to younger age groups include healthcare, personal care, and entertainment.

Source: US Census Bureau / AARP / CEA
Consumers of all ages express interest in learning about or learning more about these four capabilities with highest interest shown again by younger consumers.

- Interest in learning about or learning more about the technologies is highest among older Americans for voice-to-text capabilities (30%), closely followed by voice control of devices (28%), video chat capabilities (27%) and text-to-voice capabilities (24%).

- Among those ages 18-49, interest is greatest for video chat capabilities (41%), followed by voice control of devices (39%), voice-to-text capabilities (37%) and text-to-voice capabilities (31%), all significantly higher than interest among their 50+ counterparts.

What sources do U.S. consumers rely upon to learn about new consumer electronics and technologies? Many turn to the Internet, friends, family members, co-workers or television.

- Older U.S. adults are significantly more likely to rely upon articles in newspapers or magazines (40%) as sources for information on new CE and technology than are those ages 18-49 (26%), as well as ads in newspapers or magazines (35% versus 20%) and mailers (15% versus 6%).

- Conversely, younger U.S. adults are significantly more likely to rely upon the Internet as a source for information on new CE and technology when compared to those ages 50+ (71% versus 58%, respectively).

Among those who utilize the Internet in searching for information on new CE or technologies, search engines are the most popular source, regardless of age, followed by retailers’ websites, reviews or comments posted on websites by consumers and manufacturers’ websites.

- When looking for information on new consumer electronics, U.S. adults ages 50+ are significantly more likely to turn to search engines than are their younger counterparts (81% versus 74%, respectively), retailers’ websites (62% versus 54%) and comparison shopping websites (25% versus 17%).

- On the other hand, those ages 18-49 are significantly more likely to visit social network sites, blogs or chat rooms when looking for such information than are those ages 50+ (40% versus 19%, respectively).
Ownership of Capable Devices

- Ownership of devices capable of the technologies included in the study (video chat, voice control, text-to-voice and voice-to-text) is significantly lower among older U.S. adults compared to younger Americans. It is noteworthy, however, that ownership is consumer-reported, meaning they may own a device that is capable, yet they could be unaware of it having such a capability.

  - While ownership of similar devices is significantly lower among those ages 50+, a considerable number of these consumers do own devices capable of video chat (57%), voice-to-text (31%), text-to-voice (28%) and voice control (24%).

Video Chat

Although video chat usage is significantly higher among younger U.S. adults, a sizable number of older U.S. consumers are also taking advantage of the technology. Notably, U.S. consumers over the age of 50 express greater interest in the technology than do their younger counterparts, suggesting video chat technology possesses strong market potential amongst older consumers.

- Among the nearly six in ten (57%) U.S. adults ages 50+ who own at least one device capable of video chat technology, the most common devices owned are laptop/notebook computers (38%), desktop computers (28%), smartphones (14%) and tablets (8%).
Usage

• Four in ten (43%) of those ages 50+ who own video chat capable devices report they use the feature on their device(s) at least occasionally with one in ten (9%) that use the feature either daily or several times a week.

• Among those ages 50+ that are using the video chat capabilities of their device(s), the majority (90%) do so while at home. There are, however, a small number of these users who video chat while on-the-go (8%), while at work (8%) and while driving or commuting (7%).

• Who are 50+ consumers video chatting with? Their children top the list, closely followed by friends (46%).
  ○ Notably, the 50+ population is significantly more likely to video chat with their children than are their younger counterparts. At the same time, the 50+ population is significantly less likely to video chat with spouses or significant others, parents and friends, all of which would be expected given the varying life stages inherent to their age differences.

Base: Online U.S. adults ages 50+ who own electronic devices (n=370)
Q. Which of the devices that you own are capable of video chat using the Internet?

Base: Online U.S. adults ages 50+ who own electronic devices capable of video chat technology (n=214)
Q. How often do you use the video chat capability of your device?

Base: Online U.S. adults ages 50+ who own electronic devices capable of video chat technology (n=94)
Q. Where do you use the video chat capability of your device?
Q. Who do you video chat with?
Satisfaction and Likelihood to Recommend

- Overall, satisfaction with video chat technology among those 50+ is very high. Seven in ten (70%) 50+ users are satisfied.

- Although satisfaction with video chat technology is high among the 50+ population, many acknowledge there is room for improvement. Specifically, four in ten (40%) video chat users ages 50+ would like to see improved video quality. Improved audio quality (35%), improved reliability (29%), better connection speed (26%) and greater ease of use (26%) are also important to these consumers in terms of improving the technology in the future.

- When asked how likely they would be to recommend the video chat technology of their device(s), slightly more than half (53%) of 50+ users say they are likely.

Future Usage Expectations and Adoption

- During the next 12 months, four in ten (42%) current video chat users over the age of 50 expect to use the capability of their device(s) more often, while half (53%) expect usage to remain the same.
  - Notably, significantly more U.S. adults ages 18-49 intend to use the video chat capability of their devices less during the next 12 months compared to those ages 50+ (5% less 18-49, 1% less 50+).

- Of those over age 50 who do not currently own a device capable of video chat technology, approximately one third (31%) express interest in future ownership, which is significantly higher than the 13% interest seen among those ages 18-49.

- Going one step further, looking at those consumers ages 50+ who are interested in owning a device capable of supporting video chat technology, desktop computers (46%) top the list of preferred devices, closely followed by laptop or notebook computers (38%), then televisions (non-3D) (30%) and smartphones (29%).
Spotlight on Americans 50+

In Summary

Awareness, Interest and Ownership of Emerging Technology

- Awareness of video chat, voice control, text-to-voice and voice-to-text technologies often available as features on consumer electronics devices is moderate among those ages 50+ and is consistently lower than awareness among younger consumers.
  
  - Specifically looking at those ages 50+, video chat capability awareness (57%) is the highest of the four technologies, followed by voice control of devices (56%), text-to-voice (39%) and voice-to-text (38%) capabilities.

- Consumers of all ages express interest in learning about or learning more about these four capabilities with highest interest shown again by younger consumers.
  
  - Among the 50+ population, interest in learning about the four technologies is highest for voice-to-text capabilities (30%), but is closely followed by interest in learning more about voice control of devices (28%), video chat capabilities (27%) and text-to-voice capabilities (24%).

- Ownership of capable devices is significantly higher among younger U.S. adults across all four capabilities.
  
  - Despite this, a considerable number of consumers over age 50 currently own devices capable of video chat (57%), voice-to-text (31%), text-to-voice (28%) and voice control (24%).

Video Chat

- Nearly six in ten (57%) U.S. adults ages 50+ own at least one device capable of video chat technology. The most commonly owned devices are laptop/notebook computers, desktop computers, smartphones and tablets.

- Four in ten (43%) 50+ owners of video chat capable devices report they use the feature at least occasionally with a majority of users video chatting with their children and/or their friends.

- Overall, satisfaction with video chat technology among those 50+ is very high with seven in ten (70%) users who are satisfied.

- Although satisfaction with video chat technology is high among the 50+ population, many acknowledge there is room for improvement. Specifically, video chat users ages 50+ would like to see improved video quality, improved audio quality, improved reliability, better connection speed and greater ease of use as future improvements.
• When asked how likely they would be to recommend the video chat technology of their device(s), slightly more than half (53%) of 50+ users say they are likely.

• More than nine in ten (94%) video chat users ages 50+ expect to use the capability of their device(s) more or about the same amount over the next 12 months.

• Of those ages 50+ who do not currently own a device capable of video chat technology, approximately one third (31%) express interest in future ownership, significantly higher than the 13% interest seen among those ages 18-49.

In Conclusion

Although awareness and usage of each of the four technologies – video chat, voice control, text-to-voice and voice-to-text – is considerably higher among younger U.S. adults, a sizable number of consumers over the age of 50 are taking advantage of the benefits offered by the technologies. With high satisfaction and strong likelihood to recommend among current users, coupled with considerable interest in learning about the technologies among those who are not current users, each technology is poised for strong growth within the 50+ market. Therefore, CE manufacturers and technology developers should continue to fine-tune these technologies in order to provide consumers of all ages with the best possible user experience.
Methodology

The report described herein was designed and formulated by the Consumer Electronics Association (CEA)®. Data from this analysis brief was sourced from CEA’s Eye on Emerging Technology study. The quantitative study was administered via Internet web form to an online national sample of 1,039 U.S. adults between August 25 and 30, 2012. The margin of sampling error at 95% confidence for aggregate results is +/- 3.1%. For Americans 50+ the sampling error is +/- 4.8%.

About CEA

The Consumer Electronics Association (CEA) is the preeminent trade association promoting growth in the $204 billion U.S. consumer electronics industry. More than 2,000 companies enjoy the benefits of CEA membership, including legislative advocacy, market research, technical training and education, industry promotion, standards development and the fostering of business and strategic relationships. CEA also owns and produces the International CES - The Global Stage for Innovation. All profits from CES are reinvested into CEA’s industry services.

About AARP

AARP is a nonprofit, nonpartisan organization with a membership that helps people age 50 and over have independence, choice and control in ways that are beneficial and affordable to them and society as a whole, ways that help people 50 and over improve their lives. Since 1958, AARP has been leading a revolution in the way people view and live life.

About AARP's Innovation@50+ initiative:

The Innovation@50+™ initiative aims to spark entrepreneurial activity across public and private sectors. Anchored by the AARP social mission – to enhance the quality of life for all as we age – the initiative enlists the expertise of visionary thinkers, entrepreneurs, the investment community, industry and not-for-profits to spur innovation to meet the needs and wants of people over 50.

On the ground, the initiative catalyzes research and helps shape a marketplace ethos by promoting core, unifying principles such as "design for all." It stimulates new business models that reflect the broad transformation in how the 50-plus life is being re-imagined. Lastly, the initiative prepares 50-plus people to communicate with, access, engage and thrive in a new "longevity economy."

For more information please visit: www.aarp.org/innovation50plus