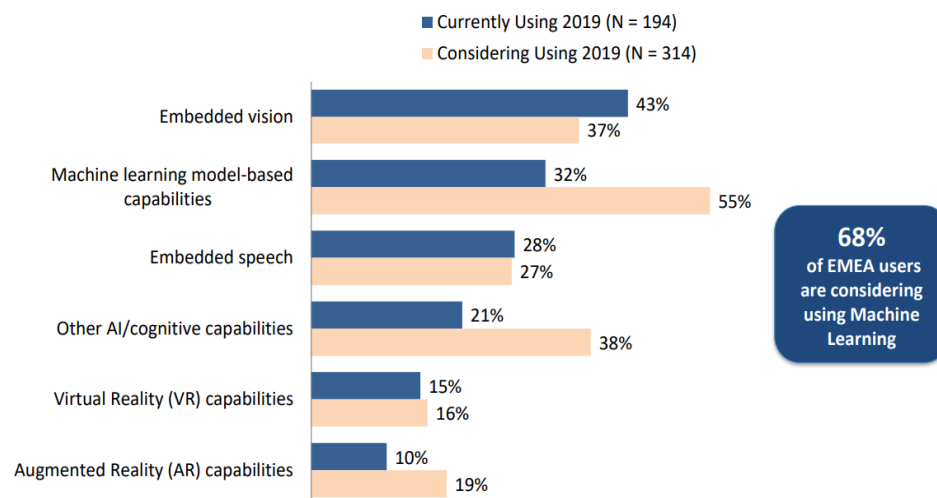**Surveys and Technology Evaluation**

The results of an online survey conducted via the web demonstrated the cutting-edge technology employed in embedded systems. the various industries in which embedded systems were deployed. The survey gave equal weight to a company's size, location, and number of employees. Wilson Research Group, a reputable independent research firm, designed and carried out the poll. It opened on January 29, 2019, and closed with 958 eligible responders on March 7, 2019.
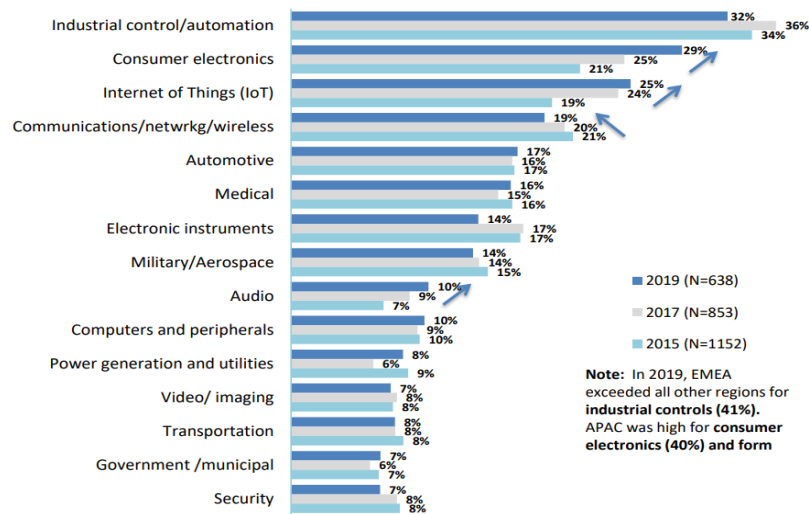
Figure 1. The Use of Advanced Technologies in Embedded Systems

The respondents were questioned about the advanced technologies that was used in their embedded systems in figure 1 above. The study found that 43% of respondents were presently employing embedded visions in their systems and 37% were thinking about doing so. In their systems, 32% are already implementing machine learning model-based capabilities, while 55% are thinking about it. 27% are pondering utilizing embedded speech, while 28% already do. Only 21% of people use AI/cognitive skills, while 38% have thought about using them. In their systems, 15% are presently employing virtual reality, while 16% are thinking about it. In the meanwhile, 10% of respondents use augmented reality features, and another 19% are

considering doing so. In conclusion, machine learning is being considered by 68% of respondents.

Figure 2. The Application Areas of the Developed Embedded Systems

In figure 2, the respondents were asked on the application areas of their developed embedded systems. According to the study, 32% of respondents use it for industrial control and automation, 29% for consumer electronics, 25% for the Internet of Things (IoT), 19% for communications and networking, 17% for automotive applications, 16% for medical applications, 14% for electronic instruments, and 14% for military and aerospace applications. The 10% is for computer/peripheral applications and audio applications. The 7% are using it for video, government/municipal, and security, while the 8% are using it in the domains of power generation/utilities and transportation. In conclusion, the industrial controls exceeded among all the application areas.